The Origin and Intention of Medieval Bestiaries

A critical examination and analysis focusing on alleged scientific merit

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Preface:

The bestiary or Book of Beasts is a medieval book containing descriptions and moralizations on a variety of animals, written between the tenth and twelfth centuries. Theoretically all editions are copies of the same book but, because of medieval methods of production, utility of certain chapters and changing preferences, different editions evolved over time. In principle every version is a copy of the same volume. Despite their differences, all bestiary editions share the same basic structure, intention and sources all of which are discussed in detail below. Bestiaries are referred to as being part of a tradition here because even though the individual editions are different, they were created using the ideas and intentions and, while individually different may be analyzed as a part of a whole.

A note on the text:

Because the bestiaries existed and were primarily used in the Western-European Medieval Christian tradition of the Catholic Church prior to the Reformation, and because little evidence exists of significant bestiary use in Eastern Europe or Greece, the terms Catholic and Christian will be used interchangeably when describing religious traditions and atmosphere in the Medieval period. The same should not be assumed during any mention of Christianity during antiquity, especially in regard to early Christian Alexandria.
Introduction:

During the medieval period almost all written works that were produced had some sort of religious context or meaning. Though a few histories and even fewer secular pieces of poetry survive, most works were influenced by religious ideas of the time. As most members of the literate population were members of the Church, this is entirely logical. The Catholic Church controlled the monasteries, the major centers of writing production in the era, and more broadly maintained a dominating influence over most facets of daily life for the majority of the population. This influence was so pervasive that even pieces of literature written for non-ecclesiastical consumption were heavily influenced by the ethics and rules of the Church. The ideals of the Church could be and would be, applied to anything subject that was worth writing about.

The bestiaries of Medieval Europe are a tradition, present an exemplary intersection of writing that in many other eras of history or contemporary parts of the world could have been wholly secular, but, due to the circumstances that produced it, is not. In order to understand and appreciate the bestiaries and their context, examining the older works from which they draw their sources is essential. These sources vary somewhat, in style and form, but all come from a same long genealogy of works beginning in the early Classical era.¹ By examining the sources from which, the bestiary originated, the idiosyncrasies of the texts become more intelligible. A modern audience can best interact with this text on its own terms, through its own roots.

The bestiary canon is a large one. Some of the smallest editions contain only a handful of entries, while some later versions are almost encyclopedic in scope. Certain exemplary entries can be examined individually and allow the modern reader to glean more from the text than when examining the text as a whole. Individual entries highlight the inheritance of sources that contributed to bestiary formation and the intention behind the text as a whole.

When encountering the bestiaries for the first time in the modern era, their seemingly singular origin and purpose can raise more than a few questions. These idiosyncratically constructed works of oddly developed natural history and moralist interpretation of animal behavior seem factually unlikely and certainly curious. At first glance, bestiaries seem to have borrowed more from the pages of Aesop than from the works of traditional Catholic scholarship. The connection between animals and people, regardless of actual biblical support, seems inclined to link animals and humans together in some fashion when encountering the divine.² Reflecting on the lives and habits of animals and attempting to derive the will of God from them was a central tenet of what would come to be identifiable as the conventional bestiary tradition.

The premise of the bestiary tradition is a very old one, dating back to the early second century, when early Christian philosophers attempted to derive meaning and interpret signs from God in various aspects of the “secular world”. This broad category of analysis contained a number of topics, including astronomy, mathematics and even used the pagan myth systems as allegories to teach Christian


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morals\textsuperscript{3}. The most lasting impact of this kind of commentary, that sought the meaning of God’s will in the wider world, was the concept of interpreting the behavior and appearances of animals. “The Physiologus”, or natural historian, composed a short treatise on the behavior and appearances of a select group of animals and their corresponding divine meanings. This watershed work, written around 200 CE, would become the backbone of the bestiary tradition for centuries to come. The central tenet- understanding the macrocosm from the details of the microcosm, became an essential guiding principle of the bestiary, thereby creating a model and foundation from which it would grow and expand\textsuperscript{4}.

The basis for much of the bestiary tradition lies with the Physiologus text, making it essential for understanding the bestiaries themselves. The Physiologus, served as a template for the later bestiaries and their related texts. Its translation and ideas spread widely and were translated into a number of languages\textsuperscript{5}. Whether the “natural historian” was in fact a historical figure or rather a title simply assigned, as author to a text to give it context is not clear. A flourishing of academic writing took place in Roman Alexandria during the second and century, especially in Christian circles such as the one that produced the Physiologus.

Individual works by individual authors usually contain legitimate stylistic differences between the original source material and its eventual offspring. These stylistic variations can actually be very useful in determining authorship of older texts. The lives and writings of people like later contributors to the Bestiary

\textsuperscript{3} Curley, Michael J. \textit{Physiologus}. Austin: University of Texas Press, xv.
\textsuperscript{4} Curley, p. xii
\textsuperscript{5} Curley, p, x
tradition such as Isidore of Seville or Gerald of Wales are well documented and attributions to them are unchallenged. The Physiologus text does not benefit from such documentation.

As the Bestiary’s oldest direct ancestor, excepting tangential contributors such as Aesop and Herodotus, the Physiologus text is an essential one for examining and understanding the bestiary tradition. Unlike other sources of the bestiary, very little is known about this author, the eponymous Physiologus. Possibly there is not a single writer but rather several or that the attribution is an altogether artificial one. Sufficient evidence exists to conclude that a single person wrote the Physiologus if the style of the text is critically examined. Individual authors are more likely to have recurring patterns and styles in his or her text than when a group of people work on the same project over time.

Individual personalities, resources and writing styles can define a particular work and give it style and character that make it identifiable with a certain author and his style. In the Physiologus text several recurring styles or unusual word choices suggest that it was penned by a single particular person. One of the more commonly repeated phrases concludes many of the entries summing up the moral by simply stating “of the (subject) the Physiologus spoke well/wisely”. This somewhat peculiar phrasing ends eight of the original entries verbatim, fourteen if slight variations are also considered. This recurring pattern present in almost a fifth of the entries cannot be dismissed as an anomaly. Recurring patterns in writing are often definite signs of a singular author or voice. The distribution of these

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6 Curley, p. xxii
7 Physiologus appendix/ Curley p. 14, 15, 10, 19, 32, 35, 39, 45, 46, 53, 23, 51
occurrences in the text, not confined to any particular section or topic, further implies a single hand in the creation of the complete volume. Though there was likely a single author of the Physiologus text it was not necessarily the “Physiologus”, himself. The passive tense that is used when describing the teachings of the natural historian, may imply that this text was written by a student of the Physiologus who was recording the lessons of his instructor and making an effort to preserve them in written form. This sort of volume, especially within the Classical period when this was recorded, certainly has president. An unnamed student recording the works of his teacher would be a plausible identity for the author of the text. Alternatively, conglomerations of monks compiling and adding a number of sources, including their own original work, who created the bestiary, make distinctive, individual stylistic differences rare.

**Genre**

Genre is a surprisingly complicated topic to discuss in reference to the bestiaries. Defining bestiaries as a genre unto themselves would be potentially easiest, but to do so would oversimplify the history of literary traditions that led to their existence. Bestiaries do have many features that are quite distinctive. Bestiaries contain encyclopedic style entries on a variety of animals. They draw from a simultaneously vast and narrow set of sources, while creating a tone that is unique unto itself, especially for its medieval origins. Bestiaries take full advantage of the wealth of the inherited classical tradition of religious, scientific and historic texts and blending them into something new.
The “bestiary” is more accurately a tradition of textual style and commonly shared information presented in a number of nearly identical or similar medieval books. Bestiary editions were theoretically identical but the variations between them make the term tradition more applicable to account for the largely unintentional variation. Most surviving editions were found in England, though continental centers of production existed as well.\(^8\) It is nearly impossible to pin a single author for the inception of this tradition both because of its widespread influence and the gradual evolution that created it. The Bestiaries’ sources are singular in nature. The two primary ones, especially for English production, were the Physiologus and the *Etymologies*, by Isidore of Seville.\(^9\) It is actually possible to assign authors, places, and dates to many of the sources that were incorporated under the folds of the bestiary tradition. With some, such as later contributor Gerald of Wales, dating the texts within a year of their inclusion into the bestiary tradition in 1187, is possible.\(^10\)

The works of Saint Isidore of Seville were likely the second most important contributing source to the bestiaries after the Physiologus; a text which greatly influenced Isidore’s work as well. Written by a Spanish archbishop around 400 years after the publication of the Physiologus, Isidore’s *Etymologies* are an extensive volume covering a wide variety of topics, ranging from medicine and grammar to

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\(^9\) Baxter, 83

war and shipbuilding.\textsuperscript{11} The Etymologies consist of twenty books, but book twelve, focusing on the topic of animals, has had one of the most enduring effects, especially in regards to the bestiaries. The text as a whole was an essential text in the preservation of early Christian and Classical ideas.\textsuperscript{12} Lucretius’s \textit{De Rerum Natura}, the generally accepted “scientific” Roman work was among the translations done by Isidore in his broader work.\textsuperscript{13}

Isidore’s works all related to the Church on some level, which is understandable for an archbishop, and his writings on the natural world are no exception. Though his work was definitely more encyclopedic in style and content than the earlier Physiologus or later bestiaries, there was still some degree of moralizing. Despite the important intermediary position between the Physiologus and later English authors that Isidore’s work held, and its continuance of the same philosophy that accompanied earlier and later branches of the bestiary tradition.

Isidore favored a more didactic encyclopedic style of writing and less oral than earlier editions.\textsuperscript{14} One stylistic trait of Isidore’s that did continue into later bestiaries was the order of his animal entries. The Physiologus text entries are in no particular order. In the \textit{Etymologies} there is a greater deal of organization and the animals are organized into groups based on “type”. The entries are organized into four legged animals (mostly large mammals), “creeping animals” (reptiles, insects and small

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\textsuperscript{11} Brehaut, Ernest. \textit{An encyclopedist of the Dark Ages, Isidore of Seville}. New York: B. Franklin, vii-viii
\textsuperscript{12} Brehaut, p. 3
\textsuperscript{13} Brehaut, p. 7
\textsuperscript{14} Baxter, p. 206, 207
mammals; the Bible has a similar designation in its classification scheme\textsuperscript{15}, fish and swimming creatures and lastly flying animals\textsuperscript{16}. Conventional English and French bestiaries written after the \textit{Etymologies} followed the same pattern.\textsuperscript{17} Isidore added significantly to the canon of bestiary entries in the tradition, not only by translating the Physiologus into Latin, but also by adding many new entries, usually without morals.

Isidore’s work supplied a number of the entries that did not originally appear in the Physiologus, including many of the shorter, more descriptive entries in the bestiary canon such as the ones on cats, sheep and quail.\textsuperscript{18} The later editions of the bestiary owe their wealth of entries to Isidore, without whom the bestiary canon likely would not have expanded beyond the fifty odd entries in the original Physiologus, (assuming that the text survived, and was later translated into Latin by a different literate, likeminded individual). The descriptive, expansive nature that Isidore contributed to the canon actually succeeded in contributing to the scientific merit and codification of bestiaries as they evolved. The bestiaries effectively blended the moralizing, allegorical, and more heavily Christian elements of the Physiologus with the organized and formal style found in the \textit{Etymologies}. Though the actual content of both the bestiaries and \textit{Etymologies} is problematic, scientifically speaking they are both well structured and organized in an intentionally methodic style which should speak, to at least some degree, to the

\begin{flushleft}
\textsuperscript{15} JPS Hebrew-English \textit{Tanakh: the traditional Hebrew text and the new JPS translation.}. 2nd ed. Philadelphia: Jewish Publication Society, p. 229, 407
\textsuperscript{16} Brehaut, p. 34
\textsuperscript{17} Barber, p. 5,6
\textsuperscript{18} Brehaut, p. 247, 254, 268
\end{flushleft}
seriousness with which the subject matter was treated. While parts of the text are still inaccurate, the method gives significant credibility to claims of scientific merit.

Isidore’s primary intention seems to have been to educate. His work is essentially a compositional encyclopedia of the known world in his lifetime, presented in an orderly deliberate fashion. Interwoven with this text, are etymological notes on the Latin contents and corresponding expansions from a linguistic point of view. Isidore did not seem particularly concerned with accuracy as most of his derivations are incorrect or seem to have only been applied to support an unconventional description he is providing. This complements the first chapter in the *Etymologies* on grammar fairly well, setting up the complete text as an expanded textbook of human knowledge, complete with a rich sprinkling of updated translations and samplings from classical authors, from which the bestiaries draw from as needed. The *Etymologies* are yet another bestiary source that was used significantly as an educational volume, further supporting the hypothesis that the bestiaries themselves, drawn from almost exclusively (pseudo)-scientific material and informative works, were used in education as well.

When discussing bestiaries distinguishing the exact subject of study is essential. The term bestiary has become so assimilated into English language that it now can refer to any collection of quasi-encyclopedic entries describing different animals. True bestiaries, as will be discussed here, are a solely medieval creation born out of the Catholic tradition. Distinguishing that an encyclopedic collection of entries on animals and the natural world is not a bestiary regardless of the time of production is also imperative. The majority of the entries must be combined with
some sort of allegory and moral message that connects to the description. In this way a book of animal fables would not qualify as bestiaries either unless it contained some sort of observational description of the animals involved.

A relevant distinction in defining both the genre and the purpose of the bestiary is clarifying what kind of scientific knowledge is being conveyed in these texts, if any at all. Critics of the bestiaries’ scientific merit disregard them as poor examples of zoology or biology or postulate that their authors did not intend for them to be taken factually and for them to serve as pure allegory. This argument has merit for a number of reasons. A large part of bestiary composition relies on anecdotal evidence, and the classification system for the entries is more subjective than would be appropriate for current scientific standards. Natural history primarily concerns itself with the documentation and taxonomic classification of members of the natural world. It was primarily based upon observation and the recording of that observation in some form. Ideally, specimens could be taken and this more in depth study gave birth to modern biology, but in its humble beginnings concerned themselves almost exclusively with observation. Thorough study of how bestiaries function and how their internal structure was not in line with the then non-existent constraints of modern biology, reveal how the aim of the bestiaries and their failings to incorporate these modern ideas into their text should not be held up as evidence for lack of historic scientific merit or intentions. The reporting and presenting of accurate descriptions of the natural kingdom was clearly one of the aims of the bestiary.

When debating the merit of the natural history present in some portions of the bestiaries it is worth considering how much actual observation and documentation could have been possible on the part of the writers, regardless of how accurate the end result is or how much fabrication was incorporated into the text over many years. Observation is a key component of scientific study. Determining exactly how much of the behavior and appearance of animals in the bestiary could have been observed and recorded by their authors is crucial. This question is further complicated by the long and varied tradition that the bestiaries have had, spanning centuries across a wide geographic range. English monks would have had contact with a number of farm animals or local woodland creatures that live alongside their monasteries, but many more of the entries would have been foreign to them and to their audiences. The original source material of the bestiaries does, however, give a slightly broader scope to the number of animals it was possible could have been observed firsthand.

Since the Physiologus text, for example, was written in Alexandria, a number of the “exotic” animals actually would have been local when the original text was being written. The bestiaries feature a wide variety of unusual and memorable beings, though many of them are described as living quite far away from Britain and France but a significant number would have been close at hand in Northern Africa. A later edition of the Physiologus, which was translated into Armenian, added the entry for tigers, which would have been more local to that particular center of
production as they were listed as living in nearby Hyrcania. What may have seemed
an exotic location to later authors was fairly local to its original contributors.  

The little non-theological credit that is given to bestiaries rarely extends
farther than in their role in preserving the encyclopedic style of writing that had
been developed in the classical era. This is completely unfair and greatly
underestimates the observation and description, which at the time were key
elements of natural history that went into the creation of bestiaries throughout the
history of their existence.

Elements of earlier texts that have been borrowed or incorporated into the
bestiary may not have been added directly from the source material. The
Physiologus text, though originally written in Greek, was not useful for bestiary
production until it was translated into Latin so that Western Europeans who could
not read or write in Greek could use it. These translations were not always correctly
done and, as so often the case with translations, parts of the original meaning of the
text got blurred or lost in the process. One of the major sources for the bestiaries,
Isidore of Seville made changes through his Latin translation of the Physiologus,
which may have contributed to some of the weakest and most nonsensical portions
of the Bestiary entries.  

Locality plays an important role in the content of the bestiaries, both in
determining subject matter and the accuracy of the descriptions. Most of the
animals profiled in the Physiologus and other early bestiary source material were
animals with distinctly prominent features that were both memorable to an

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20 Curley, xxvii
21 Brehaut, xi

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audience and also had the potential to be anthropomorphized based either on aspects of the animal’s behavior or appearance. By emphasizing the animals’ most memorable aspects, greater lessons about the will of God could be learned. The further away an animal is listed as living from the primary English centers of bestiary production, (the earliest being the Peterborough manuscript from 970 CE\textsuperscript{22}) and most prolific manufacturer of bestiaries, as the primary locus of bestiary creation in the middle ages,\textsuperscript{23} the more likely the description of the animal is to be exaggerated, inaccurate or fabricated completely. Many of the most fantastic creatures described in the bestiaries are said to come from India (the perennial “other” in Western Tradition) a location most author would have had only secondhand familiarity with and likely would never have seen in person. Any reports about animals or animal behavior that had reached these local audiences would have had ample time to be exaggerated and embellished. Many animals from Western Europe or Mediterranean basin are given exaggerated or inaccurate descriptions as well. These animals (the beaver, for example), were not animals that the authors or audience of the bestiary would come into contact with regularly. The nature and description of sheep, goats and dogs and other familiar animals would remain realistic partially due to actual familiarity with the subjects at hand. The entry on goats and sheep describes the mundane process of cud chewing very accurately because its authors were familiar with it and capitalized on their

\begin{footnotesize}
\begin{enumerate}
\item Baxter, 176
\item Baxter, 83-86
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Observation is a key element in the bestiaries and one that gives significantly greater scientific credit to them than is usually awarded.

Monasticism was a strong tradition throughout Medieval Europe but bestiaries seemed to have particularly caught on within communities in Great Britain. The French had a bestiary tradition as well, responsible for the creation of a sort of companion text in the Aviary, by Hugh of Foillouy. The close proximity that the English monasteries had with one another made it much easier for editions to be exchanged and loaned and for new copies to be created than it would be in parts of continental Europe, leading to a higher English concentration of bestiaries.

Not only was England the center of bestiary production it was also the home to the bulk of surviving bestiaries despite their scattered origins. A fair number of French editions were created later in the history of bestiaries and there are some surviving volumes from Germany and Spain but never as many as in England. Since the bestiaries were written in Latin the theological lingua franca of Christian Europe, there was no real reason that the bestiaries could not have spread throughout Europe to Churches and monasteries from Portugal to Poland. They didn’t spread however, for the most part the Bestiary as an institution stayed close to its English point of origin. The heavy degree of political and social interaction between France and England does explain the greater number of French bestiaries.

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24 Barber, Richard W. _Bestiary being an English version of the Bodleian Library, Oxford M.S. Bodley 764: with all the original miniatures reproduced in facsimile_. Woodbridge [England: Boydell Press, 82, 84.

25 Baxter, 193
26 Baxter, 83-6.
The location of production of bestiaries is intrinsically linked with their audience and is discussed further below.

Chapter One

Most bestiary entries can be divided into two parts- the “moral” or “allegory” and the more conventional “description”. These two categories may seem reasonably self-explanatory but their differences are relevant as they can seem to bleed into one another. The description provides details about the general nature of the animal, usually mentioning its appearance, (frequently the most accurate part of the entry from a purely factual stand point and arguably the most worthy of consideration on a scientific level), and several behavioral features. The allegory interprets the nature of the animal in question through a Christian perspective. Typically the description will in some way connect to the allegory so that the features described are relevant to the message that is being conveyed. An illustrative example is the entry on the beaver.

The beaver is described briefly in appearance as being a small mammal that has testicles containing medical properties that make it desirable to hunters. To ward off hunters the beaver will, according to the bestiary, when pursued, gnaw them off with his teeth and throw them behind him as he escapes to placate the hunter and lift his legs to show that their pursuit is futile and he can escape.27

The allegorical section interprets this behavior to be similar to how the pious man casts aside his sin and then, when pursued by the devil, that is to say the hunter, he can show his lack of sinful desire and resist temptation and damnation.

27 White, p. 28
The moral, rather heavy-handedly is conveyed encouraging the reader-more than likely a newly joined churchman to cast aside his sin and natural inclinations of the flesh as he joins the Church in order to live pious Christian life in line with the will of God. The description of the beaver is mostly untrue, though a myth of beavers behaving in such a fashion has proved surprisingly long lived. The description complements the allegory so well that the two sections are nearly inseparable from each other in this particular entry. The connection is particularly strong as an illustrative example of the dual nature of bestiary entries and the way that the description is provided to focus on elements of the moral. In actuality Eurasian beavers are hunted for their castoreum sacks, located near the genitals of both male and female adult beavers, which are still a desired prize for hunters. The term castoreum seems to be related to Castor, which Isidore and subsequent editions name, according to them because it castrates himself.

The beaver entry is notable not only for its exemplary style that accurately demonstrates the separate portions of any given bestiary entry but also because it is an example of the permeation of European ideas that influenced much of the bestiary. While most entries have a written source of some kind the authors would also include portions of their own experience, theoretically contributing to observational merit in the bestiaries. Examples of beavers chewing off their own testicles can be found in the Apuleius’ second century Golden Ass and in the

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29 Brehaut, 252
Physiologus\textsuperscript{31}. Through a shared cultural osmosis and communally shared information long held views continued to influence the creators of the bestiary adding a greater diversity to the text.

The majority of the entries in the bestiary follow a similar structure to that of the beaver. Their description are closely tied with their allegory, such that the two elements are so fundamentally linked that does not stand well without the other. The allegorical sections have a great deal of difficulty standing alone. A number of the entries are purely descriptive, but very few that are pure allegory in the bestiaries themselves. Outside the conventional bestiary canon however, in Hugh of Fouilloy's \textit{Aviary}, the entries for most birds are more likely to be purely allegorical.\textsuperscript{32} The more purely allegorical entries rely on quotations from the Bible to support their moralizations and use more metaphorical ideas to attach to allegories rather than direct interpretation of actions based on observation, as in the conventional tradition of the Physiologus. The more theologically inclined \textit{Aviary} variant of the bestiaries sheds light on how based in reality bestiaries are by comparison. The biblical examples in the \textit{Aviary} take any quotation that can be found which could potentially apply to the bird in question. Some of the entries for more unusual birds like night herons and pelicans, which are not commonly referred to in the Bible, even go so far to use the same verse, in this example Pslams 101:7, in different translations, such that it can be applied to both completely different birds.\textsuperscript{33} The Bible quotations rely heavily on metaphors rather than actual description and do

\textsuperscript{31} Curley, 52
\textsuperscript{33} Clark, 169, 173
little to enhance the readers understanding of the birds in the entry, even though they exist in the place usually used for description in a conventional bestiary entry. The one outside source of some scientific credit is Isidore of Seville, who is cited several times in reference to the descriptions of some predatory birds.34

Several bestiary entries do not follow the beaver pattern exactly, especially in the expanded later editions of the tradition of the text. Many entries, usually among the shorter ones in a specific volume, contain no moral whatsoever but simply serve to classify and record different varieties of animals. A great number of these moral-less entries are describing varieties of a similar animal- most notably varieties of worms and insects.35 These entries are among the shortest in the bestiaries, some only lasting a few sentences to describe a particular nature or habitat of various invertebrates. 36 These entries are not small simply because the subjects are insects and similar minute animals could not provide fodder for the interpretations and moralizations of the bestiary authors. The significantly lengthy entry on ants is one of the oldest and longest chapters in the bestiary tradition, dating back to the Physiologus text and remaining a constant ever since.37 These purely descriptive entries exist for no real religious reason, though an argument could be made that they serve as further examples of the variety and majesty of God’s creation. These entries follow more directly in the structural and more scientific shift in style brought upon the bestiary tradition through the influence of Isidore of Seville’s more encyclopedically inclined Etymologies.

34 Clark, 207, 215, 217
35 White, 191-194,
36 White. 216
37 Curley, 20
The most commonly directly sited outside source in the bestiaries themselves is also the Bible. Many other sources are used, but comparatively few directly so. Sources were drawn from a number of other ancient sources including Lucan, Pliny the Elder and Herodotus in some degree, but this is exclusively for the descriptive portion of the entries.\(^{38}\) The outside sources are used to help embellish details or provide information on animals that the authors of medieval bestiaries might not have seen in their own lives but still were reporting on and drawing conclusions and allegories from.

The Bible served a different purpose for the bestiary authors than the secular sources. Most of the biblical references and quotations in the bestiaries support allegories that the author is creating or reinforce points expressed in the morals. While the *Aviary* primarily uses the Bible as a point of reference for natural history to draw taxonomic descriptions from, the conventional bestiaries used biblical references to support the theological section by providing the actual “word of God”. Instead of basing a description of a dove or raven on what a given bird may look or behave like when observed, Hugh pulls a Bible quotation that mentions the bird in question and uses that as his arguments’ basis, which can grow problematic especially when the bible is used as a source for physical descriptions.\(^{39}\) The bestiaries, conversely, provide a description of the animal based on observation or recorded observation, and then use biblical citations to reinforce the allegoric meaning that they assign to the description. The bestiaries are much less theological

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\(^{38}\) White, 233  
\(^{39}\) Clark, 121

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than the *Aviary* and therefore create the potential for legitimate references and observation to inform and educate the reader.\(^{40}\)

While it does lend a greater degree of scientific credibility that the direct biblical quotation are conserved to the allegorical portion of most bestiary entries, it is somewhat odd that the Bible is not used to a greater extent as a pseudoscientific original source. The biblical citations in the bestiary almost always correspond with the moral of the entry, rarely with the description; in Hugh’s work the opposite is true. The bestiary authors certainly would have considered biblical texts to have some amount of validity compared with many of their classical sources, but they still use the bible differently. Animals are mentioned frequently throughout the biblical canon both as symbols and as actual animals, yet most citations ignore biblical animals entirely and solely focus on biblical lessons. The Bible was not a source of natural history for the bestiary. This can be even further observed when comparing the entries for peacocks and ostriches in the *Aviary* to their entries in bestiaries. When their descriptions are based on information from the Bible, the descriptions become inaccurate and the lesson is a negative one.\(^{41}\) When the same entries are observed and a biblical lesson applied, then applies to the Bible, as is the case in the bestiaries the moral for the ostrich becomes a positive one and the peacock gets described in more detail.\(^{42}\)

Old Testament dietary laws pose an intriguing problem for the bestiary authors. Entire chapters of the bible are devoted to the cleanliness of a wide variety

\(^{40}\) Clark, 10
\(^{41}\) Clark, 251
\(^{42}\) Barber, 137, 170
of animals including some, such as sheep and antelope, which are included in the bestiaries and their related texts.\textsuperscript{43} It seems plausible that such explicit designations of cleanliness or uncleanness might factor into the moralizing of the bestiary, but on the whole the authors ignore dietary laws. Some editions of the bestiary do engage with the dietary laws, a few times though, but as with other biblical quotations, even the direct references to animals are seen symbolically. The chewing of cud, is, according to the bible, necessary for certain animals to be considered clean\textsuperscript{44}. The goat that chews its cud, which would have been identifiable by observation by the audience and creators, is symbolically clean, according the Bodelian bestiary, because it retains and digests its food just as man should retain and digest the word of God. Animal observation is still applied and the bible is still consulted as a symbolic source\textsuperscript{45}.

Disregarding the dietary laws, a number of other biblical animal references are ignored or unused by the bestiary authors, including a number of which actually overlap with common bestiary entries. One of the most perplexing examples of this is the lion. The lion is one of the oldest entries in bestiary tradition, much of its original text can be almost entirely traced verbatim back to the original Physiologus of Alexandria.\textsuperscript{46} Lions have loomed large in European art and myth as symbols and figures for a number of causes and ideas. This status has a lot to do with the role

\textsuperscript{43} White, 19, 72
\textsuperscript{44} JPS Hebrew-English Tanakh, 228-9.
\textsuperscript{45} Barber, 82, 84.
\textsuperscript{46} Curley, 3
lions played as symbols and characters in the writings and art of antiquity.\textsuperscript{47} These works were mostly more Mediterranean and their authors had significantly greater opportunity to interact with and actually observe lions, whose habitat previously extended into Northern Africa and parts of Greece and Turkey.\textsuperscript{48} Local lions also influenced biblical writing. Lions are prominent figures throughout the Old and New Testaments. Daniel is sent to the lion’s den, the lion is the evangelist symbol of Mark, the lion is symbol of the biblical tribe and kingdom of Judah, and Samson famously wrestles with a lion. Lions figure significantly in bible and in the bestiary but the ideas represented in the two don’t necessarily intersect at all. Though biblical quotations are used as justification for the moralizations of the allegorical portions of the lion’s entry, never are they ones that actually mention lions.\textsuperscript{49}

The absence of a problematic method in relying on biblical sources does not necessarily prove the scientific merit of the bestiaries, but it does serve of an example of not only the division between the two sections of the typical bestiary entry but also the clear scientific slant (however legitimately skewed) that the descriptive portion has; even when to do otherwise was entirely possible and to do so would be relevant to a religiously layered text. The descriptions of the lion are not necessarily accurate, though the physical description is certainly correct\textsuperscript{50}. These inaccuracies are theoretically based on observation and reports that had been repeated by the authors but never on biblical references.


\textsuperscript{49} White, 7

\textsuperscript{50} White, 7

Federlin 25
The morals attached to different animals were not only distanced from their biblical standings but sometimes from predominant traditions of Europe. In the Bible bats are listed among the unclean animals and in many parts of Europe they were generally associated with death and ill omens among common people.\(^{51}\)

In the bestiaries, bats are among the model animals based on their behavior of hanging together in groups that support each other and keep one another warm. This description must have come from an individual who had actually observed bats first hand with some degree of intention as bats normally rest in secluded places that are unlikely to be observed by a casual pedestrian. This moral is actually based on actual behavior, the knowledge of which was obtained by actual observation, which apparently takes precedent over the biblical verses condemning bats as unclean in favor of lauding a natural behavior from which a lesson may be taught\(^{52}\).

A similarly conflicted entry on crows also exists, again a conventionally disliked creature in most agrarian societies, including medieval Europe\(^{53}\), and an animal condemned as unclean in the bible\(^{54}\), whose moral is a positive one, which praises the bird and its behavior. The crow, according to the bestiary, takes great care to aid its children in flight and feed them as much as they need, which is the kind of support and care humans should show their young.\(^{55}\) Similar to the bat entry, this description seems to be based on actual observation (both correctly


\(^{52}\) Barber, 157


\(^{54}\) JPS Hebrew-English Tanakh, 229, 407

\(^{55}\) Barber, 160
describe their subject’s behavior) and the moral appeals to human nature to be better than a “base” animal who displays what could be interpreted as compassion and loving-kindness.

In some instances animal-based moralizing actually goes directly against the symbolism and moralizing that might be found in the Bible. A number of animals in the Bible are listed not just as unclean but as actual allegories for sin; the serpent is especially notable in this regard, as an example of virtuous behavior. The central tenet of the bestiaries of contemplating the natural world and finding messages for the spiritual world could sometimes come into conflict with the very text that was theoretically the basis of their interpretation. Largely to the bestiaries’ credit, however, these discrepancies (or better the failure to utilize biblical references) are caused by the entries being more primarily based on actual observations of the subjects in question.

In different editions the names “snake” and “serpent” are used interchangeably or to refer to different animals entirely. Serpents are actually referred to positively in the original Physiologus text where they take up a reasonably large entry, which describes their natures, in a typical mix of factual observation based entries and some fabricated ones, and makes moralizations all but one of which are positive.

The serpent is lauded for protecting its head when attacked, symbolic for surrendering one’s body to martyrdom but keeping one’s soul safe for Christ and for shedding its skin to be symbolically being born again (a trait shared with and later supplanted by the eagle) both of which seemed to have been based on observed

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56 White, 189
57 This may be related to a translation issue coming from the Greek.
behavior of real snakes.\textsuperscript{58} Another example uses the serpent as a metaphor for the devil but is much shorter than the others and has a stronger biblical base.\textsuperscript{59} A possible explanation for this tonal shift in regards to snakes is the insertion of dragons into later editions, which take on many of the snake's least desirable characteristics and morals. Later editions actually define several different kinds of snakes and moralize based on their individual behavior. While to the bestiary's credit that less vague naturalist statements are being made and that the vast diversity of snake species are being at least somewhat taken into account, these entries are increasingly less observation based and more fantastic than their predecessors.\textsuperscript{60}

\textit{Chapter 2}

When investigating bestiary intentions it is imperative to examine the intended audiences for these works were. Literacy was limited in the tenth and eleventh centuries and access to books was even more constrained. As numerous as the bestiaries may have been, especially in England, the text was still not a common book. Unlike most Gospel texts or an Old Testament book, not every monastery had a copy of the bestiary, and when there was it was usually just a single edition. By looking at where in monastic collections the bestiary was kept it is possible to draw some conclusions about how bestiaries were used. Most bestiaries were kept with "instructional" works of some kind.\textsuperscript{61} In general, bestiaries were most likely used as an educational tool either as supplemental material or to expand or improve

\textsuperscript{58} Curley, 17  
\textsuperscript{59} Curley, 19  
\textsuperscript{60} White, 169-174  
\textsuperscript{61} Baxter, 180
sermons or for educating newly recruited monks. The Physiologus text, which was significantly shorter and somewhat simpler than many bestiaries, once translated into Latin, became a popular teaching tool in much of Europe as well.\textsuperscript{62} When incorporating the bestiaries’ contents into sermons a preacher could interweave messages and morals from the gospels with stories and allegories that were based on creatures that might be familiar to the common populace. Based on placement and context, many of the bestiaries it seems to have been one of many potential sources for sermons.\textsuperscript{63} Though do seem to have been fairly well circulated and widely used in the medieval period it cannot be assumed that they made up a large portion of sermons. Bestiaries were far more likely to have been supplemental material, used to complement messages of sermons by providing non-biblical examples to reinforce Church doctrine.

Bestiaries were almost certainly used in the education of churchmen. M monks or priests joined the Church as illiterate adults. The bestiary may have been used as a primer of sorts for introducing Latin literacy to newly cloistered churchmen.\textsuperscript{64} The themes and morals of the text were appropriate material for priests or monks, and they didn’t present any particularly challenging language or actual bible verses that might be blasphemous to risk mistranslating. This is especially evident in the Aviary, which is constructed somewhat like a primer for instruction. The moralia component of the bestiaries derived partially from Aesop and other folk tale material, intended to instruct and inform, though bestiaries were intended for a

\textsuperscript{62} Clark, Willene B., and Meradith T. McMunn, 2
\textsuperscript{63} Baxter, 189-190
\textsuperscript{64} Clark, 2-3
more mature audience. In some later editions of the bestiary, references to individual new Latin words are given at the beginning of some entries, which relate to their contents. These derive from the encyclopedic Etymologies of Isidore of Seville, many of whose entries begin with a discussion of the Latin used in the text. Isidore did not seem particularly concerned with accuracy as most of his derivations are incorrect or seem to have only been applied to support an unconventional description he is providing.

Much of the content of the bestiaries and the Aviary was directly targeting towards a monastic audience. The parables regarding the differences between the hawk and the dove, present in numerous bestiaries and related texts compare the nature of the tame and docile dove with that of the brave and noble falcon (the irony of this comparison, especially considering doves are a primary food source for falcons, is palpable) were the two sides of the same coin, the monk and the knight respectively.

The dove monk as cloistered sheltered servants of grace and the hawk knight are the bold defenders of the faith. In some way some priests could be considered knights of God fighting the evils of everyday life, or this could be connected to the recently begun crusades, which would continue throughout the writing of the bestiaries. Other bestiary entries seem especially pointed towards encouraging or reinforcing a monastic lifestyle. While a few morals approve of marriage and emphasize the importance of fidelity, most sexually related lessons, such as the

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65 White, 245
66 Curley, xxx
67 Clark, 117-119
previously described beaver promote complete chastity. Numerous entries, such as
that of the siren, whose secular song lures one to one's death, warn of the lures of
the material world and the arts that might lure one away from a cloistered life.68

Not all the morals from the bestiary are strictly intended to serve as models for
individual human behavior. While many of them served up animals as models of
behavior many of them used animal behavior, whether real or imagined, in a
broader allegorical fashion to convey messages or morals about the Church.

One of the more intriguing examples of this style of moralizing comes from the
entries on owls. Owls are mentioned in the Bible as being an unclean animal and the
bestiaries do position them to be a wicked creature, but its wickedness is allegorical
rather than literal.69 The bestiary describes the owl as turning away from the light in
favor of the dark, even though it knows the light exists. The owl is in this way an
allegory for the Jews who, despite being aware of the gospels, reject them and
embrace metaphorical darkness, going against God's light.70 The bestiaries still
provide a lesson, but not by example. Instead of learning a lesson from the hoopoe
that supports his elder in old age and is therefore a model, or even the fox that uses
trickery to capture his prey and is to be reviled, the owl can teach the reader the
evils of rejecting the gospels and why the Jews are sinful.71 This kind of entry takes
the idea of many of God's creations existing to teach moral lessons to another level.

68 Morris, Richard. An Old English miscellany containing a bestiary, Kentish sermons
Proverbs of Alfred, religious poems of the thirteenth century, from manuscripts
in the British museum, Bodleian library, Jesus college library, etc.. London: Pub.
69 JPS Hebrew-English Tanakh, 229, 407
70 White, 133-134
71 White, 53, 54, 131,
Animals are not just models or antiseptic of ideal human behavior but they were also symbols of God’s teaching and the way in which these teachings could be understood.

Much of the moralizing of the bestiaries comes from anthropomorphizing the actions of animals based on recorded observations. The behavior of animals, however, is not quite as complicated as that of humans, animals having simpler, baser behaviors aiming solely at survival and the continuation of the species. Several tropes and patterns occur in the moralizations as a result of somewhat limited material. Animal behavior is perhaps not as varied as human actions and understandably, the behaviors can recur in the descriptions and morals of a number of entries in the bestiary. While many entries specify a particularly noteworthy trait that is theoretically unique to the animal in question, such as the tiger which can be distracted from pursuing its prey by dropping a glass ball, many of the entries focus on fairly simple animal behavior- reproduction, hunting, or survival.72

Without any exact corresponding action between humans and animals, (unlike sexual behavior) the bestiary authors used hunting and being hunted in a number of ways to justify completely different Christian teachings, occasionally using conflicting metaphors. One of the most obvious interpretations between the predator and prey, when viewed though a Christian lens, is for the predator or hunter to represent the devil and for the pursued souls to be his prey. The relationship almost always can be reduced to a prey element that can correspond with the spirit, salvation or a spiritual helper and a predator element that

72 White, 12, 13
corresponds with the body, damnation and an opponent\textsuperscript{73}. This motif is present in
the allegories of the fox, beaver, antelope and dragon, among a number of others,
where the animal is either pursuing smaller prey or is being pursued themselves.\textsuperscript{74}
The role that the animal in these morals is supposed to represent is somewhat
inconsistent. While the animal is sometimes the soul being pursued at other times
the animal is the devil himself, depending on the creature in question. The pursuer
may not always be another animal however; the hunter is frequently a human,
which complicates this metaphor significantly when applied to a human audience.

Unlike some of the more allegorical or symbolic bestiary entries, the ones
focusing on sexual themes are a far easier to understand from a modern perspective.
The exaggerations and occasionally illogical allegorical connections can feel strained
or difficult to understand for some other entries, but for most entries that deal with
sexuality the connection between description and allegory requires very little
imagination. A significant proportion of the bestiary entries that are directed at
solely at women are found in this section, which while understandable on some
level, it speaks to the status and function that women held in the mentality of
bestiary authors.

Obviously human sexual mores cannot exactly align with those of animals.
Much as the simplicity of the predator/prey dynamic allowed for several different
corresponding metaphors, once technically activities for animals were
anthropomorphized the reasonable sexual behavior could take on new meanings
and expanded purpose once moralized by bestiary authors. Observation and

\textsuperscript{73} Baxter, 75, 76, 82
\textsuperscript{74} White, 18, 19, 28, 53, 54, 165
recording continued to play a key role here. When the creators of the text were unable to observe the mating habits of vultures, they assumed the female could produce, parthenogenetically, as a symbol for Mary. Through a medieval Catholic lens this hypothesis is not altogether unlikely.75

The partridge, by contrast is particularly singled out for alleged sexual deviance. The partridge is unique among the entries in that both the male and female of any species are both in the moral. The female partridge is described stealing the eggs of others, while the male was alleged to engage in homosexual relations with fellows out of wanton lust, a unique accusation in the canon. It may be worth noting that, as much as the bestiary condemns the partridge still supplies some accurate recorded observations about its nesting behavior and camouflage.76

The lessons in these sections are all fairly straightforward: don’t follow this example. This animal does this behavior, which is against God, and it is wicked so humans should not do that. Birds are not the only subjects of scorn. The viper, which is said to stray from its own species seek to out copulation with the eel is also held up as an alternative example of sexual misconduct to be avoided by humans.77

Though there is a potential for class or racially based eugenics to come out of a moral of “staying with one’s own kind”, the bestiary does not acknowledge it, which could potentially speak to the homogeny of the intended population. The eel is instead a warning to men to remain with their wives. Advice on functional marriages seems an odd topic for a monastic group to be reading about, and will be

75 White, 109
76 White, 136, 137
77 Barber, 186 or White, 209
discussed further below.

Conversely, in some entries the sexual moral would actually be a model for human behavior. The bestiary, as examples of idealized chastity, cites turtledoves. According to the bestiary authors, when turtledoves mate, they mate for life. A female will not take another mate, after her first mate dies before her.\textsuperscript{78} This entry seems based on actual observation of animal behavior that had to have been intentional on the part of the author. Animals such as the turtle dove mate for life and never stray from their mate, therefore, if men do choose to marry, they should remain loyal to their wives and their wives should embrace the glories of widowhood.\textsuperscript{79}

In a curious twist many of the "model sexual relations "in the bestiary are actually primarily addressed towards widows or mothers. These entries are not particularly stylistically remarkable compared with other similar ones; however, they do betray some telling information about the intended audiences of at least some of the bestiary editions. If bestiaries were intended to be used solely by monastic audiences either in cloistered sermons directed solely at monks or as an educational volume for instructing illiterate newly cloistered brothers on Latin and the natural world, such morals would not have much utility. While lessons speaking to the evils that women might tempt would not be out of place in a monastic environment that was promoting celibacy, exalting the virtues of widowhood or being a caring mother, as is the case in the crow and turtledove entries, does not really seem to have an appropriate audience within a monastery or even in a

\textsuperscript{78} Barber, 163, 164
\textsuperscript{79} White, 145-146
convent for that matter. The fact that these entries survive up until the late editions of the traditions speaks to their continued use and importance within the volumes.

A number of entries do fall in and out of the bestiary canon, which is understandable considering history and the frequently unreliable copying processes, but the longstanding maintenance of an entry into later editions should speak to its continuous importance. Some bestiary editions grew so small that only a handful of the original entries survive, based on which ones were used most. A bestiary from Kent contains only thirteen entries, but the turtledove was among them. At least eight entries from the original Physiologus no longer appear in any edition of the bestiary evidently because their entries on St. Amos or Prioboli rocks were no longer of use to later audiences. If this entry was as irrelevant as it would seem to be for a purely monastic audience, it should not have lasted in the tradition so long. It had to have had some broader use.

If these entries did in fact have a wider audience that may have included married women, the intention of the bestiary may have actually been significantly more directed towards members of the public than has been previously assumed. This hypothesis is further supported by the absence of some of these kind of entries from earlier editions of the bestiary, most notably the Physiologus, which was almost certainly intended primarily for monastic contemplation or education and has almost no morals which apply directly to women. Nor does the Physiologus address women directly the way later editions do. These morals intended for widows and mothers betray a larger and more diverse audience receiving some of

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80 Morris, 1-25
81 Curley, vii-viii
the later versions of the bestiary tradition beyond exclusively Christian philosophers.

A possible explanation for the bestiaries’ genesis and maintained presence in England and for these non-cloistered entries may have to do with the way English cathedrals and monasteries were structured. As previously discussed the two most likely uses for bestiaries were as primers for newly converted churchmen and as moralia to draw from as fodder for sermons to congregations which seem to have included married women.

In England, far more than in other areas of Christian Europe, cathedrals and monasteries were frequently housed in the same building and monasteries would serve as the spiritual center for the community, including housing friars. Unlike the more secluded traditional monasteries of the continent, English monasteries could share a building and likely a library with a cathedral. In these sorts of institutions the bestiary could be doubly useful being able to serve both of its suggested purposes within the same building’s library. In more cloistered monastic communities the bestiary would not have as much utility and would be less likely to be added to the church library. This correlation between monastic communities intersecting with popularly attended cathedrals, could also account for the presence of bestiaries in France. The French pilgrimage roads frequently passed through originally monastic churches that transformed from being cloistered to being semi-open abbey churches where the bestiary could find a greater degree of utility.\textsuperscript{83}


\textsuperscript{83} Baxter, 191
Chapter 3

Some have argued that the use of animals in the bestiaries was not intended to have any scientific merit, and that their authors did not intend for them not to be taken seriously as a factual source. Critics argue that the animals made the congreants or students remember their lessons better. While part of this argument holds merit, animals likely would allow medieval audiences, for whom animals were more familiar on a personal level than for modern readers, to better remember the morals provided; it fails to sustain rigorous scrutiny for two major reasons.

The first major reason is that, if the lessons were to be actually memorable they had to be some fantastic description of an exotic animal behaving incredibly. This actually does apply to a number of bestiary entries; however, it doesn’t apply to many of them, which describe normal creatures that are local inhabitants of North-Western Europe. Farm animals and local birds would not have been exotic to the bestiary authors. It is also worth remembering that when originally written many of the more “fantastic” animals would not have been nearly as exotic to the original author of the Physiologus text, who were based in North Africa and for whom crocodiles and elephants would have been easily observable animals.

The other way in which entries could have relied on animals to be memorable is by having the descriptions actually accurately describe the animals in question. Obviously not all of the entries even those of European creatures, do not apply this rule. Postpositive, if being memorable were the only purpose for including animals

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84 Clark, Willene B., and Meradith T. McMunn, 12
85 Barber, 35
as the subjects of the text there would be no reason for the entries not to be as accurate as possible. An average medieval audience would be extremely familiar with local wildlife or domestic animals and would have no problem noticing inaccuracies. If the case and some degree of accuracy would be necessary, requiring actual scientific style observation and recording of wild creatures. The fact that there are a number of inaccuracies speaks to the level on which the authors relied on previously written speculative treatises that had been part of natural histories by authors like Pliny and Herodotus, whose work is sampled, in combination with the more accurate entries based on actual observed behavior. This would certainly imply, if these were in fact the sources for much of the bestiaries, as can be shown they were, that the authors did intend for their entries to be taken seriously, especially if they were using them to be memorable for the audience familiar with some of the subject matter.86

Furthermore, the entire premise that the only reason that animals are used in the bestiaries completely disregards the conventions of hundreds of years of Christian natural philosophy and sheds a wholly unfairly modern lens on a topic that is distinctly unmodern. The Physiologus and later bestiary writers were scholars of their day defining the natural world in Christian terms, but defining the natural world nonetheless.87 The animals described in the bestiary are the reflection of a larger movement within early Christianity to examine various aspects of the secular world and use them to interpret and extrapolate God’s will and practical moral lessons.

86 Waddell, xxvii
87 Barber, 9
Early Christian philosophers looked to stars, geometry, even ancient Greek myths, (one of the major reasons why they were preserved in Christian libraries), as a means of finding truth and the will of God in the world around them. Secular, in this sense, essentially applies to anything not directly in either testament. Since God created everything his will can be found expressed in all things. The macrocosm being reflected in the microcosm is not necessarily unique to Christian thought, and the bestiary is a direct expression of that style of thought. It is a catalogue of some of the myriad examples of God’s wisdom that could be found in aspects of the natural world.

Critics of the bestiary tradition are not incorrect in their assertions that the contents of the bestiary are memorable.\textsuperscript{88} Many of these descriptions of animals are extraordinary, some even being unique. This is not necessarily a criticism, however. These memorable images of eccentric behavior or fantastic creatures have possibly been the bestiaries’ most lasting legacy. Long since the idea of basing biblical interpretation around animal behavior had fallen out of favor in conventional Christianity, many of the images and ideas of the bestiary have retained their unique attraction.

One of the longest-lasting of the original Physiologus entries is the pelican. It is likely not irrelevant to point out that most of the most long lived and enduring bestiary entries derive from the Physiologus regardless of their eccentricities or inaccuracies\textsuperscript{89}. According to bestiary tradition the pelican will kill its offspring when they are unruly and irreverent. Three days later the pelican will pierce its breast

\textsuperscript{88} Clark, Willene B., and Meradith T. McMunn, 12-14
\textsuperscript{89} Clark, Willene B., and Meradith T. McMunn, 2
with its own beak so that the blood of their parent could revive the dead chicks.\textsuperscript{90} The motif of reviving infants after a three-day period, also seen in the bear and lion entries, is a fairly obvious Christ allegory.\textsuperscript{91} If considered true, it would further reinforce the thesis that the animals of creation exist for man to interpret the will of God from. If presumed false, as is the actual fact, problems arise with the scientific merit of the entry. As with unicorns and several other mistaken mythical creatures of antiquity, the legend seemed to have some basis in reality though it is somewhat tenuous. Pelicans do regurgitate food down their breast to feed their young and this behavior could be mistaken as piercing its breast or feeding the chicks blood. This description obviously took some imagination to present as fact, but perhaps because the Christ allegory is so supportive of Church doctrine, with the pelican providing its symbolic blood to its undeserving but still beloved offspring so that they can rise again, that the bestiary authors didn’t want to look deeper and accepted the flawed entry for what it was for the benefit of the moral. This behavior fit well within their worldview regarding the animal kingdom and by the time the bestiaries were being written in England and France, Egyptian pelicans were too far away for anyone to challenge the accuracy of their statements. The Physiologus originated the entry, giving further support to its flawed merits. Once again locality plays a key role in defining and justifying the legitimacy of bestiary entries.

The legacy of the pelican entry does not necessarily relate to its actual contents, but rather to how long this somewhat surreal depiction has held a lasting influence. The image of the pelican piercing its breast to revive its young is one of

\begin{footnotesize}
\textsuperscript{90} Barber, 146, 147
\textsuperscript{91} White, 8, 9, 46
\end{footnotesize}
the most recognizable images in Christian art whose origin can be directly traced to
the bestiary. The image and idea became so widespread, appearing throughout
Church art and on seals and insignia that a brown pelican reviving its young still
appears on the flag and seal of the state of Louisiana. The persistence of these
symbols show not only the widespread use of bestiaries and diffusion of their ideas,
but also the lasting influence that they had on the public consciousness regarding
certain animals.

Determining the origins for some of the more imaginative entries is somewhat
difficult, but the sources can be very helpful in proving how seriously the authors
would have believed these creatures actually existed. Some of the fantastic elements
of the bestiary are descended from hundreds of years of interconnected folk tales
and myths, while others are based on older documentation of debatable merit and
scholarship. Part of the challenge of confronting these sections of the bestiary is
understanding the context and mindset that created these entries and how that
information may have been obtained.

Elements of the bestiary are certainly fantastic and may have been added to
make the lessons more memorable or enjoyable for readers and listeners. The
Physiologus had a heavy degree of orality, a characteristic that was balanced in later
editions by the work of Isidore. The majority of people in the middle ages couldn’t
read or write their own languages. There was an even smaller population of people

University Press, 23.
http://louisiana.gov/Explore/About_Louisiana/.

94 Baxter, p. 206-7
who could read the Latin or Greek that most texts were written in. Consulting biblical sources for inspiration or moral lessons couldn’t be done so the ones taught in sermons had to be memorable. This was reflected by the art and architecture of most churches throughout Western Europe at the time, which utilized a number of motifs of both biblical scenes and ideas from the bestiary. Visual representation of a number of bestiary creatures existed throughout Romanesque and Gothic art. Visually conveying complicated ideas could be difficult for artists, especially when working with broader mediums that didn’t allow extremely complicated detail as monumental carving did so symbols, drawn from the bestiary, were a good fit, acting as a kind of spiritual shorthand for the community.95

The unicorn in modern minds has become almost inseparably synonymous with fantasy and imaginary animals, but to the bestiary authors this was not the case. Like many of the archetypal fantastical animals of the world like dragons or trolls, the origins of unicorn myths are nebulous and hard to pin down. Descriptions of unicorns exist throughout Africa, India, China and Western Europe. The unicorn in the bestiary serves as a Christ metaphor, an influential ideal that would take hold throughout heraldic art in Europe.96 The unicorn entry is one of the older ones in the bestiary, dating back to the original fifty-one entries from the Physiologus, which, it is worth noting, was a primarily non-fantastic set of entries. One may therefore suspect the Physiologus creator believed in the existence of all the animals he included. As discussed before, the North African location would have made many of the more exotic animals much more visible to authors than later bestiaries would

95 Ferguson, 7, 8
96 Neubecker, 103, 104
be able to claim. There are a few other imagined animals in the Physiologus, (the charadrius\textsuperscript{97}, centaur, siren and phoenix), but with the exception of the phoenix which was a staple of Egyptian belief and culture long before and after the Physiologus and for that reason likely permeated into the minds of its authors, all the entries have biblical references to back up their claims to the animals’ existence.\textsuperscript{98} Many of these citations look strange to modern audiences for whom these translations of biblical text seem ridiculous but they do actually exist, though they have changed over time. Many of these fantastic beasts could have been considered real based on their inclusion in the Bible even as, over time, most of the more eccentric translations faded out and were replaced by more conventional sounding animals, perhaps to give the translation more credit. In the same verse different translations can call the same animal a satyr, “hairy one” and wild goat.\textsuperscript{99} Animal translation in the bible, especially the Old Testament, seems to have been a major area of contention, at least based on the numerous ways in which ambiguous animal references could be translated, make even more difficult by the ignorance surrounding which creatures may have actually been living in the Holy Land when the Bible was written. Israel’s location as a major trade cross roads, which would bring in both exotic animals and their descriptions complicates the matter further. This would continue to be an issue in Alexandria when the Physiologus text was being written. In the case of the unicorn, however, the translation remained in place

\textsuperscript{97} The charadrius or caladrius was a mythical bird that could predict if a disease would be fatal.
\textsuperscript{98} Curley, 51
for a surprisingly long time and the translations, which now more commonly use wild ox or antelope remained in place long enough that it could potentially be concluded that scholars thought that unicorns either did exist in the distant east, or had at the time of Christ. Their images were almost omnipresent throughout the iconography of medieval and early modern Europe, so it is fairly clear that their presence loomed large in the minds of many people, perhaps including the bestiary authors. There are several references to unicorns in the Bible, any of which could have been used to support the unicorn entry in the Bible.

In the allegorical portion of the unicorn entry, the pursued unicorn is representative of Christ and his hunters, his crucifiers. In the beaver or antelope entries, the hunter represents the devil pursuing souls who either escape or become trapped in sin respectively.

Now as with the Aviary, simply using the bible, or any text, and especially a nonscientific one, as the primary source is not good natural history; however, in regard to the unicorn and several other imagined beasts of the bestiary actual observation may have still taken place. This certainly was not careful observation, which likely would have disproved unicorn or mermaids but some amount of observation still could have taken place.

These widespread myths about the unicorn had to come from somewhere and one of the more likely the result of misidentification of actual animals, most commonly agreed to be the Arabian oryx. Oryxes are rare and weren’t common

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101 Neubecker, 103, 104
even in ancient times; their range is wide enough that it is entirely possible that the Physiologus authors could have seen one from afar or heard second-hand reports of their existence nearby.\textsuperscript{102} Under these circumstances and with some biblical support, it is not out of the realm of possibility that the original Physiologus authors had some substantive, quasi-scientific reason to believe that unicorns and potentially other animals were worth including within the bestiary. The unicorn’s existence was continually supported by the sale of narwhal tusks as unicorn horns to the believing monarchs of Europe throughout the Middle Ages.\textsuperscript{103}

The existence of a number of the animals in the bestiary was likely justified by mistaken observations of real animals being reinforced by biblical or other ancient sources that were dubbed credible by the bestiary authors \textsuperscript{104}. Though these accounts were not accurate they were at least partially based on solid observational accounts, not necessarily simply based on fictitious literary references and blind allegiance to them, as has been suggested by previous scholarship.

Earlier Non-Physiologian sources of the bestiary are varied, but often fairly easy to identify. Monasteries frequently had the benefit of maintaining many of the works of the Classical inheritance in the books they copied and reproduced. Appropriately, many of them may have been familiar to the monks who contributed to the bestiary’s creation. Depending on the entry, it can be a challenge to properly identify the source of origin for many of the profiled animals. The source of origin can be very important for determining the veracity assigned to the material conveyed. If

\begin{footnotes}
\item[102] White, 44, 45
\item[104] Baxter, 72
\end{footnotes}
the author was drawing from what could have been considered a credible source at the time it is not outside the realm of possibility they put stock in the information and for it to be, in their eyes, seen as credible. A few entries are almost immediately traceable. Some elongated later versions of the bestiary include an entry listed with reptiles and serpents regarding flying snakes that live in Arabia and defend spice trees.\textsuperscript{105} This particular description is especially easy to trace as it seems to have been lifted directly from the pages of Herodotus’s History.\textsuperscript{106} While there are other authors who mention such creatures, Herodotus remains the originator of their existence in the written word and the continued discussion of them throughout antiquity and into the period of bestiary compiling reveals some degree of faith in their existence. As with many of the imagined creatures in the bestiary, the flying serpent conveniently lives in Arabia, which even after the crusades remained a distant other about which outlandish claims could much more realistically be made.

Incidentally, flying snakes do actually exist in parts of India, South East Asia and China. They are not winged as is implied by Herodotus and authors after him, but rather glide by unfolding flaps of skin on the sides of their body and undulating through the air.\textsuperscript{107} For someone who had never seen such a creature, ascribing them wings in order to fly is not an illogical choice. While not common even in their natural habitats, people who had seen them certainly would have talked about their noteworthy behavior and information passed (not necessarily accurately) back to writers living in the Mediterranean and Western Europe by trade routes that had

\textsuperscript{105} Barber, 192
existed from the Far East since the Roman era. Though the descriptions are inaccurate it is safe to conclude that they were in fact based on actual observation, but without the benefit of means of properly recording and spreading information the original accurate discoveries became blurred and are now targets for untrue accusations regarding accuracy and intent in the bestiaries.  

Herodotus, unlike many of the other early contributors to the bestiary canon was not a natural philosopher. Herodotus styled himself a historian and was more interested with the recording of factual events than natural science. The snakes and much of the description that accompanies them exists more to give a vague general idea about the nature of various distant locations as they related to his history. These passages are not in-depth analyses of the regions in question, at least in the case of the periphery locations, such as Arabia, where the flying serpents allegedly live. Flying serpents are not the most unusual detail of Herodotus’s history where a number of similar exaggerations exist, but it is still completely possible for this description to have been based on what was originally perceived as fact. Herodotus’s inclusion of erroneous materials almost certainly contributed to later problems and misunderstandings about portions of the natural world. Details may have been further blurred if this information came by way of Isidore of Seville, who also includes Herodotus’ description but provides little context or detail.  

The Physiologus text did not limit itself to the description of animals exclusively, nor did later editions. The original text also contains entries for seven

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109 Brehaut, 257.
different varieties of rocks (which could include organic materials like pearls) and two kinds of plants.\textsuperscript{110} Later bestiary editions, unless they were intended to explicitly focus on one particular subject (like the \textit{Aviary} for example) also included non-animal related entries. Geology and botany, the modern terms we could use to describe studying these things, would fit well within the framework of what was then known as Natural Philosophy, a concept that would in time evolve into our modern conceptions of what proper scientific stylings should look like. These entries were written in exactly the same way as previous ones, providing a brief description of the item described before prescribing some allegorical meaning that could be derived from this description. Most of these entries fell into obscurity over the course of the development of the bestiary. An extremely likely cause for this is the lack of visual representation that could be drawn from stones. Their lessons are equally applicable as animal lessons but may not be as memorable as they require slightly more imagination to anthropomorphize inanimate objects.

Indeed, the most consistently appealing non-animate entry is that of the Peridexion or Perindeus tree, if we are to define plants as inanimate. The Peridexion tree is only given attention at all because of how it interacts with doves and dragons. The Peridexion tree can provide salvation for doves when they want to escape a pursuing dragon (perhaps inspired by bird perching at the tops of trees to avoid large reptilian pursuers, the tree is said to have existed in India, where king cobras are serious predators and are unable to climb trees, making it still possible for observation to have been the genesis of this entry) which, considering the

\textsuperscript{110} Curley, vi-vii
symbolic roles conventionally assigned to doves and dragons, makes for a very easy metaphor about achieving salvation, which is of course the accompanying moral\textsuperscript{111}. The Peridexion tree seems to have survived because of how the inanimate object acts not as an analogy for a person but the animals interacting with it are just in the same way that most entries position them.

Foreignness is an important factor in defining animals and entries in the bestiary, both in terms of theoretical “otherness” in an Orientalizing sense but also actual geographic distance. While the majority of the most fantastic descriptions in the bestiary are placed in some of the more distant locations, India being the perennial favorite, as within much of Western literature, which both explains the trust that could be put into fantastic seeming accounts of far off places and the confusion and muddling that the actual account could go through over thousands of miles that could distort or misrepresent what had originally been intended to be factual information. While the majority of these more questionable entries, which have drawn so much scrutiny regarding the bestiary tradition’s reliability, were placed in archetypically “other” locations such as India, Ethiopia and Egypt, some of them were connected to geographically more local areas that nevertheless occupied an equally “other” position in the minds of bestiary’s English and French authors.

Despite its relative proximity to much of Western Europe, Ireland maintained an almost surpassingly distinct identity both unto itself and to the way other Europeans viewed it. Ireland was one of the last Western European areas to be converted and, having never been a Roman conquest, maintained a distinct culture

\textsuperscript{111} White, 159
that separated it from the previously Romanized portions of the rest of Catholic European. An excellent example of this within the bestiary tradition exists with the previously mentioned Gerald of Wales’s *History and Topography of Ireland*. This work, one of the latest contributions to the bestiary canon, is somewhat lighter on direct moralization following entries but still presents “factual” information on animals and plants and is then able to make some moralization (though much broader ones) from the entries. It also served as one of the biggest late contributors to the bestiary, which does give modern audiences some greater degree of knowledge into the process of composing and compiling the standard bestiary text and its sources.112 The original text that Gerald created describing the people, landscape and creatures of Ireland was apparently a rather short one filled with brief descriptions and accompanying moralizations. Though initially praised by his abbot, Gerald chose to revise and expand his work several times before it became the text that currently exists, adding entries from other bestiary-style texts.113 By doing this Gerald is able to present a somewhat limited idea of what animals were present in the editions of the bestiary he had access to in the late twelfth century, a point by which a fairly sizeable amount of the bestiary canon had been produced.114

Bestiaries produced after the publication of *The History and Topography of Ireland* do include several new characters that can be reasonably assumed to exist and have entries based on actual observation115. Gerald may one of the few bestiary contributors for whom we have an actual intended field expedition being recorded.

112 O’Meara, 15
113 O’Meara, 15, 16, 17
114 O’Meara, 13
115 White, 238
Gerald traveled to Ireland in 1184 and one of the intended uses of the *History and Topography* was to record and report as much about this distinctly foreign but geographically local country. The morals associated with his work are generally broader than the personal ones in conventional bestiaries. He is writing about the nature of an entire island, not just one man, and though lessons can be applied to human character and Gerald does make suggestions for doing so,\textsuperscript{116} many of them are meant to describe the nature of the island as a whole. Part of Gerald’s reason for writing this piece was to represent ideas about the island to the English monarchs who were in speculating attempting to conquer it.\textsuperscript{117}

*The History and Topography of Ireland* contributed at least five new entries to the standard bestiary canon, including the barnacle goose and the osprey conveniently with dates and a source we can definitely identify; a luxury not afforded to many of the entries.\textsuperscript{118} These differences do not exclude the Gerald’s work from the bestiary canon however. Despite a slightly different aim and style, Gerald’s work shares a fundamental similarity with the bestiaries that indisputably links the two works. Gerald’s work operates entirely under the assumption of the macrocosm being reflected in the microcosm. Gerald was actually able to convey this idea on a number of levels all while providing further evidence for the theory that acts of nature are ways in which the divine secrets and intentions of the universe and God can be conveyed. The presence of a frog in Ireland symbolic for

\begin{footnotes}
\footnote{O’Meara, 15}
\footnote{O’Meara, 13}
\footnote{Barber, 120, 121, 122, 123}
\end{footnotes}
the increase in corruption in what was once a pure place\textsuperscript{119} or the crane who is constantly on guard for predators and can teach us to be on guard for Satan and sin.\textsuperscript{120} Both assume that the natural world is filled with clues that man can divine to understand the will of the creator. Gerald does this on a slightly larger scale with some political allegory as well as personal moralia, but it exists well within the same school of thought and helped inspire it.

\textit{Chapter Four}

Scientific merit is difficult to quantify in works that exist outside the traditional scientific canon, especially if such works were produced in the pre-enlightenment era. Ideas about what defines a “scientific work” have evolved over time. Attaching our postmodern ideas about scientific merit and factual necessity to older works, which didn’t exist within the same mental framework can be potentially anachronistic. Individual scientific merit of a work does not necessarily define its genre or relevancy, especially in a field as significantly evolved as scientific writing. Intention is an important element of historically defining a particular style of writing, especially for a particularly policed subject like scientific writing. Lucretius’ \textit{De Rerum Natura} is still considered an early scientific text of sorts, despite its distinctly non-traditionally scientific structure and lack of adherence to conventional scientific methods\textsuperscript{121}. It’s certainly possible that Lucretius is still lauded as a precursor to modern scientific works because at least some of his theories proved to be partially accurate. If this is the precedent to be set vast

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\textsuperscript{119} O’Heara, 52
\textsuperscript{120} O’Heara, 40
swaths of ancient and medieval writing that was considered scientific to its authors could be pushed aside as completely meritless because they are not completely in line with modern thinking. It seems likely that the bestiary has not been given the scientific credit it deserves, such as it is, because of the way that its findings have ultimately been proven incorrect. Scientific papers written in the modern age are still considered scientific even if they are ultimately proven false. To disqualify older works from the same standard would be revisionist and unfair.

There seems a tendency to dismiss any idea that scientific writing could have been associated with practical or spiritual morality and that the presence of one in a scientifically inclined text immediately disqualifies the other from having scientific merit. While this is arguably not entirely the case with the bestiary, which does have other issues surrounding its scientific validity, it is certainly not the case with scientific publishing in the modern era and indeed many periods between. Modern scientists and publishers still apply scientific discoveries to how the average person lives their lives; it is just done in a slightly different way. Now, the modern, secular view on science has changed so drastically from the way it existed when the bestiaries were being compiled so the methods of distribution are no longer centered around the Church and its associated libraries and sermons but rather through mass media and typically secular publications. Even with such a significant sifting in distribution style and conventional feeling about science, new discoveries and scientific hypothesizes are still used to suggest or influence the everyday lives of individuals. Studies on climate change can be presented so that they influence people to recycle waste products or find other ways to reduce their carbon
footprints. A new health study, on the effects of gluten or trans-fats, may dictate what people choose to eat. These are not direct results of scientific conclusions but are scientifically influenced life choices made because of the way new information is being presented and sold as practical knowledge. Even excluding literal advances in medicine and technology that produce tangible results, the influence that science can have on determining small changes in the way average people live their lives is a significant one. The lens through which we view what is presented as scientific observation has radically shifted. Instead of the Medieval dogmatic Christian view that sees the recording of the natural world as a greater way to understand God’s will the modern world has mostly accepted a secular view, largely disconnected from most religious beliefs. Both views still use new information to influence or reinforce behaviors in the lives of the general public.

Perspective cannot be understated in this situation. The world views held by the authors and intended audience have a great deal of influence on the contents of texts. The worldview that new information is created in can drastically affect how it is presented and how it is interpreted by its audience; whether that audience is within the academic community that created it, or in the general public that interacts with new discoveries. In a predominantly Christian academic environment the descriptions and hypotheses on newly discovered or described animals were filtered through a distinctly Christian lens; the contents have been understandably adjusted to the mindset of the time. The common practice for the era was reveling

122 Barber, 9
and exploring the glory of God, rather than our modern idea about simply cataloging the animal kingdom for the sake of understanding it.\textsuperscript{123}

Both observation and the recording of data took place during different parts of the process of creating the bestiary tradition. Unfortunately for the sake of accuracy, they were frequently not done by the same person, which meant some of the information was lost in the translation of oral information to the written word.

Bestiaries have more scientific merit than they are generally given credit for having. To deny any actual scientific value is to undercut some of the principles that created the bestiary tradition. They are not, however, without faults and are by no means an exemplary work of science. Not only are the bestiaries not necessarily fantastic examples of the implementation and exercise of scientific concepts in history as whole but are not even the best examples to come out of the Medieval period. Calling them the Medieval period’s response to biology does not contextualize either the study of biology or the tradition of the bestiaries properly.\textsuperscript{124} Bestiaries are certainly not without merit and their intentions speak volumes as to the merit they deserve to be credited with when examined through the medieval lens in which they were created. The scientific method, that fundamental backbone of intellectual exploration, the desire to explore and record the ideas of the world around us, is certainly present in the works of the bestiary.

Bestiaries are an engaging group of works. Though the tradition has a number of vastly different associated texts, each adds its own particular style to the overall canon. This melting pot of stylistic variations and assorted intentions reflects the

\textsuperscript{123} Baxter, 72
\textsuperscript{124} Baxter, 66
lenses through which its creators viewed the world around them. The bestiaries were written to educate and inform and were based, primarily, on observations and conclusions drawn by scholars, either personally or in a secondary form. Bestiaries still may be eccentric and contain a significant amount of medieval Christian dogma but they hold a place in the Western scientific canon. Time and changing ideals may have shifted the way we view these texts, but they are a product of their environment and were created in a mindset vastly different from the modern one. A change in the general academic mindset from the one that produces a particular work to the one that consumes it should not diminish the merits of an individual work. Fantastic elements of the bestiary become less outrageous when examined closely in context and leave the bestiary exposed for what it is—a hybrid work of theology and science created in a world where theology reigned supreme, but human curiosity and legitimate scientific worth can still be found, even in rather unlikely places.
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