



Editorial

# The Amazon Rainforest of Pre-Modern Literature: Ethics, Values, and Ideals from the Past for Our Future. With a Focus on Aristotle and Heinrich Kaufringer

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**Abstract:** The tensions between the STEM fields and the Humanities are artificial and might be the result of nothing but political and financial competition. In essence, all scholars explore their topics in a critical fashion, relying on the principles of verification and falsification. Most important proves to be the notion of the laboratory, the storehouse of experiences, ideas, imagination, experiments. For that reason, here the metaphor of the Amazon rainforest is used to illustrate where the common denominators for scientists and scholars rest. Without that vast field of experiences from the past the future cannot be built. The focus here is based on the human condition and its reliance on ethical ideals as already developed by Aristotle. In fact, neither science nor humanities-based research are possible without ethics. Moreover, as illustrated by the case of one of the stories by Heinrich Kaufringer (ca. 1400), human conditions have always been precarious, contingent, puzzling, and fragile, especially if ethics do not inform the individual's actions. Pre-modern literature is here identified as an 'Amazon rainforest' that only waits to be explored for future needs.

**Keywords:** Amazon rainforest as laboratory; pre-modern literature; Aristotle; Heinrich Kaufringer; ethics; STEM; Humanities; STEAM; STEAHM

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Even though research on the pre-modern world has been well established for a very long time, globally speaking there is a steady decline in interest especially in history (Brookins 2016). An entire discipline is at risk, to be a little overdramatic, of falling into extinction, and it faces serious challenges from within and without, requiring intensive efforts to reflect upon its own purposes and future function (Barros and McCrank 2004; see already Burckhardt 1982). This has severe consequences also for the study of literature, the arts, philosophy, religion, and other fields in the Humanities and Social Sciences. Industry 4.0 is the new catchword, while the relevance of our past seems to fade away both within the academy and in public, along with the vast traditions of human culture (but see Lerner 1997; Bennett 2006). STEM dominates the public discourse, whereas STEAM would be the much better response to the current challenges (Classen 2018a).

However, human life is deeply determined by its culture and memory, and we develop forward not simply by searching for new methods, new strategies, and new materials without any regard of previous experiences and learning. In fact, historical knowledge, ideas, and values play a much larger role in culture, identity, value formation, and character than many stakeholders today are willing to admit. However, at first sight it costs money to preserve them (libraries), although in the long run they tend to be the decisive guidance in all of human operations, providing insights, relevance, and purpose. The STEM fields tend to be well funded from the outside, whereas the Humanities need money from the inside. However, universities across North America continue to subscribe to and be deeply engaged with General Education in which human conditions and history are of essence.

Of course, modern astronomy, optics, computer sciences, medicine, microbiology, engineering, and other fields have helped us to move forward in many amazing venues, and have revolutionized

the way how we see and interact with our world, at least in material terms. For instance, we certainly communicate today so much faster with each other on a global scale, but this does not mean at all that the quality of communication has improved. Despite much tacit opposition, the Humanities, including the study of History, the Arts, Anthropology, and related fields continue to matter centrally and undoubtedly should occupy the center of all academic efforts because they concern human life and provide meaning and relevance. However, the challenge increasingly rests in convincing the upper administration and politicians of the fundamental need of the Humanities, including the study of foreign languages, cultures, philosophy, and religion. This paper continues numerous previous efforts to achieve just that goal, here drawing from the world of the imagery that can easily be shared by the Sciences.

Joshua Davies, for instance, now explores how engagements with medieval artifacts offer “resources, templates and means of excavating our own and others’ places in the world, and the workable memory trails that constitute those places” (Davies 2018, pp. 201–2; cf. the review by Jay Paul Gates in *The Medieval Review*, online, 19.11.20). In fact, the past is very much with us, and it represents the memory of all human life (Carruther 1990). Remembering the past or rediscovering it constitutes one of the central strategies to provide people with identity and relevance because the retrospective offers a grounding from which the effort to aim for the future can be launched. As Jeffrey Andrew Barash now observes, all this represents the collective memory that creates the basis of our lives and makes possible the growth into the future (Barash 2016).

In this paper, I make a renewed effort to defend and explain the Humanities mostly from a European medievalist point of view, which is simply my area of expertise and which has no bearing on the relevance of Asian, African, or any other literature from past and present. In particular I will draw from the metaphor of the Amazon rainforest in order to illustrate how much both scientists and humanists could agree, after all, on a common denominator, the relevance of universal resources both in physical and in metaphysical terms. STEM and the Humanities are not polarly opposed to each other; instead, they represent different facets of the same aspect, our existence here on earth. Past, present, and future talk to each other, as the metaphor of the Amazon rainforest will illustrate. What matters is not a single-minded research project, but a multifaceted approach to all life.

One of the most critical issues in human existence, which seems to be increasingly ignored everywhere, consists of our ethical ideals, concepts, and standards. Many government officials in western countries have recently been charged and tried for corruption or outright crimes, and there are many ripple effects in numerous other areas, whether in the economy or in the academy, whether we think of plagiarism or obstruction of justice. Without ethical principles, we cannot hope to establish a constructive, functioning society. Absolutist monetary concepts have led to a vast imbalance in the modern world, much more than ever before, with some super-rich individuals owning over \$100 billion in private funds. Hence, where is the public discourse on ethics? Does ethics constitute any significant teaching subject in our schools and universities? Technocracy must be balanced by a Humanities-based worldview, and the study of literature, past and present, offers the best opportunities for this delicate yet critically important task. The new studies by Zimmer (2020) and Kern (2020), for instance, re-emphasize the essential relevance of ethics for all human dimensions. Their suggestions, however, are implicitly based on the acknowledgment of the historical dimension of our ethical ideals. Thus, we also need a medieval and classical-ancient perspective.

It does not come as a surprise that the young generation increasingly pursues careers that are determined entirely by the level of salaries, not by personal interests, abilities, or qualifications. However, in face of the imminent climate crisis, global warming, migration, and many other problems, technology and sciences have been able to provide only partial answers, or have even been the cause of catastrophic developments (nuclear power, loss of the ozone layer in the atmosphere, warming of the world oceans, environmental pollution; military aggression as a result of new weaponry).

These urgent issues invite us, if not require us, to probe once again the meaning of human life and how we approach it within the academic framework, whereby we might recover the foundation of all

human existence, ethics. What are the essential criteria that would allow us to declare that our lives are happy and fulfilled, that is determined by ethical thinking? How do we establish a functioning, well-balanced social framework, unless we all operate by some basic ethical standards? Moreover, as a society, we can only achieve good cooperation, a sense of community, mutual respect, tolerance, and, above all, a solid form of communication if we agree on a set of fundamental values embraced by everyone. Those are normally expressed in a Constitution, federal laws, state laws, but then also in some religious texts that provide the foundation for ethical behavior.

Human beings do not possess a genetic code directing the individual to good, ethical behavior. This is a long-term learning process, and much depends not on nature, but on nurture, i.e., education. While there is no criticism against STEM as such, the essential driver in our society moving us forward into the future, technology by itself cannot be the answer for these urgent issues. Indeed, throughout time, the critical questions pertaining to human existence cannot be solved through the application of algorithms, as we would say today, or of mechanical tools with which to fix broken hearts, to overcome loneliness, desperation, sorrow, fear, or despondency. There are countless issues that we need to address on a daily basis, whether they pertain to happiness, love, and meaning altogether, but the voices supporting technology tend to be louder than those embracing literature and the arts where the true human issues are examined, negotiated, and explored, maybe as illusions, as a utopia, as dream concepts, or as a fiasco. But the fictional text serves critically as a platform to focus on the human heart and mind.

Violence, for instance, threatens to destroy our social fabric on a daily basis, and crime is closely related with that. Intolerance, racism, sexism, hatred, agism, and many other phobias are, tragically, very much present everywhere. Around 40,000 people die a violent death in the United States every year, and despite countless mass shootings that are ongoing almost daily, American society has not found any significant way how to address this huge problem that threatens to destroy our social fabric and the basic bonds that hold us together as human beings (<https://www.pewresearch.org/fact-tank/2019/08/16/what-the-data-says-about-gun-deaths-in-the-u-s/>). Anti-Semitism continues to haunt the modern world, now coupled increasingly with Islamophobia, but how do we confront those hateful attitudes, if we do not go back to our past experiences and reflect upon the way how we got here today in the first place?

Science, medicine, and technology do not offer any solutions in that regard and they do not even address those problems because they are irrelevant to them. Nevertheless, we are all in an agreement that our social issues must be dealt with if we want to survive and to progress as a collective. This is where the Humanities enter the picture, even though it would be delusional to assume that the study of a literary text, a painting, a musical composition, or of a philosophical treatise might provide a magical response that would solve everything. Society does not follow a simplistic mechanical process, which is also the reason why digitization and robotization cannot assist us in this most difficult matter. Instead, we as people rely on a discourse that slowly but surely has taken us from one stage in our cultural development to another. As the current stream of contemporary literature indicates, the search for insights into the human issue and the endeavor to find useful models of human behavior continues all the time.

Faith, ideology, values, ideals, but then also feelings, sentiments, and hence mentality matter deeply and are very slow-moving throughout time. Nevertheless, change takes place as we have witnessed during the last decades both in the USA and in many other countries all over the world, especially with regard to people's interaction and mutual respect, and hence the relationship between majority and minorities (see the issues of racism, LGBTQ rights, women's rights, etc.).

This now allows us to turn to the question of what the Humanities can contribute to the well-being of our society. The study of literature, honestly, does not represent a panacea, but it always proves to be a medium to investigate human life in its infinitude of features, highlights, downfalls, losses, successes, happiness, sorrow, and so forth. Studying fictional texts makes it possible to investigate the vast range of potentialities in our existence, presenting us with endless options and models of behavior.

Already the ancients had to work through many if not all of the fundamental issues besetting people, whether we think of jealousy, envy, hatred, fear, pride, lust, anger, sloth, greed, and gluttony (basically the Seven Deadly Sins as formulated already by the medieval Christian Church; cf. [Newhauser 2007](#); [Langum 2016](#)).

Homer's *Iliad* and his *Odyssey* remain as much classics and hence of timeless value as Wolfram von Eschenbach's *Parzival*, Dante's *Divina Commedia*, or Johann Wolfgang Goethe's *Faust*, and we could easily list works by complementary female authors since antiquity who equally contributed to the exploration of human nature and experiences, such as Sappho, Hrotsvit of Gandersheim, Marie de France, Mechthild of Magdeburg, Christine de Pizan, or Jane Austen.

The literary text, in short, serves as a kind of prism, or a magnifying glass which makes it possible for the reader to perceive him/herself through a looking-glass. In most cases, fiction overdramatizes conditions, ideas, situations, figures, vices, and virtues, but this makes it possible for the modern reader/listener to study more carefully what constitutes the human conditions, attitudes, concepts, notions, or values. While students of microbiology or chemistry resort to the microscope, and while students of astronomy rely on the telescope, students of humanity draw from literary texts or visual documents to carry out an analogous investigation, looking into human life using a literary or artistic lens. Intriguingly, considering the overarching situation throughout history, there are only few fundamental aspects that determine all of human life, and they are the basic building blocks, like proteins, for example.

In essence, poets and writers throughout time have addressed nothing but these central questions: death, the meaning of life, God, love, and the self versus the other (identity). Studying older works of art thus does not remove us in an old-fashioned way from the current world, but simply represents an effort to come to terms with the 'Heisenberg principle,' building a certain degree of objectivity into our investigations. Admittedly, we cannot expect to find immediate answers to the most current issues, such as climate change, pollution, poverty, global migration, or racism, in ancient or medieval literature.

Scientists and sociologists are certainly better qualified to approach those issues. However, when it comes to ethical issues, to vices and virtues, to the quest for identity, or, even more globally, to the meaning of our existence in the here and now, the situation looks very different. Our material environment is the subject of investigation by STEM, but our spiritual environment, our own self in all of its complexity, is the subject of investigation by the Humanities. Both are hence the complementary other side of the same coin.

The central icon that I want to draw from for this paper is nothing less than the Amazon rainforest, a huge habitat of a vast majority of all of global plant and animal life. As we can read online, "The Amazon represents over half of the planet's remaining rainforests, and comprises the largest and most biodiverse tract of tropical rainforest in the world, with an estimated 390 billion individual trees divided into 16,000 species" and dating back at least 55 million years. In fact, "most of the region remained free of savanna-type biomes at least until the current ice age when the climate was drier and savanna more widespread." In terms of biodiversity, the Amazon represents an incredible storehouse of natural resources: "As the largest tract of tropical rainforest in the Americas, the Amazonian rainforests have unparalleled biodiversity. One in ten known species in the world lives in the Amazon rainforest. This constitutes the largest collection of living plants and animal species in the world" ([https://en.wikipedia.org/wiki/Amazon\\_rainforest](https://en.wikipedia.org/wiki/Amazon_rainforest); cf. also [Cleary 2000](#); [Butler 2019](#)).

If we count each individual plant, reptile, spider, animal, fish, or rock in the Amazon, we are confronted with a huge number of living beings and non-living objects. Life is in full development in this vast rainforest basin, and evolution is taking place right in front of our eyes there. The point here, however, is not to study the Amazon as such, but to understand its metaphoric significance also for the Humanities. Pre-modern literature, the arts, or philosophy constitute, on the vertical vector, the human Amazon, especially when we combine the documents from the Eastern and Western world, from the Northern and the Southern Hemisphere and consider them all as being a part of the largest

library in the world (cf. [Venkat Mani 2017](#); [Kells 2017](#)). Human behavior and ideals are determined by many different factors, and those change, of course, in the course of time.

The European Middle Ages, for instance, were much more influenced by the Catholic Church than the eighteenth or the twenty-first century. However, fundamental concerns have remained the same, even if we respond to them today somewhat differently. Murder and treason, for instance, have always been viewed most negatively. Leadership and friendship have consistently mattered deeply, and also love and sexuality. The mode of living out those concepts might be different today, and responses to murder might certainly be changed, at least within the European context (but not in the USA or in China). Eroticism and love used to be values realized mostly outside of marriage, which was reserved primarily for progeny, and yet, the fundamental issue, the emotional bonding between two people, has continued to be of central importance until today. Marriage is a social institution, often subject to political, legal, religious, and economic changes. But passion between two partners, such as Paris and Helena, Abelard and Heloise, Romeo and Juliet, often leading to their tragic ending because of external conflicts, is entirely understandable to us today as well, as the high popularity of Shakespeare's many plays, for instance, indicates.

Literature and countless other products of human activities, ideas, and concepts can thus be equated with the Amazon rainforest, a realm of infinite resources to study what matters in our lives. There is the soil and the canopy, and much in-between, all filled with life. As natural scientists have long recognized, the Amazon rainforest harbors enormous potentials for future research because of the sheer endless biodiversity. We could call that basin in South America the largest laboratory of the world (see, e.g., [Rodrigues-Alcântara 2013](#)). There is no doubt that future scientific research will have to rely on the infinite models provided by nature, whether we think of pharmacy, natural materials, fabrics, energy, etc.

By the same token, every literary text can be viewed as a forest of fiction, as Umberto Eco once called it most appropriately ([Eco 1994](#)). Throughout time, there has been hatred, jealousy, love, hope, faith, rational calculation, machination, justice, cooperation, support, partnership, friendship, marriage, vision, aspiration, and faith. Each individual has to figure out for him/herself where s/he stands in regards to vices and virtues, ideals, values, selfishness, utopia, or dystopia. No one can take on that decision for the other, but the individual has a very hard time facing the various tasks, so it seems, to select or to make a choice. After all, people are constantly challenged and must make decisions, some of which are certainly correct, while others are entirely wrong. The metaphor of the Amazon illustrates all this impressively, since there is constant death and new life, growth and decline, toxicity and healing power, development of new life, material, plant matter, and the emergence of new creatures or biological entities out of the same ground and aiming for the same goal, to live most productively. Poets and artists operate in the same fashion, contributing to the ever-growing forest of human culture.

One drastic example of the endless potentiality of the history of literature would be the question of what constitutes a true leader. Irrespective of the political system we live in, ultimately someone must lead society forward, under whatever circumstances (democratic elections, a coup d'état, an aristocratic dynasty, a party leadership, dictatorship, or tribal rules). While the system by which a leader is elected has varied throughout time, the essential values associated with true leadership have always remained the same, as we can clearly observe in medieval heroic epics that continue to appeal to modern audiences ([Classen 2019](#)).

The issue here is not to create an artificial parallel between a major natural habitat and the world of literature. Instead, the purpose itself rests on a higher epistemological level. If we acknowledge that the issues that we are faced with on a daily basis are difficult and challenging, to say the least, then it makes perfect sense to look for avenues to handle them more reasonably and rationally on the basis of specific models as developed in the past. We thus return to the laboratory and investigate what samples, models, concepts, or methods might be useful in human life compared to those practiced or implemented in nature. The vast store of epic poems, lyric poetry, courtly romances, didactic narratives, plays, verse narratives, treatises, and many other genres represents the infinite experimentation with



what matters in people's existence, what proved to be dangerous or threatening, and what was more insightful and perspicuous than what we practice today.

Literature, hence, presents itself as a medium of epistemological investigations, and the further we go back in history, the more we are privileged to be presented with many different examples of human behavior, some good, some bad, some curious and odd, some surprisingly relevant and parallel. While modern individual cases tend to differ vastly from those presented in pre-modern narratives at first sight (the manager of a company versus the medieval knight), the ethical, moral, religious, and philosophical issues often prove to be surprisingly similar and relatable.

Of course, the contemporary discourse tends to demonize the Middle Ages and to use it only as a negative foil, highlighting only some of the dramatic events and developments in the immediate post-Roman period and the profound crisis in the fourteenth and fifteenth centuries, but the true meaning of that era is thus mostly shut out and ignored (Tommaso di Carpegna Falconieri 2019). Most of the same fundamental quests determining human life were already carried out then, and before we embark on our own new paths, it behooves us naturally to examine the roadmaps created hundreds of years earlier, especially when we enter the metaphorical jungle of the Amazon rainforest, that is, life itself.

Let us briefly pass in review many different kinds of medieval texts, for instance, where central issues are addressed that continue to concern us today. Both in *Beowulf* and in the *Nibelungenlied*, the central question concerns the issue whether and how the individual can survive in a truly threatening world without compromising his/her value system. What does honesty, honor, leadership, friendship, commitment, or community really mean? How do the specific cases or circumstances in those heroic epics help us to reflect on concrete situations today? Anger, jealousy, pride, fear, aggression, hatred, friendship, love, and spirituality are all fully present in the various Eddic texts, such as *Egil's Saga* or *Laxdæla Saga*, which thus can serve as mirrors of human psychology. To be even more extreme, would it not be justifiable to recommend that the future president of the United States read Homer's *Iliad* or the anonymous Old French *Chanson de Roland* in preparation for his/her responsibilities once serving in this high office? Could we not recommend young couples who are thinking about getting married today read some of the medieval *fabliaux*, *mæren*, or *novelle* to comprehend the challenges involved in gender relationships, in sexuality, and in the battle of the wits? There are profound reasons to suggest to older people who are expecting to pass away soon, or to young people as well in preparation for the future to read Johann von Tepl's *Ackermann* (ca. 1400) as an astounding example of how the individual can learn how to come to terms with death? Individuals fighting for women's rights today ought to consult Christine de Pizan's *Cité des femmes* (ca. 1405), while those primarily concerned with race issues should take into consideration what Wolfram von Eschenbach (d. ca. 1220) or the anonymous author of *Aucassin and Nicolette* (ca. 1230) had to say about this issue.

Toleration and tolerance, for instance, are not issues which scientists or medical researchers can tackle easily without the help of specific examples. Instead, researchers of medieval philosophy and religion are called upon to consider the meaning of this highly complex issue because they have been challenged with it already six hundred years before our time and developed their own ideas, such as in the famous 'Ring Parable' contained in the third story of the first day in Boccaccio's *Decameron* (Classen 2018d). To draw from our central metaphor, the Amazon rainforest harbors countless species, samples, creatures, and hence, to return to our own field of investigation, countless ideas, models, examples, and concepts relating to fundamental human issues both in the past and in the present.

We do not know what future researchers will discover, what methods of analysis they will pursue, how they will draw from the raw material, such as the Amazon forest itself, or from the vast realm of medieval and early modern literature, the arts, religion, or philosophy, in order to find productive avenues to solve issues and to establish peace. Of course, medieval medicine and philosophy invite critical and open-minded readings as well insofar as many seemingly absurd, outlandish, or bizarre models of thinking might make it possible for us to explore heretofore untouched territories of epistemology or scientific/medical investigation. While the ancient humoral teaching developed

by Hippocrates and Galen profoundly dominated medieval medical teachings, in light of modern integrative medicine, we find ourselves at time invited to reconsider what the meaning of the four humors might really have entailed and to what extent we might be able to draw from it after all (Black 2020).

I have investigated many of these issues already in a variety of critical studies, so I do not need to go into further details here as to pedagogical and interpretive methods and concepts (e.g., Classen 2014, 2018c). We also do not need to question further whether the past really matters for us today, but we must learn better how to explain its true relevance for the present and future generation. Differently put, how do we convince the present generation that history is of great relevance in order to find access to the future (Currie 2019)?

Obviously, previous experiences serve as most valuable tools to reflect on any kind of conflicts, tensions, issues, challenges, propositions, or situations, and can serve as pilot lights. Of course, many people might argue that they could steer their metaphorical ship into the harbor of their future without any help from yesterday, but in practical terms it has always been crucial to be guided by a pilot or a light house. Or, what air plane would be able to land at an airport without the help of the airport traffic controller? Even the best radar system, mechanized control operations, or computerized guidance cannot replace human observation, so our existence is not at all simply grounded in the present.

Of course, we certainly require radar and computers in our modern world, but everything else associated with them is built on a vast storehouse of personal and collective experiences. By the same token, our lives depend on the past and proceeds productively by means of keeping an eye backwards and an eye forward. Or, to use another metaphor, when climbing a ladder, we eventually reach a certain rung, or the very top of it, but the entire ladder cannot exist without the bottom structure, especially when we want to climb down again for a variety of specific needs or reasons, either spiritual, medical, cultural, or scientific. The scaffold of life consists of the vertical and the horizontal; otherwise the structure will collapse. Medieval literature certainly constitutes one of the rungs of this huge ladder. Countless other artistic expressions from East and West also need to be incorporated because the structure of human life is enormously rich. Literary texts, musical compositions, philosophical reflections, visual works, and other expressions of human creativity contribute infinitely to the constant growth of that scaffold or that enormous ladder.

It is absolutely clear that pre-modern literature, including classical texts, provides a host of narrative examples reflecting human life in all of its variations, challenges, and opportunities. Those experiences are simply valuable for us and remain crucial for all our teaching of future generations. Thus, Beowulf's struggle against the dragon as the arch evil, Roland's ultimate fight against the Muslim forces to defend Christianity, Parzival's efforts (Wolfram von Eschenbach) to gain access to the Grail as his ultimate goal in this life, Mechthild's superhuman strife to reach out to or to meet the Godhead, Marie de France's endeavors to present avenues for her literary figures to gain erotic happiness, and Dante's ideals to find his way toward Paradiso deserve to be embraced as fundamental literary strategies to make sense out of our life. The literary Amazon rainforest is waiting for us, and it consists both of its panoply and its enormously deep soil where most of life is hidden.

All this can ultimately be captured and transformed into a meaningful and practical teaching strategy by way of returning to one of the essential aspects of all of human existence, ethics, as taught and practiced a long time before us already. Without ethical ideals or standards, there cannot be true and full life. The ancient Greek philosophers Plato and Aristotle formulated very specific concepts about this aspect of existence. As Richard Kraut summarizes the Aristotelian ethics (Kraut 2001, rev. 2018), formulated in his *Nicomachean Ethics*, which were a later and improved version of the *Eudemian Ethics*:

What we need, in order to live well, is a proper appreciation of the way in which such goods as friendship, pleasure, virtue, honor and wealth fit together as a whole. In order to apply that general understanding to particular cases, we must acquire, through proper upbringing and habits, the ability to see, on each occasion, which course of action is best supported

by reasons. Therefore practical wisdom, as he conceives it, cannot be acquired solely by learning general rules. We must also acquire, through practice, those deliberative, emotional, and social skills that enable us to put our general understanding of well-being into practice in ways that are suitable to each occasion.

The four cardinal aspects of Aristotle's teachings can be summarized as follows:

Being of "great soul" (magnanimity), the virtue where someone would be truly deserving of the highest praise and have a correct attitude towards the honor this may involve. This is the first case mentioned, and it is mentioned within the initial discussion of practical examples of virtues and vices at 1123b Book IV.

The type of justice or fairness of a good ruler in a good community is then given a similar description, during the special discussion of the virtue (or virtues) of justice at 1129b in Book V.

Phronesis or practical judgment as shown by good leaders is the next to be mentioned in this way at 1144b in Book VI.

The virtue of being a truly good friend is the final example at 1157a in Book VIII ([https://en.wikipedia.org/wiki/Nicomachean\\_Ethics](https://en.wikipedia.org/wiki/Nicomachean_Ethics)).

According to Burger, "The Ethics does not end at its apparent peak, identifying perfect happiness with the life devoted to theōria; instead it goes on to introduce the need for a study of legislation, on the grounds that it is not sufficient only to know about virtue, but one should try to put that knowledge to use" (Burger 2008, p. 212). Ultimately, the introspective and critical reader realizes that "the end we are seeking is what we have been doing" while engaging with the *Ethics* (Burger 2008, p. 215; cf. also Pakaluk 2005; Warne 2007).

While it might certainly be too complex to come to terms with Aristotle's teachings in the short space of this paper, a few quotes from his own work might highlight some of the salient features of his thoughts, at least in Book I. Even though the concept of 'happiness' proves to be rather debatable, Aristotle, and so many other philosophers following him (including Boethius with his famous *De consolatione philosophiae*, ca. 525), emphasized that "If this be so the result is that the good of man is exercise of his faculties in accordance with excellence or virtue, or, if there be more than one, in accordance with the best and most complete virtue." Then, "the view that happiness is excellence or a kind of excellence harmonizes with our account; for 'exercise of faculties in accordance with excellence' belongs to excellence." He warns us, however, "a man is not good at all unless he takes pleasure in noble deeds. No one would call a man just who did not take pleasure in doing justice, nor generous who took no pleasure in acts of generosity, and so on."

However, as Aristotle comments, "we hold happiness to be something that endures and is little liable to change, while the fortunes of one and the same man often undergo many revolutions: for, it is argued, it is plain that, if we follow the changes of fortune, we shall call the same man happy and miserable many times over, making the happy man 'a sort of chameleon and one who rests on no sound foundation'." This then leads to the conclusion: "The happy man, then, as we define him, will have this required property of permanence, and all through life will preserve his character; for he will be occupied continually, or with the least possible interruption, in excellent deeds and excellent speculations; and, whatever his fortune be, he will take it in the noblest fashion, and bear himself always and in all things suitably, since he is truly good and 'foursquare without a flaw'."

Ultimately, as Aristotle concludes, "For indeed happiness does not consist in pastimes of this sort, but in the exercise of virtue, as we have already said"—certainly a concept which resonated deeply in the Middle Ages and far beyond. In fact, there is no reason to assume that this insight into the profound need for ethical behavior and thinking might have changed, shifted, or even disappeared



(here quoted from the online edition of Aristotle's text at: <https://oll.libertyfund.org/titles/aristotle-the-nicomachean-ethics>).

However, this is not a paper about Aristotle and his teachings on ethics, which scholars have discussed already from countless angles. Nevertheless, we can easily agree, far beyond the usual divide between STEM and STEAM, that his insights prove to be fundamental, timeless, and critically relevant for all of us, past and present. In fact, we could go so far as to claim that the essence of life consists of this ethical principal, to pursue goodness, or happiness, in terms of virtues, for the overarching well-being of all of society. Corruption, for instance, represents utter greed, endangering the existence of the community as such. Lack of leadership, excessive pride, selfishness, sloth, lack of commitment, or failure of living up to one's obligations, all these comprise the essential components of goodness, or virtue. There is nothing conservative, traditional, or out-of-date about this observation. Instead, here we recognize the crucial touchstone of all social life, irrespective of when it was created. Past, present, and future equally partake in this realization.

The relevance of the plays by Shakespeare, the various works by Goethe, the novels by Jane Austen, or the ballads by Brecht is not in question. The 'Classics' assume their unquestioned role as if they were written in stone. However, when the issue turns toward the relevance of the Humanities versus the Natural Sciences, none of the well-established criteria matter because they are being subsumed under the category of financially sponsored projects. There is always the generic assumption that scientific research will lead to monetary profit, so both the government and the industry at large are always willing to invest in this field. The Humanities, by contrast, simply cost money and do not yield a tangible gain.

However, this simply means that the Amazon rainforest of the various Humanities fields is profoundly misunderstood. Studying languages, literature, philosophy, history, visual arts, religion, or anthropology does not constitute a luxury, and it is not simply a fun activity. As the example of Aristotle's *Ethics* have taught us, our entire life today is determined by the principles and insights developed by previous thinkers, poets, or artists. We might not know Aristotle's texts, or the writings by Boethius, and we might ignore Kant or Burke altogether out of simple ignorance, and yet, all our own principles are determined by their insights and conclusions as they have percolated down to us through a myriad of channels (literary, essayistic, philosophical, visual, etc.). After all, our own society today is facing an onslaught of ethical, moral, and philosophical problems for which there are no easy solutions because we have neglected or ignored the teachings from the past for too long.

This is not to say at all that only a conservative, backward-looking approach would solve our issues. By the same token, cutting ourselves off from our historical ideals and values, our collective memory, or our traditions simply in favor of modern technology and machinery, would be tantamount to self-abandonment and self-deprivation. We will move forward, of course, but we can only hope to achieve that goal by way of drawing from our historical sources in philosophy, religion, literature, and the arts, at least viewed through modern critical lenses.

This is not meant in absolutist terms, yet without a strong sensitivity toward and responsibility for the cultural past we cannot even hope to move forward in a constructive manner, aiming to realize our own social, ethical, and moral values. All this might be tantamount to carrying the proverbial owls to Athens, or the coals to Newcastle, but we desperately need new and old pilot lights, and we must resort to the treasure trove of antiquity and the Middle Ages, for instance, in order to recognize the ethical, moral, religious, and even aesthetic map in our mind in order to discover the avenues toward our future.

In essence, then, I am pleading for a return to philosophical studies, not only in modern, but also in historical and literary terms, or at least to philosophically-grounded approaches, perceiving the previous voices as landmarks of an intellectual map where ideals and values are explored. The study of pre-modern literature is not simply *l'art pour l'art*, or a historical investigation for its own sake, but proves to be most meaningful, relevant, and insightful, if pursued sensitively, critically, and constructively. We could easily draw from the 'classical' texts, such as Dante's *Divina Commedia* or Chaucer's *Canterbury*

*Tales*, or we could rely on mystical literature composed by Hildegard of Bingen or Margery Kempe. We could resort to love poetry by Guillaume le Neuf or Walther von der Vogelweide, and each time we would encounter highly meaningful efforts to come to terms with critical issues in human life which science or medicine could never handle effectively. The issues raised here pertain to the universal quest for love, for God, for meaning, for identity, and, ultimately, for happiness. The point, however, is not to assume that Dante or Walther had created literary recipes for modern-day life problems. Instead, they addressed fundamental issues and sensitized their audiences, and so us as well, how to approach the issues and how to reflect on them from various perspectives. We are confronted here by alternative concepts about the very same concerns and are provided by innovative insights, methods, at times also values and ideals.

To draw on the central metaphor again, the Amazon rainforest contains an infinite amount of plants, for instance, that contain medical properties for many illnesses and sicknesses for which we have not yet any practical solutions. By the same token, medieval and early modern literature proves to be infinitely rich in its treatment of universal human conflicts, vices, or problems, whether we are thinking about ways to establish good leadership (Classen 2019), whether we struggle with the quest for meaning in our life (Frankl 1946), or whether we want to understand God and death. Scientifically, there are no answers to be expected in any one of those three areas, and in many others. But poets, philosophers, and theologians in the past have already made many suggestions and have developed concepts about true happiness and a good life that deserve to be considered today. In other words, when drawing from the 'literary' Amazon rainforest, we can expect many surprises, epiphanies, and discoveries. Scientists would certainly have to agree with this notion of the untapped natural laboratory as a resource for tomorrow.

Let us end here with the brief analysis of just one example that might help us engage more deeply with the essential issues at stake. It is a simple verse narrative by the otherwise relatively unknown Middle High German poet Heinrich Kaufringer, active around 1400 in Landsberg near Augsburg. His so-called *mæren* have recently attracted considerable attention because of the poet's emphasis on fundamental ethical concerns, gender issues, rationality, communication, and the topic of marriage (Classen 2018b). In "The Hermit and the Angel" (Kaufringer 2014, no. 1), a holy man decides to leave his isolated cell and to wander through the world to observe more of God's workings. He is soon accompanied by a stranger who commits horrible deeds that are entirely baffling to the hermit. First he kills the infant of a friendly inn-keeper who had hosted them free of charge. Then he steals a valuable chalice of a second kind inn-keeper, and subsequently hands it over to an evil inn-keeper who charges them heftily although they did not get a real place to stay. Finally, the stranger kills a young man who comes running past them by pushing him into the river below them where he drowns.

This represents the last straw for the poor hermit, and he is about to explode when the stranger reveals himself as an angel who acted on behalf of God. Each of those four people were actually guilty of sinful behavior and deserved their death or loss of child and chalice respectively, while the evil man was lost at any rate and so got a little joy here on earth before his eternal condemnation. The angel then urges the hermit to return to his cell and not to wonder any further about God's decisions because divine justice cannot be comprehended by human beings.

There are similar cases in medieval Jewish and Spanish literature (Thompson 1932, J225.0.1), and each time we are to understand that the human mind is rather limited in its efforts to come to terms with God's working here in this world. This brings to our attention the universal problem of justice which can often not be achieved because the circumstances are beyond the individual's control. In the Middle Ages, the legal practice of the ordeal was used at least until the early thirteenth century—banned since the Fourth Lateran Council in 1215—but it was certainly a clear expression of human helplessness in such cases where contradictory statements and inconclusive evidence made the final judgment impossible (Neumann 2010). While the classical-antique approach to such conditions was then often determined by the principle of *in dubio pro reo*, in the Middle Ages the help of God was sought after all. People's secret thoughts are deeply decisive in evaluating right and wrong. However, who is truly

authorized to reach a judgment? Modern conditions do not necessarily make it easier for us to achieve justice despite the availability of DNA testing. Justice, truth, fairness, validity, or veracity are esoteric, perhaps even elusive terms, and throughout antiquity and the Middle Ages writers have constantly tried to come to terms with those fundamental issues. Algorithms do not provide any answers in that regard. Engineering methods pertain only to material objects, not to human concerns. Computers can recognize dangerous situations in the most dense car traffic, but ethical concerns basically do not matter within that electronic medium, at least not for now.

However, when we draw from literary examples, such as Kaufringer's first verse narrative, we are directly alerted to our fundamental condition as people who need and yet cannot really achieve happiness. We could also rely on the *lais* by Marie de France in order to explore the meaning of eroticism and love in the Middle Ages. Boccaccio's *novelle* or Chaucer's *tales* are not only masterpieces of late medieval literature, but also mirrors of fourteenth-century life with all of its complexities and contradictions. Kaufringer contributed to the same discourse and deepened it even further. For him, the question loomed large of how the individual could operate in the changing world of the late Middle Ages. Considering the extent to which Boethius or Aristotle continued to influence their posterity at least until the eighteenth century, if not today, we can fathom the extent to which pre-modern intellectualism mattered deeply well into modernity. The search for truth, for the good, and for happiness continues, and it has not lost any of its relevance today. Of course, we must find our own solutions and methods, but we can draw from a huge storehouse of previous experiences, insight, visions, and learning in order to organize our own thinking and reflections, as Jürgen Habermas has famously outlined in his most recent two-volume study, *Auch eine Geschichte der Philosophie* (Habermas 2019; Also a History of Philosophy).

While my concern here has focused on the relevance of literature vis-à-vis the STEM fields, and especially the relevance of medieval literature, Habermas questions poignantly how we can explain the importance of philosophy in our day and age, both in its historical and in its contemporary dimension. Although he is primarily concerned with post-metaphysical thinking first developed by Spinoza, Hobbes, then Kant and Fichte, he leaves no doubt that philosophical approaches, grounded in the past, constitute a fundamental instrument in our efforts also today to create meaningful life: "Das philosophische Denken reagiert nicht nur auf die Herausforderungen des akkumulierten Weltwissens, sondern, wie Hegel als erster erkennt, auch auf Krisenphänomene eines Zerfalls der Solidarität, die insbesondere im Zuge des modernen Formwandels der gesellschaftlichen Integration zu Bewusstsein kommt" (Habermas 2019, vol. 1, p. 39; Philosophical thinking does not only react upon the challenges of the accumulated knowledge about the world, but also, as Hegel recognized as the first one, upon the phenomena of crisis brought about by the collapse of solidarity, which grows especially in the course of the modern change of forms in the social integration). It would go too far here to engage at length with Habermas's concepts, but it proves to be immediately obvious that the fundamental questions concerning the human identity, the path toward and beyond death, and the meaning of life have deep roots without which the present conditions cannot be understood.

As Habermas underscores unmistakably, even modern science relies heavily on the major transformations in late medieval philosophy, promoted especially by luminaries such as the English Franciscan William of Ockham (ca. 1287–1347). We live in a world of post-metaphysics, which Ockham introduced already long before our time (Habermas 2019, vol. 1, pp. 807–51). This Franciscan thus illustrated through his philosophy that we must combine history, literature, theology, and the sciences in order to make sense out of our world. STEM is not the answer; STEAM, by contrast, makes much more sense, especially if we integrate the humanities more strongly, so it would be STEAHM.

Granted, my samples have all been drawn from the European context, mostly situated in the pre-modern era. If the model developed here is to make sense, however, we have to incorporate, of course, literature, the arts, and philosophy from all over the world created throughout time and we also must also be highly sensitive to the new voices today that help us gain access to the current issues in human life. The metaphorical Amazon rainforest consists of the root matter, the middle growth,

and the panoply. Nothing can exist without all other parts, and the past (roots) is just as important as the future (leaves), all connected through capillary movements, breathing, so to speak, from deep down to high up, or, from the past to the future. It is the global network that we are facing here, and I am rather confident that the future will witness much closer collaboration between the Science fields and the Humanities, along with the Fine Arts, Social Sciences, and Medicine. However, deliberately removing any one of those parts will make the entire network collapse.

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## References and Notes

- Barash, Jeffrey Andrew. 2016. *Collective Memory and the Historical Past*. Chicago: University of Chicago Press.
- Barros, Carlos, and Lawrence J. McCrank, eds. 2004. *History under Debate: International Reflection on the Discipline*. New York, London and Oxford: The Haworth Press.
- Bennett, Judith M. 2006. *History Matters: Patriarchy and the Challenge of Feminism*. Philadelphia: University of Pennsylvania Press.
- Black, Winston, ed. 2020. *Medicine and Healing in the Premodern West: A History in Documents*. Peterborough: Broadview Press.
- Brookins, Julia. 2016. The Decline in History Majors: What is to be done? *Perspectives on History*. May 10. Available online: <https://www.historians.org/publications-and-directories/perspectives-on-history/may-2016/the-decline-in-history-majors> (accessed on 22 December 2019).
- Burckhardt, Jacob. 1982. *Über das Studium der Geschichte*. Edited by Peter Ganz. Munich: C. H. Beck.
- Burger, Ronna. 2008. *Aristotle's Dialogue with Socrates: On the Nicomachean Ethics*. Chicago: University of Chicago Press.
- Butler, Rheatt A. 2019. The Amazon Rainforest: The World's Largest Rainforest. Available online: <https://rainforests.mongabay.com/amazon/#content> (accessed on 22 December 2019).
- Carruther, Mary. 1990. *The Book of Memory: A Study of Memory in Medieval Culture*. Cambridge Studies in Medieval Literature, 10. Cambridge and New York: Cambridge University Press.
- Classen, Albrecht. 2014. The Challenges of the Humanities, Past, Present, and Future: Why the Middle Ages Mean So Much for Us Today and Tomorrow. *Humanities* 3: 1–18. [CrossRef]
- Classen, Albrecht. 2018a. STEM and Teaching German Language and Literature with an Interdisciplinary Approach: Eighteenth-Century Reports by German Jesuit Missionaries in the German Classroom. *Die Unterrichtspraxis* 51: 53–62. [CrossRef]
- Classen, Albrecht. 2018b. The Agency of Wives in High Medieval German Courtly Romances and Late Medieval Verse Narratives: From Hartmann von Aue to Heinrich Kaufringe. *Quidditas* 39: 25–53. Available online: <https://humanities.byu.edu/rmmra/pdfs/39.pdf> (accessed on 22 December 2019).
- Classen, Albrecht. 2018c. The Human Quest for Happiness and Meaning: Old and New Perspectives: Religious, Philosophical, and Literary Reflections from the Past as a Platform for Our Future. St. Augustine, Boethius, and Gautier de Coincy. *Athens Journal of Humanities & Arts* 5: 179–206. Available online: <http://www.athensjournals.gr/humanities/2018-5-2-3-Classen.pdf> (accessed on 22 December 2019).
- Classen, Albrecht. 2018d. *Toleration and Tolerance in Medieval and Early Modern European Literature*. Routledge Studies in Medieval Literature and Culture, 8. New York and London: Routledge.
- Classen, Albrecht. 2019. The Principles of Honor, Virtue, Leadership, and Ethics: Medieval Epics Speak Out against the Political Malaise in the Twenty-First Century. *The Nibelungenlied and El Poema de Mio Cid*. *Amsterdamer Beiträge zur älteren Germanistik* 79: 388–409. [CrossRef]
- Cleary, David. 2000. Towards an Environmental History of the Amazon: From Pre-history to the Nineteenth Century. *Latin American Research Review* 36: 64–96.
- Currie, Adrian. 2019. *Scientific Knowledge and the Deep Past: History Matters*. Cambridge: Cambridge University Press.
- Davies, Joshua. 2018. *Visions and Ruins: Cultural Memory and the Untimely Middle Ages*. Manchester: Manchester University Press.

- Eco, Umberto. 1994. *Sei passeggiate nei boschi narrativi: Six Walks in the Fictional Woods*. Harvard University, Norton Lectures, 1992–1993. Milan: Bompiani.
- Frankl, Viktor E. 1946. *Man's Search for Meaning*. Translated by Ilse Lasch. London: Hodder and Stoughton.
- Habermas, Jürgen. 2019. *Auch eine Geschichte der Philosophie*. Berlin: Suhrkamp.
- Kaufringer, Heinrich. 2014. *Love, Life, and Lust in Heinrich Kaufringer's Verse Narratives*. Medieval and Renaissance Texts and Studies, 467. MRTS Texts for Teaching, 9. Translated by Albrecht Classen. Tempe: Arizona Center for Medieval and Renaissance Studies.
- Kells, Stuart. 2017. *The Library: A Catalogue of Wonders*. Berkeley: Counterpoint.
- Kern, Iso. 2020. *Der gute Weg des Handelns: Versuch einer Ethik für die heutige Zeit*. Basel and Berlin: Schwabe Verlag.
- Kraut, Richard. 2001. Aristotle's Ethics. Stanford Encyclopedia of Philosophy. rev. 2018. Available online: <https://plato.stanford.edu/entries/aristotle-ethics/> (accessed on 22 December 2019).
- Langum, Victoria. 2016. *Medicine and the Seven Deadly Sins in Late Medieval Literature and Culture*. The New Middle Ages. New York: Palgrave Macmillan.
- Lerner, Gerda. 1997. *Why History Matters: Life and Thought*. New York and Oxford: Oxford University Press.
- Neumann, Sarah. 2010. *Der gerichtliche Zweikampf: Gottesurteil, Wettstreit, Ehrensache*. Ostfildern: Thorbecke.
- Newhauser, Richard. 2007. *The Seven Deadly Sins: From Communities to Individuals*. Studies in Medieval and Reformation Traditions, 123. Leiden and Boston: Brill.
- Pakaluk, Michael. 2005. *Aristotle's Nicomachean Ethics: An Introduction*. Chicago: University of Chicago Press.
- Rodrigues-Alcántara, Clénia. 2013. *Amazon: Biodiversity Conservation, Economic Development & Human Impact*. New York: Nova Science Publishers.
- Thompson, Stith. 1932. Motif Index of Folk Literature. vol. A–L. Available online: <https://books.google.com/books?id=qIjf9pCiVA8C&pg=PA29&lpg=PA29&dq=hermit+und+engel&source=bl&ots=RyHYLAPM61&sig=ACfU3U2F5tKbuHld18Vjv-gxYXToyNmog&hl=en&sa=X&ved=2ahUKEwjQ2u7ivoHmAhWsUt8KHxiJDPcQ6AEwBXoECACQAQ#v=onepage&q=hermit%20und%20engel&f=false> (accessed on 22 December 2019).
- Tommaso di Carpegna Falconieri. 2019. *The Militant Middle Ages: Contemporary Politics between New Barbarians and Modern Crusaders*. National Cultivation of Culture, 20. Leiden and Boston: Brill.
- Venkat Mani, B. 2017. *Recoding World Literature: Libraries, Print Culture, and Germany's Pact with Books*. New York: Fordham University Press.
- Warne, Christopher. 2007. *Aristotle's Nicomachean Ethics: Reader's Guide*. London: Continuum.
- Zimmer, Robert. 2020. *Weltklugheit Die Tradition der europäischen Moralistik*. Schwabe reflexe, 64. Basel and Berlin: Schwabe Verlag.



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