THE INFLUENCE OF NATURAL HISTORY: MARINE ANIMALS AND STRANGE CREATURES IN EDWARD TOPSELL'S *THE HISTORIE OF SERPENTS*

Ana-Maria PAVEL
"Ovidius" University of Constanta

Abstract: *Using and analysing Topsell's translations and explanations of the sea creature's existence, this essay attempts to demonstrate literature's role as a cultural discourse that preserves developing conceptions of early modern water imagery and to begin questioning the existence of particular creatures in the world, their relationships with the inner and the outer space of their experience. I will focus rather more on scientific facts than social or moral values, but I am always concerned with validation of natural history, as* The Historie of Serpents, Or, The Second Booke of Living Creatures (1608) *represents a broad collection of observational data. Natural history is a prism through which to discover Renaissance culture, while each creature or mythical beast presented in the book is attentively described. Topsell compendium is a mix of ancient and contemporary sources, with the names of serpents, dragons and bees, their moral description, conditions of living and particular traits, examining how real-life sea-creatures merge with fantastic ones, supported by powerful illustrations. I argue that Edward Topsell's compendium had a significant impact on Renaissance culture and his imagery of the serpents and sea-creatures was transferred to dramatic interpretations of the natural world in diversified ways.*

Keywords: *ecocriticism, fantastic creatures, marine creatures, monsters, serpents, Edward Topsell, zoology*

Self-alienation, strange feelings, spiritual reality, individuality versus universality. Commonly depicted in stories, the sea is often allegorized as the separation of the individual from society. An adventure into the wild, unpredictable weather systems, the shipwreck of travellers or founding safety on the island, pirates, mermaids, sea gods and sea monsters are only a few of the challenges and puzzling occurrences faced during sea travel, which provided many authors with ideas and thoughts for composing literary works. In Shakespeare's time, oceans and seas are depicted as sources of power, fate, renewal, or even masses that, in the end, transform the body and soul. On the other hand, the sea-change effectively removes material wealth and human bodies from social and economic networks; without the processes of rehabilitation, the riches of the sea cannot join or re-join the human world. In writing about Shakespeare's sea-imagery, in "Shakespeare and the Global Ocean," ecocritic Dan Brayton argues that "in his vividly imagined descriptions of marine landscapes—beaches, the sea floor, islands—as spaces

in which humans both do and do not belong, Shakespeare imagines a deep ontological relationship between humanity and the sea in terms of mutual impacts" (178). In this line of thought, of inclusive cultural influence, I argue that this mutual shift between the human world and the sea existing in Shakespeare's drama is partially derived from the extant works of natural history in his time, including Topsell's compendium of serpents.

Opinions are not only divided, but also controversial in relation to the symbolism of the sea in the Renaissance. Ecologist critic Tom MacFaul, in *Shakespeare and the Natural World*, briefly summarizes a few of the opinions emerging in Shakespeare's time regarding sea metaphors, mentioning theories from Christianity, Renaissance, the Elizabethan period, and the Reformation. MacFaul writes of "the irreducible untidiness and slipperiness of the natural world" (2), which leads to the belief among some of Shakespeare's contemporaries that humans could be placed somewhere outside nature, being able to master it. Yet these presumptuous opinions were opposed by many writers in Shakespeare's time, and they were considered dangerous. MacFaul finally argues that such views might be interpreted as "hubristic" (27) and "human reason therefore needed to be flexible, and modest, recognizing the insight into God's plans. The fit between reason and the natural world had become slippery" (27). There is a visible contradiction in the Renaissance, therefore, between the emerging rationality of scientific thought (as manifested, among others, in Topsell's compendium of the natural world) and the religious and fictional ideas circulating in the period.

This essay investigates ecocritically how Edward Topsell's *The Historie of Serpents* (1608) influenced early modern notions of oceanic life by contributing to the conceptions of natural history and, subsequently, to the creation of oceanic metaphors in Shakespeare's time. As Karen L. Edwards observes about these texts of the early modern period, "Those of Gessner, Ulisse Aldrovandi, Edward Topsell—and Jonston—have been called *pandects* and *humanist encyclopedias*" (Edwards 72). Indeed, these books collected all the knowledge of the natural world extant at a given time. As humanists, all these Renaissance naturalists noticed, besides natural history in its real meaning, a certain theoretical aspect related to what we now call philology. As Brian W. Ogilvie explains in *The Science of Describing Natural History in Renaissance Europe*, scholars in the Renaissance made the distinction "between the empirical study of nature and the symbolic interpretations of it" (Ogilvie 16). From the empirical study of nature to metaphoric meanings there is but a short step, so poets in the Renaissance used a series of images inspired from books of natural history in allegorizing their interpretations of natural phenomena and the human world.

Natural history, therefore, offers insights into a far-reaching culture, as it is by definition a domain leaning more on observation, rather than

experiment, in which significance is placed on the observer, rather than on the observed. It is the oldest continuous humanist tradition. As Thomas Lowe Fleischner observes in *The Way of Natural History* (2011), "Throughout history, attentiveness to nature was so completely entwined with daily life and survival that it was never considered separate from life itself" (Fleischner 10). However, natural symbolism and mythology are related to reptiles and amphibians, as well as dragons, more often than with any other taxonomic group of living creatures. Even nowadays, these animals serve as icons representing mischievousness, devious and manipulative intent, lying, and even death. Considering the metaphoric significance of these creatures, the question is: How did the metaphors about these creatures transcend natural history and were transferred to literature, more specifically to drama?

The Historie of Serpents. Or, The Second Booke of Living Creatures by Edward Topsell was published in London in 1608 and it covers a unique collection of information and woodcut illustrations of imaginary strange animals and marine creatures, and mostly serpents, which once existed in history. Sifting truth from supposition, spaces in the book are shaped through an interaction of the object described; the page and the visual image, which captures both text and movement on a printed page, borrows heavily from earlier treatises, most notably Conrad Gessner's *Historiae animalium*, which leads Topsell to several fantastic claims. For example, in the Dedicatory Epistle to Reverend Richard Neile, Dean of Westminster Cathedral, Topsell claims that he discusses "God's living works" (sig. A3^{r}) and asserts with great confidence that the study of letters (the humanities) is the ultimate form of learning. As Topsell states, "no knowledge of Political States, no Science Geographicall of the round World's Orbe, no speculation Astronomicall of the Heavens lights or motions, no art of speech, reason or works, is comparable to this Learning" (sig. A3^{r}). Therefore, in the early modern view expressed by Topsell, there is an undeniable link between the natural sciences and the humanities, and any work of natural history is expected to place human interactions at the centre of its preoccupation.

By the time Topsell began publishing, in English culture the illustrations of Gessner's various woks on zoology were already ubiquitous. As Katherine Acheson observes in "Gessner, Topsell, and the Purposes of Pictures in Early Modern Natural Histories," pictures of these animals "were painted on ceilings and embroidered on tablecloths, and they punctuated tales of outlandish and apocalyptic goings-on" (Acheson 137). It is mostly assumed that Gessner is probably the first naturalist who covered such a large number of high-quality and culturally-valuable illustrations in a European zoological work, because only a fine observer who "needed an educated eye and mastery of the discipline's practices" (Ogilvie 21) would have managed to master such product and to offer such insights into the broader culture. Gessner's images

of animals are specific and carry significant information, and "the move towards naturalistic representation of these animals demonstrates that curiosity about their structure was increasingly important to Renaissance philosophers" (Etheridge 69). In *Milton and the Natural World: Science and Poetry in Paradise Lost*, Karen L. Edwards argues that the study of animals burgeoned after Gessner (Edwards 72). Edwards insists that "Inspired by and often dependent upon Gessner's work, a succession of massive, illustrated animal histories appeared over the next hundred years" (72). It is not surprising, therefore, that Edward Topsell's work should have had such an impact on early modern thought, even a century after its first publication in London.

Topsell wrote *The Historie of Serpents* in the same manner as Gessner did, describing a whole host of creatures, which are represented through illustrations, with the same content of alphabetically ordered four-footed mythical specimens, amphibians, fish, birds and other aquatic creatures, physically described and named in various languages. Gessner's title pages bear subtitles in different languages, probably because they were meant to be read by a larger public who could no longer read Latin. Topsell also made use of different languages in his work, such as French, Italian, Spanish, Greek or German, in order to show and explain the different names given to the creatures he describes. As Susan Wiseman observes in *Writing Metamorphosis in the English Renaissance 1550-1700*, "The listing of names for creatures from several sacred and secular languages is a repeated feature of Topsell's descriptive technique" (Wiseman 103). On the same page, Susan Wiseman offers the example of the cockatrice, a mythical two-legged dragon or serpent with a rooster's head, present in Topsell's work; apparently this is the King of Serpents "called by the Grecians *Baziliscos*, and by the Latines *Regulus*" (Topsell 119). Interestingly, Topsell does not insist on the size of this creature, but on "his stately pace and magnanimous mind" (Topsell 119), which shows the author's focus on the creature's psychological traits. Wiseman observes that the richness of names listed for the basilisk stabilizes a possibly different monster "found in African, Egyptian, European and domestic narrative and traditions—as well as Greek and Hebrew" (Weisman 103). The multicultural environment and the large geographic expanse of the areas in which these semi-mythical creatures are known to exist give a fictional connotation to these otherwise objective descriptions of reptiles and amphibians.

Exploring legends or myths, each and every existing creature or mythical beast has its own meaning—both hidden and visible—and its particular traits. At times endowed with human characteristics, these descriptions show how real-life sea-creatures merge with fantastic beings, with the help of powerful illustrations. Because only an emblematic image of each animal would not have been sufficient to satisfy the reader's curiosity, Topsell makes use of dense information, addressing questions about their body

undulations, strengths, vulnerabilities, perceptual inner world, diverse environments, functions, fatalities, relation to ecology, to God, to humankind, to other species. Topsell often describes their physical traits and habits in a fantastic manner. For example, about the Cockatrice, he says that "it killed his own kind, by sight, hearing and touching" (Topsell 124). About the Darthe claims that "The manner of this serpent is to get up into trees or hedges, and from there to fly like an Arrow upon the upper parts of men, and so to sting, bite and kill them" (Topsell 145). About the Dragon of the Sea, Topsell notes: "When this is grown to a great and large proportion, whereby it does great harm to other creatures, the winds and the clouds take him up suddenly in the air, and there by violent agitation, shake his body to pieces" (Topsell 235). These descriptions of sea- or land-creatures may look frightening at first sight, but when interpreted from the mutually inclusive perspective of Renaissance humanism, it is clear that they are an integral part of an interrelated world of ecological correspondences and similarities. When these beings become harmful to the environment, the same natural forces that created them cause their destruction.

I argue for the significant cultural impact that such works of natural history—mixed with fantasy—had in the early modern period. Ultimately, the hybrid sea-creatures popularized by Topsell's compendium percolated into the works of Elizabethan and Jacobean playwrights, including Shakespeare, who may have read—or been familiar with—Topsell's translation of Gessner. *The Historie of Serpents* (1608) traces aquatic creatures in art, literature, and history, and also alludes to representations of sea animals in antiquity. In many ways, natural histories, such as Topsell's edited translation, add to the myths of creatures they document, while also informing readers about their physiological aspects; these texts follow their predecessors' efforts, who had already produced encyclopaedias. As Kay Etheridge observes about the state of natural history in the early seventeenth century, "By the time of Belon and Gessner, these animals were more than symbols; they were objects of curiosity and study for the purpose of generating new knowledge about nature" (Etheridge 71). While being part of the new awareness of the natural world in the early modern period, Topsell's compendium is also a link with the past, through the recognition of the presence of divine will in the natural world. As Topsell says in the Preface to the Reader, "for the admiring of Gods praise in the Creatures, standeth not in a confused ignorance not knowing the beginnings and reason of every thinge, but rather in a curious and artificiall investigation of their greatest secrets" (sig. A8^{r}). Therefore, curiosity about the natural world and its pertinent exploration are ways of recognizing divine intervention in human life.

For this reason, the sea in early modern times was both an element of nature and a metaphor for the manifestation of the divine mediation in the

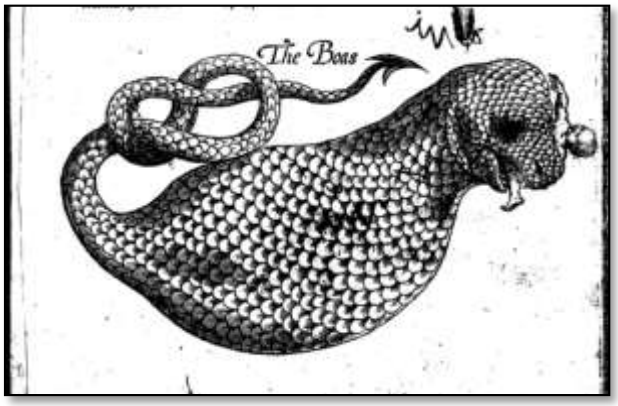
natural world, which came to be connected with fortune. In *Shakespeare's Ocean: An Ecocritical Exploration*, Dan Brayton argues that, in Shakespeare's romances, the sea is a catalyst for the action provided and serves as a metaphor for human inner reflection and questionable fate, assuming that humans do not completely find their place there, but "in venturing upon the waters or merely imagining the depths, characters are confronted with the question of how to conceive of their place on this blue planet" (Brayton, *Shakespeare's Ocean* 64). In Brayton's view, "The psychological effect of an immense global ocean inspired Shakespeare to produce a mix of maritime metaphors" (Brayton, *Shakespeare's Ocean* 78), giving birth to a series of marine, fantastic creatures. As Tom MacFaul observes in *Shakespeare and the Natural World*, "The natural world in Shakespeare's time was conceived as a complex and tangled system of sympathies and antipathies, and man's place in it was highly questionable; everything in life was seen as connected, but this was the source of worry and wonder rather than of complacency" (MacFaul 1). From this comprehensive view of nature, when distinctions between humans and nature, implicitly animals and serpents, became crucial, comes the metaphor of the mutually-dependent relationship between humans and other creatures, including the sea-creatures of the deep. Therefore, Topsell's compendium reveals not only a wide world of serpents populating the countries of Africa and Europe, but he also shows certain serpents who are "lovers of young Virgins" (Topsell 5), or even of young men (Topsell 5). It was but natural for Topsell to describe human–ophidian sentimental relationships as existing organically in a world governed by correspondences and mutual dependencies on divine law.

Both Edward Topsell's two-volume bestiary *The Historie of Foure-Footed Beasts* (1607) and *The Historie of Serpents* (1608) became widely appreciated and popular for their fantastic woodcut illustrations. These two volumes were printed by William Jaggard, the printer of William Shakespeare's First Folio. In both volumes, the English cleric Edward Topsel relies on Gessner's ideas concerning legendary and mythical animals, and he assigns unusual, unconventional attributes to the creatures he describes. At this time, when access to physical library resources is limited, in *The Historie of Serpents*, Topsell debates questionable points, such as the existence of particular creatures in the world, with a complete confidence in his own words. Most of the animals that appear on his pages are actual creatures, but endowed with unusual, unconventional attributes, such as *the Aspes*' eyes, which are "exceeding red and flaming" (Topsell 55); *the Cameleon*, which has "a copped head, like to a Camel, and two bones at the top of their brows standing up on either side, and hanging out" (Topsell 113); or even the Crocodile of the earth, *Scincus*, a type of crocodile which is unknown today, and which is described "to be a beast having his scales like a Gorgon, growing or turning his head

from the tail, and not as others do, from the head to the tail" (Topsell 142). However, Topsell also includes legendary and fabulous animals, duly described and illustrated, such as the dragon, the winged dragon, the hydra, or the unicorn. These fantastic creatures, however, do not look as if they are part of a medieval bestiary, but they are treated as perfectly integrated in the objectively-described natural world.

Collected out of Conrad Gessner's resources, Topsell's *The Historie of Serpents* begins with a general treatise of serpents, describing at large their true nature and figure and continues with their names, conditions, kinds and virtues, considering both the individual creature and its desire to connect with others, the Biblical narratives, their love and hatred towards the humans, the Divine wisdom, the work of God in their creation, preservation or destruction, or the intervention and the power of the human beings in taming them, correlated with historical data from the Scriptures, philosophy books, battle narratives, or even poetry books. Topsell mentions in his Dedication to the Reader that "although I cannot say that I have said all that can be written of these living Creatures, yet I dare say I have wrote more than ever was written before me in any language" (Topsell sig. A7^{v}). This confidence in the power of his own reason—which includes several creatures in well-defined categories—is derived from the Greek scientific mind and Aristotle's urge for definition and categorization, but it is also a demonstration of the Renaissance mind's appetence for investigation and opening new and challenging ways for knowledge.

The book's cover page shows an unconventional front piece to the volume about serpents, an engraving of the boas in the process of swallowing an infant child. The image is related to an episode that Topsell mentions in his work, which occurred in Italy: "when Claudius was Emperour, there was one of them in the Vatican at Rome, in whose belly was found an Infant swallowed whole, and not a bone thereof broken" (Topsell 111). With his giant arrow-tail and lying on the ground, which probably incurs a kind of divine punishment, Topsell also argues that the boa's bite is not poisonous like most of other species that kill through substance, such as *the Hydra*, "for there was



The Historie of Serpents, section of the title page

in that immortal head such a poison as was incurable" (Topsell 201); but boas kill by completely swallowing the pride. As to this serpent's name, "the Latines call it Boa, and Bova of Bos, because by sucking Cow's milk it so encreaseth, that in the end it destroyed all manner of herded, Cattell and Region" (Topsell 111); the Italians call the boa *Serpeda de Aqua*, while the Greeks name it *Hydra*, and it apparently comes from Italy.

Often, animal particularities mirror a systematic interaction between generic heritage and the environment within which it grows. In the exploration of ophidians, in the book *Snakes: The Evolution of Mystery in Nature*, herpetologist Harry Greene identifies different types of boa snakes and their reaction to the environment and to humankind, often explaining their typical behaviour or defensive treatment in different circumstances. For example, "Rosy Boas (*Charina trivirgata*) react to gentle handling by forming a ball of coils, but when more vigorously threatened they release an extremely foul cloacal discharge" (Greene 106). Similarly, "Many young Boa Constrictors are mild-mannered, whereas adults in some populations hiss loudly and strike readily" (Greene 107). Sometimes, as Greene observes, they are treated in a positive manner in human cultures: "Madagascan Ground Boas (*Boa madagascariensis*), Indigo Snake (*Drymarchoncorais*) and some other harmless species are tolerated by rural people" (Greene 294). However, there are also numerous interpretations in literature and history concerning this type on snake. Interestingly, many cultures in both the New and Old Worlds associate boas, among other snakes, in their myths and tales, with female sexuality.

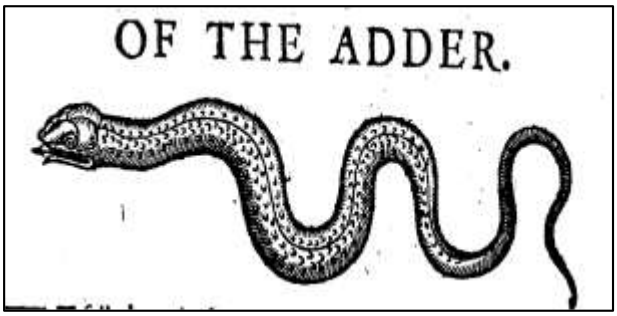
Looking at the picture of humans' relationships with animals, anthropologist Marty Crump reminds readers, in his book entitled *Eye of Newt and Toe of Frog, Adder's Fork and Lizard's Leg; The Lore and Mythology of Amphibians and Reptiles* (2015), of the Cubeo people of Colombia, an ethnic group of the Colombian Amazon, who fear boa constrictors because they are considered lustful. As Crump argues,

> Cubeo women give birth in their manioc gardens, and any difficulties they experiment are blamed on boas. Worse yet, when a woman dies during childbirth, she is assumed to have fornicated with a boa. When the snake comes to fetch his new-born child and discovers it is human, he carries away the mother's soul. (Crump 102)

Strange as this ethnological interpretation of humans' relations with boas might be, it is clear that human societies have always been attracted by ophidians and their imagination created fantastic stories. Even more so, the first part of the title of Marty Crump's anthropological study about the relationship between humans and serpents is inspired from Shakespeare's

Macbeth, when the three witches utter an incantation as they stir their boiling cauldron. The terrible ingredients the weird sisters use for their horrifying brew are "Eye of newt, and toe of frog, / Wool of bat, and tongue of dog, / Adder's fork, and blind-worm's sting, / Lizard's leg, and howlet's wing" (4.1.14-17). These weird ingredients come from species of amphibians and reptiles. While the witches may think they can influence Macbeth's mind through the horrifying incantations by exhibiting a brew that uses ingredients from reptiles and amphibians, they cannot control Macbeth totally. They just create illusions in the Scottish king's mind, which he transforms into murderous action. The fact that a scientific book, such as that written by Marty Crump, takes its title from Shakespeare's *Macbeth* shows that cultural influences work both ways; while Shakespeare was influenced by Topsell's scientific treatise to use names of reptiles and amphibians in his plays, later works on the cultural influence of reptiles take their cue from Shakespeare's metaphoric representations of such creatures.

In his compendium, Topsell generally presents serpents as a means of transformation, making them examples of the world's capacity to generate living creatures. They vary in size, they can be dragons, they can be grouped with other amphibians or insects, or they can come out of the human body. According to Susan Weismann, when writing about the cultural metamorphoses in the Renaissance, serpents "are the 'creeping things' of the Bible, both God's creatures and the Devil's" (Wiseman 102). They are from the earth, or from the water, and there are "prodigious beginnings of serpents, whereof some seem to be true & other to be fabulous" (Topsell 6). The metaphoric significance of serpents, therefore, is paramount and can be found in all cultures and ages.



The Historie of Serpents, p. 50.

Concerning the organisation of Topsell's book, the animals are listed in alphabetical order, according to their English names, in groups, among which Topsell integrated a large number of serpents, from *Adder* to *Viper*. If taking into consideration a table of creatures described in Topsell's first volume *The History of Foure-footed Beastes and Serpents* or his second book *The Historie of Serpents or The Second Booke of living Creatures*, the Adder, alphabetically ordered, is "the most known Serpent in England" (Topsell 51). The subject of much folklore in European countries, this creature received

various scientific names and derivations, such as *Nadere*, or *Natrix*, which signifies a water snake; *Colubre* in Latin, from *colitumbras*, as it lived in shadowy places; *Gelenius* in Greek, which represents snakes without a tail; *Lo Scorzone, Scorsoni, Colubra* in Italian; *Colenure* in French; or *Culebra* in Spain (Topsell 51). Even if called in many ways, these beasts are all long, rough, venomous, secret and hurtful. With a forked or twisted tongue, this serpent puts the victim into painful torments. Concerning the colour, it is most commonly black on the back, green and yellow at times, with a stocky appearance, with scales on it that are sharper than those of the Snake. Topsell discusses several metaphoric allusions to the adder:

> The parts differ not from the general description before recited, it is long like an Eeele and has many Epithets, as *virides colubri*, green Adders, long, rough, venomous, divers coloured, swelling, slyding, winding, blew, terrible, secret, hurtfull, Medusean, Cyniphian, Gorgonean, Lybissine, biting, spotted, wreathing, black, bending, heavy, scalie, and divers such other, as the Gramarians have observed. (Topsell 51)

The references from Greek mythology give a poetic and metaphorical dimension to Topsell's book of natural history. The adder is "Medusean" (51) and "Gorgonean" (51) because the Medusa, or Gorgon, in Greek mythology was a terrible monster with snakes instead of hair (*The Oxford Classical Dictionary* 409). The image was borrowed from mythology to be associated with the description of snakes in a book of natural history.

As concerns its observable physical characteristics, the serpent receives different attributes among naturalists. Karen L. Edwards discusses Topsell's description of the serpent: "The entry concedes that the amphisbaena might be one of the following, depending upon which authority one consulted: a fish; a one-headed serpent that can move forwards and backwards, or whose tail moves as if it were a head; a two-headed *freak* or defect of nature; a naturally born two-headed serpent, or a fabulous legend" (87). On the other hand, Topsell's serpents are beneficial to humans, and they "dwell in one and the same Element with men" (Topsell 3). Regarding their habitation, "their knowledge is from God, their continuance from Heaven, their natures worth our study, their fruit serviceable to man-kind" (Topsell 3), but concerning "their spirits and inclinations, they are the most unreconcilable enemies to man" (Topsell 3). The literary representations of fantastic creatures in Topsell's treatise reflect particular relationships between the biblical references, the remote past, and the present perspective, even if it is not altogether truthful.

The name of God and the motif of serpents in *The Book of Genesis* are used repeatedly throughout the pages of the first chapter in Topsell's *The Historie of Serpents*. When Topsell refers to "Adams fall, or the forbidden Apple" (22), two references can be identified behind this biblical comparison, namely that of calling the serpents' life cold and dry, and the human life hot and moist. This is connected with the theory of humours, advanced by ancient writers and very popular in the Renaissance.[1] But is it nature to be blamed, or actually the humans, for these metaphors of the serpents' characteristics? This is somehow related to what Dan Brayton writes about Shakespeare's use of metaphoric allusions to the natural world, when he questions, "What part of us belongs to the world of nature? To what extent is nature alien? To what extent are we alien to ourselves?" (Brayton 5). Indeed, just like in Shakespeare's plays (where the author speaks through his characters), Topsell's compendium questions the received notions of the humans' place in the natural world, the divine intervention in the workings of destiny, and the role that humans play in the well-organized and aggregated ecosystem. While setting forth primarily the Christian ideas about the symbolism of serpents in a world where reality is merged with metaphoric allusions, Topsell generates new knowledge through his compendium of the natural world, which is as much realistic as it is fictional.

Human identity is primarily seeking for autonomy and self-justification. But curiously, in Topsell's *The Historie of Serpents*, a human-headed serpent, generated in pictures, is available for observation. What does it mean, exactly? The dramatic representation of the serpent in the Garden of Eden as having a human head was, according to John K. Bonnell, in "The Serpent with a Human Head in Art and in Mystery Play," common to drama and iconography; according to this hypothesis, the literary source might have given rise independently to both dramatic and art forms (Bonnell 255). The episodes of the Bible, drawn from the scenes mentioned above, would have had a direct impact on the reader, and there is a dramatic perspective of the Adam and Eve story and the serpent. But interestingly, John K. Bonnell mentions that Petrus Comestor's commentary on the Genesis is regarded as a literary source, in which the serpent is described as having the shape of a young woman (Bonnell 257-258). Medieval

The Historie of Serpents, p.18.

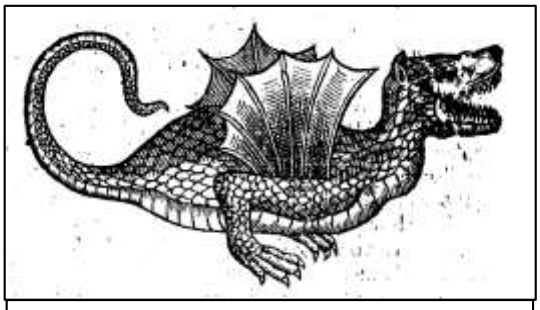
[1] The theory of humours originated in Aristotle and was propagated by ancient doctors, such as Hippocrates and Galen. During the early part of the European Renaissance, this theory, though popular, started to be rejected, as documented by Rashid Bhikha and John Glynn, in "The Theory of Humours Revisited" (6).

theologians, such as the twelfth-century French commentator of the Bible, Petrus Comestor, tried to explain the diversity of the natural world through biblical parables, and sometimes they ended in creating hybrid creatures, half-mythological and half-real. In relation to the above-mentioned formulation of the Middle Ages, the Serpent in the Garden of Eden was half-beast half-human, different from the all-beast that it once had been, namely the devil.

In *The Historie of Serpents*, Topsell mentions the wit and cunning of the serpent: "And that this came not into the Serpent as that time when the deuill framed his tongue to speak, may appeare by the præcept of our Saviour Christ, where he saith; *Be wise as Serpents, be innocent as Doues*" (Topsell 18). Considering the Biblical narrative, the metaphor pairing snakes with doves has a figurative connotation. Although the wisdom of the serpent is a positive trait, it is contrasted with the innocence of the dove. The Bible is filled with such stories and episodes, and this verse is related to the time when Jesus sent his twelve disciples out in their mission to spread the news throughout Israel. Again, the relationship between humans and nature is highlighted, and animals are personified, as was in the initial story, in the Old Testament, in the *Book of Genesis*, where God placed humans in the Garden of Eden. In the biblical earthly paradise, humans are free to do whatever they please, with only one exception, when God forbids Adam and Eve to eat from the tree that is placed at the centre of the garden, telling them that to do so would spell their deaths. However, a snake tempts the woman to taste the forbidden fruit, and the man's companion further persuades him to do so as well. In return, God forces the two out of the garden of Eden and curses the serpent (Ogden 188). Serpents, therefore, are not only real creatures that live in various parts of the world, but they are also metaphorical hybrid beings which, in biblical metaphors or in the medieval teratological compendium of monsters, might be associated with the devil, with manipulative intentions, or even visualized as hybrid creatures that cross from the animal to the human world.

Not only are serpents represented as trans-species fantastic creatures in Topsell's *The Historie of Serpents*, but also the mythical dragons are described as if they were real beings. In the book monograph devoted to the treatment of dragons in Graeco-Roman antiquity, entitled *Dragons, Serpents and Slayers in the Classical and Early Christian Worlds: A Sourcebook*, Daniel Ogden focuses on the dragon fights of myth, which inevitably cast the dragons in negative and aggressive roles. As Ogden observes, "The genealogies tell us that the ancients did indeed think of their great dragons and sea monsters as belonging in a special category together, a point that also emerges from the canonical list of great dragons invoked by Seneca's Medea" (13). Indeed, dragons are semi-mythical beings that have been endowed with metaphorical meanings throughout the centuries, depending on the narrator's perspective and the psychological appeal that these creatures raised in the readers' minds.

For Topsell, the Dragon is like any species of serpent, probably with a richer narrative history. As he says, "Among all the kindes of Serpents, there is none comparable to the Dragon, or that affordeth and yeeldeth so much plentifull matter in history for the ample discovery of the nature thereof" (Topsell 153). Examples of Dragons are from Greek mythology (a dragon was guarding the Golden Fleece), from Alciatus' book of emblems, and from Egyptian mythology. A constellation in the Northern hemisphere is called *Draco*, and the ancient Romans wore images of dragons on their shields to scare their enemies (Topsell 154). The golden apples in the garden of the Hesperides in Lybia were guarded by "a terrible Dragon" (Topsell 155), and there are several sorts of dragons, such as the winged serpents of Arabia and the "Dragons of the Temples" (Topsell 155), found in ancient ritual sites.



The Winged Dragon, in *The Historie of Serpents*, p. 159.

Being a cleric, and therefore extensively dedicated to God and Christian religion, Topsell makes endless speculations concerning the relationships between God and nature, God and animals and, finally, animals and humans. *In Nature and Scripture in the Abrahamic Religions: Up to 1700* by James J. Bono, it is stated that the English natural historian, Topsell, reconsidered the relationship between God and nature: "As creator, God was nature's author" (Bono 300). As James J. Bono notes, Topsell's living beasts "were essential in order to comprehend the divine order in creating the universe" (Bono 300). I would argue against or beyond this quasi-religious interpretation by observing that the age in which Topsell's compendium was published was challenged by a diversity of rational views, especially in the realm of natural science. Starting from the idea of a hierarchically ordered and divinely-ordained universe, early modern science pushed the limits of knowledge forward by emphasizing the diversity of nature. This is basically what Topsell's compendium does; even if the author shows that every creature has its appropriate place in an ordered hierarchy, human imagination also plays a role in the cultural harmony of the universe. This is why several of his real and fictional creatures are endowed with moral features. First, this proper order is not necessarily (or not exclusively) religious. Second, the creatures inhabiting this world correspond to the humanistic (post-Aristotelian) need of being integrated into categories. Third, once these categories are ascribed to creatures in the natural world, their features may reveal hidden meanings and become metaphors for human

actions. Thus, nature is allegorized and humanized to correspond to the educated readers' cultural expectations.

For these reasons, as I see it, Topsell's compendium of natural history is both a work of zoology and animal evolution, as it is a cultural metaphor offering humanistic interpretations of mythological serpents and amphibians. For each of these creatures described there is a classical or biblical metaphor that links the image of these serpents to human psychological traits. In this way, ophidian and amphibian creatures are integrated in a world of human behaviour, in which both humans and serpents have their specified role in the natural order. Whether inimical or beneficial, serpents, chameleons, dragons, and other species are an integral part of a well-ordered universe, which humans just think to be able to govern. In fact, all these creatures are set on the same hierarchical level of power relations, and serpents influence humans, just as much as humans may think they tolerate or punish serpents for their misbehaviour. Within this well-ordered universe, sea-monsters and serpents are both real beings and fantastic creatures, and their symbolism represents cultural nodes of interference with human myths and practices.

Works Cited

Acheson, Katherine. "Gessner, Topsell, and the Purposes of Pictures in Early Modern Natural Histories." *Printed Images in Early Modern Britain: Essays in Interpretation*. Edited by Michael Hunter. Farnham: Ashgate, 2010, pp. 127-144.

Bhikha, Rashid and John Glynn. "The Theory of Humours Revisited." *International Journal of Development Research*, vol. 07, no. 9, September 2017, pp. 15029-15034.

Bonnell, John K. "The Serpent with a Human Head in Art and in Mystery Play." *American Journal of Archaeology*, vol. 21, no. 3, July-September, 1917, pp. 255-291.

Bono, James J. "The Two Books and Adamic Knowledge: Reading the Book of Nature and Early Modern Strategies for Repairing the Effects of the Fall and of Babel." *Nature and Scripture in the Abrahamic Religions: Up to 1700*. Edited by Scott Mandelbrote and J. M. van der Meer. Volume 1. Leiden, Boston: Brill, 2008, pp. 299-339.

Brayton, Dan. *Shakespeare's Ocean: An Ecocritical Exploration*. Charlottesville: University of Virginia Press, 2012.

———. "Shakespeare and the Global Ocean." *Ecocritical Shakespeare*. Edited by Lynne Bruckner and Dan Brayton. London and New York: Routledge, 2011, pp. 173-190.

Crump, Marty. *Eye of Newt and Toe of Frog, Adder's Fork and Lizard's Leg; The Lore and Mythology of Amphibians and Reptiles*. Chicago: University of Chicago Press, 2015.

Edwards, Karen L. *Milton and the Natural World: Science and Poetry in Paradise Lost*. Cambridge: Cambridge University Press, 2005.

Etheridge, Kay. "Loathsome Beasts: Images of Reptiles and Amphibians in Art and Science." *Origins of Scientific Learning: Essays on Culture and Knowledge in Early Modern Europe*. Edited by S. L. French and K. Etheridge, pp. 63-88.

Fleischner, Thomas Lowe. *The Way of Natural History*. San Antonio: Trinity University Press, 2011.

Greene, Harry W. *Snakes: The Evolution of Mystery in Nature*. University of California Press, 1997.

MacFaul, Tom. *Shakespeare and the Natural World*. Cambridge: University Press, 2015.

Ogden, Daniel. *Dragons, Serpents and Slayers in the Classical and Early Christian Worlds: A Sourcebook*. Oxford: University Press, 2013.

Ogilvie, Brian W. *The Science of Describing Natural History in Renaissance Europe*. Chicago: University of Chicago Press, 2006.

The Oxford Classical Dictionary. Edited by M. Cary et al. 3rd ed. Oxford: Clarendon Press, 1953.

Shakespeare, William. *The Tragedy of Macbeth*. Edited by Barbara Mowat and Paul Werstine. Washington: Folger Shakespeare Library, 2015.

Topsell, Edward. *The Historie of serpents. Or, The second booke of liuing creatures*. London: William Jaggard, 1608.

Wiseman, Susan. *Writing Metamorphosis in the English Renaissance 1550-1700*. Cambridge University Press, 2014.