Abstract

Based on Aristotelianism, philosophies in Islam, Christianity, Judaism, and traditional phenomenology, Martin Heidegger and late Max Scheler, shared a conceptual understanding of the soul. The plant's soul – a worldly stage of the individualization of universal creativity - unfolds via the animal towards the human and beyond. The Phenomenology of Life philosophy (Anna-Teresa Tymieniecka) enmeshed the ontopoiesis of the vegetative beingness into the unity-of-everything-there-is-alive, thereby overcoming the discommunicative hierarchization of the soul. An eco-cosmological following of „the plant’s“ ontopoiesis will have to base its understanding not only on the communicative creativity of „the plant“ but on its inseparable interwovenness into the web of life, thereby also taking into consideration newest botanical studies which brought to light insights into so far unknown „intelligence“ of plants.

Keywords: Aristoteles, Philosophy in Islam, Vegetative Soul, Heidegger, Phenomenology of Life, Symbiotic Communities, Anna-Teresa Tymieniecka
Introduction

We will not historicize extensively, nor will we limit ourselves to purely methodological or systemic questions while comparing different schools. But, introductory historical remarks historizing philosophical thoughts – having Martin Heidegger’s historization of philosophy as an example – will be sent ahead, before advancing towards deep levels of the logos of life (Anna-Teresa Tymieniecka) beyond historicity. Thoughts which also were shared by philosophies regardless of specific spaces of cultures, religions and temporalities.

Unlike Bertrand Russel in his A History of Western Philosophy (1945/2009), Heidegger did not include Arabo-Persian-Islamic philosophy in his historical oriented seminars which covered mainly Latin-European thinkers from Augustinus who lived in nowadays Tunisia/Algeria via Thomas Aquinas to Kant. Although Heidegger was referencing to Avicenna by an indirect route, when lining out that Thomas Aquinas himself, with regards to the definition of essential truth (*adaequatio intellectus et rei*), was referring to Ibn Sinā (Avicenna) (Heidegger, 1927/1967, p. 214; Heidegger, 1927/1996, p. 198), he was far from grasping the major influence Ibn Sinā (Avicenna) had on Thomas, Heidegger outlines the characteristic method applied by Thomas. Prescribed definitively in the epiphany, a graduation (*Stufenfolge*) of the created Beingness (geschöpflich Seienden): God as spirit, Man, animals, plants and bodily things are the fundamental ontological characteristic along the guideline (*Leitfaden*) of the idea of unchangeability and changeability (*Unveränderlichkeit und Veränderlichkeit*) (Heidegger, 2006, p. 79). Just to give another example: while discussing Leibniz, Heidegger refers to Leibniz who was convinced that plants have no reason, and that God thinks for them” (p. 181).

Already in his dissertation on the categories in Duns Scotus, written in 1915, where Heidegger draws special attention to the influence of Avicenna on Duns Scotus without going more into depth (Heidegger, 1915, II). Although he quoted Scotus, referring to Avicenna in Latin, e.g. in the context of the discussion on “identical determination” (*identische Bestimmtheit*) (Heidegger 1912-1916, 1978, p. 222), it was not the object of Heidegger’s dissertation to study Duns Scotus and Avicenna comparatively. In this context, the given short excerpts only should draw attention to the important impact Avicenna had on Latin-European scholasticism, also conveying a specific interpretation of Aristoteles which later led to fierce debates as we will see.

The Aristotelian concept of the soul – I deliberately refer to the term concept – is a bar to an eco-phenomenological understanding of life’s ontopoiesis. Many “Western” and what we might call Islamic shaped philosophies shared the Aristotelian concept of soul ontologically. An ontological concept which is not in accordance with the creative and communicative unity of life.

Particularly with regards to the obvious crisis of life, in which the human caused ecological crisis plays a key role, I will argue in the following that the Aristotelian mechanics of the soul’s hierarchization and its continuous living on bears a major responsibility on the philosophical and meta-scientific level for the predominant
misunderstanding of life. The Aristotelian conceptual categorization of the soul crossed various regions along the Mediterranean and its hinterlands, enduring long-time periods in the history of philosophy. From antiquity onwards, the Aristotelian grading of the soul mouthed finally into what is called modernity.¹

Bearing a major responsibility on the philosophical and meta-scientific level for the predominant misunderstanding of life, the adaption and reception history of the Aristotelian understanding of the soul will be outlined shortly. The categorization model of the soul, tracing back to Plato before being formulated and shaped by Aristotle, was much later flourishing for many centuries in Islamic framed philosophies before being received in scholastic Latin schools in the 13th century. Later, not only radical schools as an offspring of the enlightenment, among them Karl Marx who admired Aristoteles, but also traditional phenomenological schools like Martin Heidegger or before him Max Scheler tied up the Aristotelian model of the soul. It is possible to argue that the Aristotelian understanding of the soul ranks among the most durable categorization models in the history of philosophy. The time may be ripe to question it. We will follow Heideggerian constructive philosophical destruction.

With this in mind, it seems to be necessary to call for a philosophical debate which naturally cannot be anything else than a cross-cultural and multi-religious, not to say universalistic discussion.

At the beginning of the 21st century, late Anna-Teresa Tymieniecka initiated a lively philosophical debate between, what she called, Islamic Philosophy and Occidental Phenomenology, bringing the Philosophy of Life into a the flourishing cross-cultural and -religious debate. Consulting the Philosophy of Life makes clear that it was no coincidence when the subject of the soul was chosen for the beginning of the series Islamic Philosophy and Occidental Phenomenology in Dialogue. The soul, Anna-Teresa Tymieniecka wrote, plays the role of the microcosm for both Islamic thought and phenomenology of life (Tymieniecka, 2003, p. XVI).

In the following we will first have to compare the understanding of the threefolded soul in Aristoteles De Anima, it’s traveling into philosophies in Islam, Christianity, Judaism², and early phenomenology – Martin Heidegger or Max Scheler will serve here as examples – before introducing possible alternatives, pointed out by the Philosophy of Life.

**Anima Vegetativa**

For the understanding of life, movement is along with perception and non-corporeality a pillar in Aristoteles’ ontological architecture. In his more historical reflections on the nature of the soul, he emphasizes while referring to Thales, Diogenes or Heraclitus that earth was never seen as moving, contrary to air, fire and

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¹ The terminologies “antiquity”, “middle ages”, “modernity” etc. are a manifestation of a Eurocentric historic periodization which requires universal alternatives.

² We are aware that terms like Islam, Christianity, Judaism, Buddhism etc. cover a variety of interpretations inside specific schools with often conflicting dogmatics, spiritualities, practices etc.
even water. “All elements”, he writes, “got their advocate, except the earth” (Aristoteles, 2015, p. 23).

Life, constituted by the four elements (earth, water, air, fire), was defined by having at least one of the following capacities: reason, sensitivity, movement and standstill in space, furthermore movement in terms of nutrition and shrinkage respectively growing. As plants have the capacity to nourish themselves, but none of the others (Aristoteles, 2015, p. 65) – and only in this sense they move while growing by nutrition, so they live. As only the human being unifies all characteristics of life in its bodily existence, including reason, the human became in later more Neo-Platonists philosophies in Islam the microcosm of life. We find the basis for this core concept already in the Aristotelean understanding and classification of live. The nourishing and reproductive soul forms the basis, the most basic level of live. The nourishing, Aristoteles writes, is the first soul (p. 83). And, as the humans have to nourish themselves, they have to have an anima vegetativa too. The categorization of life allocates the soul to specific phenomena.

His more empirical observations in nature, among many the fact that plants continue to live even when partitioned (Aristoteles, 2015, p. 57), made Aristotle wonder, but not rethinking his static ontology. He came to astonishing observations when comparing the roots of plants with the head of living beings (p. 79). We will later see, when coming to recent studies that plants roots can reach far beyond pure ingestion. Again, it seems that the observations in nature gave Aristoteles a clue of understanding of the plant’s dimension which seems to contradict his more categorized concept of the soul. Of course, we will not accuse Aristoteles of lacking botanical knowledge – especially his natural observations were often doubtless precise – the problem is more the long living on of his categorization-based ontology, thus in philosophy in Islam as in post-Christian enlightenment and generally in western philosophies, Karl Marx included.

**Peripatetic Schools in Islam**

Since the mid of the 8th century mainly Greek, Syriac and Middle Persian philosophical texts, among them Aristotelean and Pseudo-Aristotelean treaties were translated into Arabic. This early translation movement merged into a flourishing period of mainly Arabic written philosophy in Islam, which had Bagdad, Basra, Mosul and other places in nowadays Iraq to its centres. When we speak of “Philosophy in Islam” in this context, we are aware of the fact that dialogues with other communities, Christian, Jewish or Sabian not only contributed to flourishing philosophical debates, but were later also subsumed under the established term “Islamic Philosophy”. When we speak of “Philosophy in Islam” we take into consideration the polymorphism of the term, including multiple worlds of beliefs, cultures and languages.

There is no doubt that Islam and the understanding of and the striving for knowledge overcame the predominant late antique stand-still in philosophy and sciences. Not least, it was the peripatetic Arabic schools, bringing philosophy and science since the 8th century to a new peak. From the 9th century onwards philosophers like Ishāq al-Kindī (lat. Alkindus, 800-873), al-Fārābī (lat. Alpharabius, 872-950), Ikhwān aṣ-Ṣafā (ca. 2nd half 10th century), Ibn Sinā (lat. Avicenna, 980-
1037) and Ibn Rušd (lat. Averroes, 1126-1198) contributed definitively to the new rise of philosophy and sciences. Due to a political wave of reluctance or even refusal of philosophical and scientific knowledge during later antiquities under the rule of the Byzantine Empire, sciences and medicine had declined. Former centres of knowledge, Alexandria, Gaza, Antioch or Edessa lost their central role. The 9th century Bagdad became the point of departure for a fresh wave of peripatetic philosophy.

Here is not the place to delve into dependencies, ways of adaption, reception and debates studying possible source codes for the upcoming Arabic philosophies and sciences. Just it has to be noticed, that when it comes especially to natural sciences, here botanic, advancements are to be considered. Aristoteles’ time had passed since nearly a millennium. This holds true also for Historia Animalum (zoology) and other Aristotelian writings, sometimes surviving only in later antique texts, which we will not touch here.

In our context we just want to give one example of a later flourishing period of Aristotelian shaped natural philosophy, so to say Neo-Platonist (Plotinus, Porphyries) thought which constitutes the main fundament of later Islamic embedded philosophies. We can call this time the intermediate period which borders proximately the rising of natural philosophies and sciences in Islam. Also, in this time continuity, here the Aristotelian concept of the soul, prevails slight discontinuities on the surface (Christianity, Islam). Below we will follow a similar over lacing when it comes to debates on Arabic versus Thomist Aristotelism around another 800 years later. Obviously, it was the basic Aristotelian concepts of the soul which survived philosophically the following more theological disputes, between Christianity, Islam and to a certain extent also Judaism (e.g., in the Averroist Maimonides).

In the interim period between late antiquity – here we still follow an antiquated periodization schema – and the emergence of Islam in the first quarter of the 7th century, De Natura Hominis (On Human Nature), written by Nemesius, Bishop of Emesa (today Homs in Syria) around 390 AC might serve as good example for the continuation of the Aristotelian anthropology. In the understanding of Nemesius, the plant’s soul shows a certain new understanding based on mineralogical, botanical and zoological observations he made. Natural sciences started to question the categorized demarcations of life, enriching soon natural philosophies in Islam, especially when it comes to species of life which are hardly to categorize.

De Natura Hominis is based on the degree-teachings of inorganic beings, plants, animals, and logos, emphasizing strongly the unity of nature. The human being, bordering the sensitive and spiritual world at the meantime, not only realizes this unity, but also holds together the diverging aspirations (Kallis, 1978, p. 52). Already in Aristoteles’ zoology we find gradual transitions. The sponge appears to be endowed with a certain sensibility, and, rooted in the earth, is immobile, but reacts to external forces. Aristoteles called these “transitional beings” zoophytes. A long-lasting debate was initiated by a group of “strange creatures”, e.g., also polyps, corals, starfish, sea-urchins, and earthworms. All these beings existed somehow in-between the kingdom of plants and animals.

One of the most noteworthy polymaths in Islam, the Arabic writing Aḥmad al-Bīrūnī (973-1048) allocated the coral, because they respond to touch, to the kingdom
of animals (Egerton, 2012, p. 24). In Bīrūnī we find the term marğān or mardjān for pearl which was identical with the later term for coral. He concluded that the original name was ‘small pearl’, while ‘coral’ was a later popular idea (Donkin, 1998, p. 110). “The pearl”, al-Bīrūnī writes, “is also part of the animal kingdom and like the bone of a man (Bīrūnī, 1989, p. 110).”

In keeping with the Aristotelian observation-based thoughts, Nemesius made particular reference to a force flowing through all being, uniting life micro-macro-cosmologically. While he overcame the Aristotelian drive for classification in a certain way, he nonetheless saw the plants just as beings created not for their own sake, but to serve the animals not least the humans (Kallis, 1978, p. 85).

It is no yet researched whether Nemesius shaped to a certain extent Arabic natural philosophy – several Arabic manuscripts in Syria and Egypt survived – but specific parallels which occur, the question whether God is creatively woven in all beings, but not into the particularities or individualities of life. In the later debates first inside Islamic embedded philosophies – after Ibn Sīnā concluded against God’s knowing of particularities – and then in scholastic philosophical disputes, this question was one of the most controversial ones.

Nemesius was inspired by Plotinus who claimed that the universal soul dissipates itself indivisible (“sie zerteilt sich unzerteilbar”) (Kallis, 1978, p. 101). Plotinus asked: “How could it be possible that while assuming one soul that one is reasonable the other unreasonable? The one in the animals another than in the plants?” (Wie könnte ferner bei der Annahme der einen Seele die eine vernünftig, die andere unvernünftig sein, die in den Thieren eine andere und die in den Pflanzen eine andere?) (Plotin, 1878, p. 133) The question why anima vegetativa shall be un- or less reasonable will continue to occupy our attention. First, we will have to look on the reception of Aristotelian and Pseudo-Aristotelian understandings of the soul (mainly Plotinus) in Arabic philosophies and early phenomenology.

From Ikhwān aṣ-Ṣafā’ to Ibn Sīnā

Ikhwān aṣ-Ṣafā’ were a group of scholars, philosophers and scientists, working around the mid of the 10th century AD mainly in Basra and Bagdad. They left behind a remarkable and voluminous work. While introducing into all at that times known scientific disciplines, the 52 treatises were based on pseudo-Aristotelian thoughts, that is a cosmology-philosophy based on parts of the teachings of Plotinus’s Enneads. Their main achievements can be seen in the fields of a transdisciplinary interwovenness of scientific disciplines, unified in the micro-macro-cosmological interplay of life. While the more intuitive approach of Ikhwān aṣ-Ṣafā’ to reality can be traced back to Plotinus, the mathematical-geometrical reflections on cosmological laws to Pythagoras, the group of scholars follows the Aristotelian concept of the soul when it comes to natural philosophy and observations in nature. Regarding the latter, we find remarkable studies, characterized by a certain fine-tuning when it comes to the flowing transitions of life.

“(… the first and lowest rank of plants is of what is close to dust, and it is moss [or ‘mould’ or ‘lichen’: khaḍra‘ al-diman], which is nothing other than dust which becomes felted on the ground, rocks and stones. Then it exposed to the
moisture of the rains and the dew of the night, and, in the early morning, it becomes green, as if it were the germination of seed or grasses. And if it is exposed to the heat of the midday sun, it reverts. Then the very next day it becomes like it was from the night-time dews and fresh air. And neither truffles and nor moss [khadra’ al-diman] will sprout in adjacent locations except in the days of spring, because of the proximity of what is between the two of them, for the mineral element of this [one] [badha] is plant-like, and that [one] [dbalika], also a plant, is mineral-like.” (Brethren of Purity, 2015, pp. 101-102)

Ikhwān aṣ-Ṣafā’ came to fare reaching conclusions, when it comes to observations of life, thereby following the flow of life cosmologically. But they were still caught in the narrow frame of Aristotelean categorization, when classifying “the plant”.

Today we know that lichen belong to fungi, but they live in symbiotic communities, in which they photosynthesize. The 10th centuries scholars came quite near to botanic knowledge currently available. Here it becomes already clear that “the plant” in this isolated singularity, as the Aristotelian abstract categorization is suggesting, is not capable of surviving. We do not call into question the necessity to differentiate life, but the Aristotelian categorization went hand in hand with hierarchization thereby losing sight of life’s cooperative and communicative nature.

As Ibn Sinā was in nearly full accordance with the peripatetic concept of the soul, hence we will not touch his understanding of the plant, rather we want to examine shortly a problem which is closely related to the understanding of the plant in the Aristotelian concept of the soul. As the realms of life are ascendingly differentiated into vegetative, animal and human (rationality), accordingly the faculties of the soul follow the same pattern. For the plant these faculties are nutritive, reproductive and growth supporting. “The soul is like a single genus divisible in some way into three parts. The first is the vegetable soul, which is the first entelechy of a natural body possessing organs in so far as it is reproduced, grows, and assimilates nourishment.” (Avicenna, 1952, p. 72)

Accordingly, Ibn Sinā hierarchized the faculties of the soul. The ranking of the soul’s faculties is described by governing, as he underlines: “It should be seen how some of these faculties govern others.” (37). We will not go into the depth of Ibn Sinā’s epistemology at this point, but want to recall that Aristotelian epistemology founds its expression also in political philosophy and state theory, be it in Islamic shaped traditions, for which al-Fārābī’s (872-950) “Perfect State” (Madīna al-Fāḍila) is one example, Machiavelli’s (1469-1527) “The Prince” (Il Principe) another. Even though the former is governed by a wise man, and the latter by a more virtuous and unmoral prince – Machiavelli probably borrowed and assimilated these virtues driven state theory from the Arabic sociologist Ibn Khaldūn (1332-1406) – the hierarchization of the soul pervades the Islamic as the occidental concepts of being, society and statehood. Ordinary people, often identified with the animal soul, so to speak sexual desires and other “deficiencies”, have to be governed by a wise and/ or virtuous man. The philosopher became the incorporation of the perfect, while the masses were seen as tending more towards pleasures - a concept which mouthed into vertical and non-participative societal and political structures.
Also, the Freudian concept of the soul with its categories of “Ich” / Ego and “Es” / Id, can only be explained, when traced back to the Aristotelean concept of the soul. We cannot delve deeper into the impact of the Aristotelean concept of the soul on Islamic philosophies and occidental thought. And of course, we cannot reduce Ibn Sīnā to a pure adaption of the Aristotelean understanding of the soul. His strength is to be seen in his applied philosophy and epistemology, thus especially when it comes to healing, medicine and related empiric deductions. His writings had a profound impact, be it in the field of medicine, philosophy and epistemology or psychology, going far beyond scholastic receptions in Latin Europe.

While analysing representations in an animal’s memory, Leibniz gave the same example of a dog memorizing the stick while associating it with pain in the meantime. Rahman noticed remarkable similarities (Avicenna, 1952: 81). And, even it was food and not a stick, Pavlov experimented later with dogs, experimenting the gastric functions of dogs, while anticipating food. But, that's a different kettle of fish.

Aristoteles, and here Islamic and Scholastic philosophies followed him closely, differentiated the powers of the soul into nutritive, appetitive, sensory, locomotive and rational. While nourishment, reproduction and growth characterize also plants, mind-containing beings are only ascribed to human beings. Reason and cognition belong to humans only; appetitive, sensitive and locomotive capacities to animals. The rational human crowns life’s unfolding. Younger philosophical schools in Islam continued to follow the soul’s hierarchization. Mulla Sadrā (1572-1640) thoughts on the hierarchization of the soul’s faculties are elucidated by Khamenei:

“In the sequence of the faculties of the soul and between its lower and higher degrees, which as Mulla Sadrā says amounts to nineteen, there is a sort of hierarchical domination. For instance, the animal soul is superior to the vegetative one, and the human soul has sovereignty over the other souls and their faculties. Generally speaking, the later the time of origination and realization of a soul, the higher the degree” (Khamenei, 2003, pp. 24-25).

In Islamic philosophies the graduating of the soul towards the divine became over time more differentiated, from beyond the seven sublunary spheres to the ninth level (Ikhwān aš-Šafāʾ, Ibn Sīnā) up to nineteen grades in Mulla Sadrā. After a sort, Mulla Sadrā found an answer to the questions of earlier Nemesius, reflecting on the differentiation, or as we could say, individualization of the one soul.

A more reduced graduation of the soul ascending – the gradual transcending towards spiritual and divine spheres we find foremost in later philosophies in Islam, tracing back maybe to gnostic thoughts – constitutes the post-Aristotelean understanding of life, be it in a western or “Eastern”, here Islamic, context. It became a philosophical self-assurance also for later European Enlightenment, in spite of the more empirical based botanical systematization by Linné (Systema Naturae, 1758) and later Darwin’s evolutionist-biologist deductions. But nevertheless, it was also Frank Darwin’s – one of the three sons of Charles Darwin – observations which shackled the doctrine of main assumptions, first of all the narrow
borders of Aristotelean categorization regarding the life of plants. Philosophy lagged
far behind new botanical insights.

**Max Scheler and Martin Heidegger**

The late Max Scheler understood the plant in “The Human in the Cosmos” (Der Mensch im Kosmos, 1927/1945) as the lowest level of the psychic, underlining that emotions or perceptions and consciousness fail to be found in plants. Research findings, among them the path-breaking studies of Gottlieb Haberlandt who developed the knowledge on sense organs of plants (e.g., light sense organs), were rejected, thereby arguing with Aristotelian categorization (12-14). Scheler emphasizes, referring to Darwin, that plants, contrary to animals, are lacking any “signalling ability” (Kundgabefunktionen) (15). Max Scheler and Martin Heidegger knew each other since 1920.

After “Being and Time” (Sein und Zeit, ) was published, Heidegger who esteemed Max Scheler and discussed him in “Being and Time”, sent immediately a copy to him. In „Geschichte des Seyns“ (Heidegger, 1998) he denies any historicity of plants (and animals), “as they are not related in any case to history” (“Pflanze und Tier sind nicht einmal geschichtslos, weil sie überhaupt in keiner Weise zur Geschichte in Bezug stehen”) (96). In one of his seminars of 1951 Heidegger, thereby closely following the Aristotelean concept of the soul, differentiated Human Beingness clearly from the plant and the animal which, as he claimed, do not have logos (λόγος). But, he added, Humans do not only think they also act by anticipating which is the real determining (Heidegger, 2012: 513-514).

Nowadays there is an ongoing discussion in post-humanism on “consciousness” in plants, whether they act by “thinking” or not:

“Often because of a general sense of motionlessness, of being immobilized by their rooted being, the vegetative state of being is an unthinking state of being. The assertion here is that thought is possible because of constant mobile stimulus in conjunction with cerebral development. This of course poses the question: are there forms of thinking that are less dependent upon motion? (Woodward, 2018, p. 132)

In his studies on early Greek philosophy, especially on the fragment of Anaximander of Millet, who flourished in the first half of the 6th century BC, and introduced Cosmos (κόσμος) as an just order of the universe. With regards to the infinitive *apeiron*, Anaximander understood the stuff of which all things are composed out of the *arkhē* which neither was seen as water nor any of the other elements, but some other nature which is *apeiron*, out of which come to be all the heavens and the worlds in them. The *apeiron* is ageless and surrounds all the worlds (pp. McKirahan, 2010, pp. 33-35). A thought which we later find also in Ibn Sīnā who refused God's knowing of particularities is anticipated to a certain extend by Anaximander who considered that the “*apeiron* appears only at the beginning of the process; afterwards things take their own course” (37).

A classification of the soul’s potentialities and capabilities, the categorial hierarchizing of the soul, in accordance with specific “qualities”, e.g., like the ability
of (auto-) movement, of sensing and striving for something, consciously or unconsciously (anima), cannot – to our current knowledge – be found in Anaximander and pre-Platonian schools. We also have to be aware that philosophy, in the spirit of Hegel, did not begin with the Greeks. It seems that the idea of cosmic justice traces back to ancient Egyptian philosophy of Ma' at and other pre-Greek philosophies in ancient Persia and Mesopotamia in ancient Iraq.

In contrast to earlier phenomenological thoughts, *Phenomenology of Life* (Anna-Teresa Tymieniecka) overcomes, as we will see in more detail, the former drawn strict demarcations:

“
A sharp demarcation line between strictly botanical and strictly biological investigations is difficult to draw since we know of aquatic creatures and corals that possess characteristics of both plants and animals. There are beside plants with life promoting strategies similar to those of animals, e.g., carnivorous plants.” (Tymieniecka, 2009, p. 87)

Today we know that plants are communicating among themselves and with other living beingness in different of ways. We will come back to the question of the necessity to rethink the plant’s soul.

**Excursus: Peripatetic Scholasticism**

It is well known that scholastic scholars like Albert the Great (Albertus Magnus, 1200-1280) and his student Thomas Aquinas (1225-1274) called in Arabic sources extensively, mainly Ibn Sinā (Avicenna). This also holds true especially for the philosophical reception and discussion of Ibn Ruṣd (Averroes), the most known “commentator” of Aristoteles at that time – an estimation which is regarding the philosophy of Ibn Ruṣd reductionist as he went far beyond pure commenting, becoming finally the reason for the ban of his and the thoughts of Ibn Sinā in Latin Europe. Also, the younger Thomas Aquinas had followed Ibn Ruṣd in his differentiation of worldly and theological knowledge while approaching towards one truth. Therefore, Aquinas was accused of heresy, and in the particular of being an Averroeist (Pillay, Fernandes, 2017).

When in 1270 Thomas wrote *De unitate intellectus contra Averroistas*, the work aimed at refuting mainly the thinking of the Averroeist Siger of Brabant (1235/40-1284). It was foremost Siger who called in Arabic readings of Aristoteles. “En effet, il cite souvent Averroès et Moïse Maimonides, et dans son traité *De Animae intellectiva*, les questions averroiistes sur la corruptibilité de l’âme, la multiplication du principe pensant avec les corps, sont très-nettement posées.” (Renan 272) Moïse Maimonides (1138-1204) was a Jewish Averroeist, and he had also been criticized by Thomas. Aquinas made a strong effort to disprove the Aristotelean-Averroeist teachings of a specific understanding of „unitas intellectus“, which assumed a uniformed essence of the intellect of all human beings (Dempfé, 1986, p. 234). Dempf linked this Averroeist understanding of the autonomy of the unity of life to Heraclitus, to an essentialist and excessive increase of the doctrine of eternal natures and saw in Siger of Barbant, whose principal statement was „a life without research is the death and the grave of an inglorious man“, the main opponent to the position of Thomas
Ernst Bloch interpreted the philosophical thesis of Ibn Sinā /Avicenna and Ibn Rušd/Averroes against which Thomas polemicized precisely as “alle Menschen haben nur eine einzige Vernunft, und die Vernunft in allen Menschen ist eine einheitliche.” (all human beings have only one unique reason, and the reason is a unified in all humans, my trans.) (Bloch, 1952, p. 36). We later will have to discuss whether this uniqueness of human reason is comprehensible and whether it holds true only for the human.

On the 10th December 1270 the following theses, mainly supported by Avicenna und Averroes, were banned (we have chosen theses tracing back to Avicenna):

1. Quod intellectus omnium hominum est unus et idem numero. (That the intellect of all-human is one and same number, my trans.)
2. Quod ista est falsa vel impropria: Homo intelligit. (It is wrong to assume, that human beings know, my trans.) […]
5. Quod mundus est eternus. (That the world is eternal, my trans.)
10. Quod Deus non cognoscit singularia. (That God does not know the particularities, my trans.)” (Ley, 1957, pp. 293-294)

The ban was renewed and extended in 1277, causing probably a backslash for science and philosophies for the coming centuries, especially in French and German speaking lands.

We outlined the scholastic debate here shortly, to show that the obvious more theological controversies superpose the common ground of the soul’s ontological concepts. These were not part of the debate. The hierachization of the soul and its faculties was consensus. In a context of posthuman eco-phenomenology we recall the old controversy in order to raise here the question whether in case that human beings might be equipped with the ability to know, how they do know? And whether the long-lasting architecture of the soul’s understanding was helpful to grasp not only the essence of “the plant” but the complex interplay of life.

**Sentient logos moving symbiotic communities**

Coming back the phenomenon of the coral. For a long time, the coral was believed to be a mineral, having, according to Pliny, healing properties. Robert Boyle (1627-91) saw in the coral a plant-mineral hybrid, then corals were classified by Marsigli as plants, before, in the course of the studies of Peyssonnel in the Caribbean at the end of the first half of the 18th century finally being “accepted” as animals. A living-together of plants with other forms of living-beingness was pointed out by Manusco who characterised “plants very different from animals and more like a colony than an individual. (Mancuso & Viola, 2015, p. 200). Nowadays also corals are identified as marine invertebrates, living in colonies, and as reef builders fascinating “architects”.

Endangered first probably after nuclear testing in the Pacific and worldwide coral mining, then by global warming of the seas, coral bleaching – a disease – spread drastically (Great Barrier Reef).
Corals have specific stem cells which allow them to regenerate when injured, living on for up to one century. Did Gilgamesh “know” about this, when diving for the herb of immortality to the ground of the sea. We do not yet know, for what “plant” Gilgamesh searched when striving for immortality, and we will not dwell on these questions any further. The example of the coral shows on the one hand progressing knowledge and on the other hand the increasing emergency to re-enmesh creatively the individual into the web of life. Coral fishing for the beauties industries’ cell refreshment is not sustainable at all. Corals live as a symbiotic community as individual polyps together with seaweeds. Some of them are catching small fishes and plankton. In case they are overshadowed, they turn to the sun-light for photosynthesis. It seems that the coral follows here the old Egyptian hymns praising the sun: Or: “… all plants turn around toward your beauty, there is no life for those who do not look at you” (Wiebach-Koepke, 2009, p. 54).

Here is not the place to debate extensively “pre-Aristotelian” or, more precisely philosophies, which preceded Pre-Socratic schools. But in short: It seems that Aristoteles had fallen far behind insights, which were already achieved in Ancient Egyptian philosophies. While in Egyptian cosmogonies – and I refer only to one cosmogony among others – the Prime Mover unfolds out of Prime Matter, the primordial waters Nun, with Aristoteles’s first philosophy (metaphysics) a certain dualism came up. Order and chaos, in Ancient Egyptian thought both present at every moment, were not grasped simultaneously any more. With Aristoteles a more hierarchical and teleological concept of development broke fresh ground. Every being in nature strives for what is believed to be its most perfect and suitable form.

The ancient Egyptian Ma’at Philosophy included all being, the heavenly bodies, the seasons, the plants and animals, the human-being, life and death. Egyptian philosophy was not magic - in the sense the often-negative connotation has - but more based on a, what I would like to call, circular divine creativity which, was identified with the sun. “All living plants which grow in the earth are thriving at your rising, they are drunk with you at your sight” (Wiebach-Koepke, 2009, p. 53). It is the Sun-God being, the creative force, initiating every vital process and bringing life into existence. In Plotinus we still find traces of the Egyptian God-Sun-Light cosmology, which later was probably taken over and assimilated by Ibn Rušd (Averroes), when identifying light as the noblest among the sense perceivable things (Averroes, 2010, p. 120). Of course, the Ancient Egyptians were not aware of the chemical reaction (nowadays known as photosynthesis), driving the unfolding of life during day times and calming down during the night. And, even if the grasping of life’s interplay was more poetical than analytical, we deny Hegel’s claim that true philosophy begins with Greece. To the contrary with Aristoteles the categorization of life broke fresh ground. While the differentiation of life, in terms of a closer specification of natural individuality, advanced, the insights into the micro-macro-cosmic interwovenness of life suffered a setback. As Aristoteles categorized the soul into three levels (vegetative, animal and rational-human), the communicative and cooperative interplay of life became in the same time de-laced or unbundled.

Not only the human perceptive faculties were arranged hierarchically, but also the interwovenness of life became graded, which contradicts the sentence of the logos, the primal feature of the intentional co-relatedness of the constructive process of life’s unfolding. When Anna-Teresa Tymieniecka underlines that sentence “is key
to life’s communal sharing at all levels of complexity (Tymieniecka, 2009, p. 31) this holds not least true for the complexity of plants’ life. Not for nothing Tymieniecka underlined that life originates by progressive individualization. “But”, as she emphasizes, “I would not introduce types of measures of what is higher and lower (Tymieniecka, 2008, p. 3).

We know that plants do not only move their leaves, be it for protection or hunting insects (Venus Flytrap), but some even move by ejecting seeds with a sufficient force to fly for distances up to 10 m, e.g., the Witch-hazel (Hamamelis). Other plants “walk” in the rain forest, like the walking palm (Socratea exorrhiza) with its stilt root (of course it might take years for the walking palm to move forward a bit, and it is also not as easy in the dense rain forest).

That, however, is not the point here. Also, not the visibility of plants’ often non-visible movements, or their invisible communication by the networking of roots, or their extended senses beyond the human (perceiving electromagnetic fields etc.), the collaboration with e.g., ants and other insects in order to protect themselves against pests (Mancuso & Viola, 2015, p. 27). Plants are “intelligent” and humans can even learn from them. More of importance is that not any of the individualized souls and its specific forms in the Aristotelean concept would survive without being in permanent communication with everything—there—is—alive.

A new critique of reason overcomes life’s hierarchical categorization. Anna-Teresa Tymieniecka followed closely the latest research results in biological science. Based on these studies she wrote regarding the „simple creature of the plant“:

„Only in their togetherness, union, and community do they guarantee the total expression of individuality. “ (Tymieniecka, 2008, p. 79) Furthermore, and here the quest towards a new understanding of life, a new critique of reason (New Enlightenment) comes to the foreground, thus especially in the context of the horrific crisis of the human, requiring a fundamental new „geo-cosmic positioning of the human, within the unity-of-everything—there—is—alive“ (Tymieniecka). Only the human beingness tends to sequence life. A dialogue between philosophies in Islam, other worldviews and the phenomenology of life will not least have to overcome the verticalization of life.

If we come back to the already mentioned Scheler-Haberlandt controversy and consider the latter’s studies, among them Sinnesorgane im Pflanzenreich zur Perzeption mechanischer Reize (Sense organs in the kingdom of animals and mechanic stimulation) (1906), the ground-breaking realizations in the fields of botany cannot be denied. The research of Aldrovanda vesiculosa, a carnivorous plant, capturing small aquatic invertebrates while using traps similar to those of the Venus Flytrap, brought Haberlandt to the conclusion that „Aldovandra“ attracts animals to a trap, before digesting the victim and benefitting from it. The example given here fits in the imagination of a kind of an anthropomorphization of the „behaviour“ of plants, interpreting life as a kind of permanent struggle in which the „stronger“ and more tricky wins. But, plants “act”, quite different. In the context of newer research, we will come back to the debate not only on the sensitivity of plants, but also on their cooperative “strategies” of life. At this point we have to emphasize that Haberlandt was far from being the first who gave attention to the sensitivity of plants, and still, we refuse to see plants as sentient beings (Mancuso, Viola, 2015, p. 80).
Tymieniecka closely follows new botanical research, while introducing her *Philosophy of Life* in perspective of a New Enlightenment:

“This leads directly to the question of the individual’s existential place within its ‘population’, its place within the plant community (and maybe further out into the living kingdom), a question prompted by bringing out the coexistent modi of plants within their specific concrete territories and culminating in a move to the borderline of the phenomenal and the scientifically observable where a crucial challenge to the individuality and autonomy of the whole living unit of a plant is being raised.” (Tymieniecka, 2008, p. 82).

**Conclusion and outlook**

In perspective of a New Enlightenment, introduced by Anna-Teresa Tymieniecka, the question not only of vegetative individualization but of all living beingness is most challenging. The Aristotelian vertical-hierarchical model bars the way to realize the “spiral direction of evolutive progress” (Tymieniecka, 2009, p. 64). An ascending progressive unfolding of life (vertical), bringing new types into beingness, is carried on with an extension of the communicative and sentient logos, unifying life. The horizontal communicative-sentient extension of life’s unfolding went hand in hand with its logic life-transcending course, continuously creating new types of life, among them human-beingness. But is this process progressing? It seems not to be for sure that humans’ creativity progresses, also not in an evolutive sense. The human-eco crisis tends to degenerate specific capacities and abilities. Two-dimensionalities (e.g., the youngsters’ permanent “screening”) cause neuro-regressions of imaginative faculties. While being aware of many newest “Apps” the meg-city captured human does not know even the names of minerals, plants and butterflies, as long as these are still alive at all around him/her. The human not only broke out of life’s symbiotic community, s/he progressively destroyed it. This goes so far, that the human “enabled” him/herself to erase life nearly completely. A New Enlightenment should guard against obvious human-destructive tendencies, without falling into a sceptic or even apocalyptic pessimism. To the contrary, while outpacing the hierarchization of life – more a kind of illusory and elusive man-made affirmation – a New Enlightenment will have to sensitize for a vision of life in which human beingness is interwoven in the symbiotic web of life. Then the human will self-unfold life (again), thus in harmony with the sentient-creative-communicative Logos of Life.

“Symbiotic linkage and interactive exchange offer the web of life, which among its many functions serves with as it were as a nervous system, and make the unity-of-everything-there-is-alive, without which no living being would come to exist. In this sense *Once is All*. Given this state of affairs, we may see too the validity of Leibniz’s intuition that each monad reflects all the universe.” (Tymieniecka, 2008, p. 188)

With this in mind we will continue the dialogue of philosophies before and in Islam, in Christianity and beyond, with the Phenomenology of life, unifying Ibn Sīnā and Heidegger towards a New Enlightenment.
References

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