

## (M)edieval (A)nimal (D)atabase: a Project in Progress

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Animals are woven almost unnoticed into the complex web of human existence. Animals permeate every part of our lives, from mundane subsistence questions to our attitudes about the world around us. We prepare dishes from their meat. We use leather for shoes and wool for clothing. Animals can reflect prestige, and hunting them may be a test of manhood. Animals and their attributes appear as symbols in religion and allegory, in the way humans tell their stories. In the medieval world, animals can appear in strange mixed forms that may often be not understandable for today's observers but which were as real to people of those times as the chickens and cows they were surrounded by in daily life.

MAD has been conceived as a way of addressing the manifold ways humans related to and depended on animals for physical and spiritual existence in Medieval Central Europe. Above all, this database is intended to create a truly interdisciplinary tool for research.

The time frame may begin with the end of the Roman Empire in Europe, and in some areas data input may even extend to materials from the seventeenth



*Draconcopedes serpentes sunt magni et potentes:  
facies virgineas habentes humanis similes,  
in draconum corpus desinentes.  
Credibile est huius generis illum fuisse  
per quem dyabolus Evam decepit.<sup>1</sup>*

(Hortus Sanitatis. Strassburg 1491:  
Johannes Prüss the Older,  
*De animalibus*. cap. xlix)

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<sup>1</sup> *Draconcopedes* are big and strong serpents with virginlike faces being similar to the ones of humans; they end in the bodies of dragons. It is credible that they represent the species with which the devil deceived Eve.

or eighteenth century where clear continuity can be demonstrated. In the beginning at least, Central Europe means a core area of today's Southern Germany, Austria, the Czech Republic, Slovakia, Poland, Hungary, Transylvanian Rumania, Croatia, Slovenia, and Northern Italy, although contributions are welcome from anywhere.

We have envisioned a database compiled around a number of data categories including texts, images, archaeological topographic data, artifacts, and archaeozoological evidence. We also want to compile good bibliographic and website databases for Central European Medieval animal material. The following list is by no means complete but it is meant as a beginning and basis:

- Textual data: charters, account books, cookbooks, chronicles, encyclopedia, Latin and vernacular literature, inventories, etc.
- Image data: panel and wall-paintings, book illustrations, bestiaries, textile patterns, stone and wood sculpture, architectural images, graffiti and gravestones, etc.
- Archaeological topographic data: corrals, animal pens, barns, fishponds, butcher shops and workshops, etc.
- Artifactual data: yokes, harness elements, leather objects, worked bone, antler, ivory materials, etc.
- Archaeozoological data: Species, carcass processing, bone element measurements, subsistence traditions, food preferences and taboos, etc.

In 2004, the first steps were taken towards the construction of this database.<sup>2</sup> It was agreed to officially connect the database project with multiple projects and institutions. These include: the Institut für Realienkunde of the Austrian Academy of Sciences (Krems, Austria), the on-going project between CEU-Medieval Studies and the Aquincum bioarchaeology-laboratory as well as the Economic History project also directed from CEU-Medieval Studies; and the ELTE-Archaeology Institute (Budapest). Other connections will hopefully be established with the Medieval animal measurement project being developed at the University of Siena (Italy), and already have been initiated with the Danish wall painting-project of Axel Bolvig (University of Copenhagen) and the “Computer Science for the Humanities” group around Manfred Thaller at the University of Cologne.

A trial structure has been developed with which we could begin to collect data to evaluate the usefulness of various categories of information to be pre-

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<sup>2</sup> László Bartosiewicz (Eötvös Lorand University, Budapest, Institute of Archaeology), Alice Choyke (Aquincum Museum, Budapest and Central European University, Budapest, Department of Medieval Studies), Szandra Gyetvai (ELTE), Gerhard Jaritz (CEU-Medieval Studies and Institut für Realienkunde, Austrian Academy of Sciences), Ingrid Matschneegg (Institut für Realienkunde, Austrian Academy of Sciences), and Judith Rasson (CEU-Medieval Studies) were present at these first discussions.

sented in a draft version on the Worldwide Web. The results of this work have been presented in a workshop at the CEU-Medieval Studies department in 2004.

In 2005, we collected many different examples (“case studies”) and database inputs regarding the way animals were envisioned, presented and used in Medieval Central Europe. We presented papers describing various aspects of the database at the International Medieval Congresses at Kalamazoo (May 2005) and Leeds (July 2005).

Great importance has to be put on the information-technological aspects of building a collaborative database, particularly on the ways and means of organizing the various pieces of input. Since this is work in progress, we cannot present any final results but will consider the challenges arising during the first steps of such a project. Its aims are

- to make available and interlink the existing knowledge on animals in the Middle Ages, both source information and specialized knowledge;
- to facilitate broad collaborative participation which means that anybody interested should be able to contribute.

It is an internet project only, so we do not work with anything other than digital data and use internet based formats.

As can be probably imagined, it is quite a challenge to establish a collection of medieval fauna in its complex heterogeneity and to transfer this knowledge into contemporary virtual space. When searching for ways of realizing this idea, it might be helpful to consider recent developments in the field of digital knowledge. New digital technologies, such as Google, to name just one example, have turned the organization of knowledge into a space of social change.<sup>3</sup> The currently most successful digital platform of knowledge is WIKIPEDIA, a swiftly growing network in several languages that not only allows the user to find information but also to actively get involved in collecting and spreading it.<sup>4</sup> WIKIs are open collections that gather heterogeneous knowledge, mostly in the form of texts and images.<sup>5</sup>

The exchange of digital data whether for commercial purposes, charity or for research targets in the humanities, presupposes the existence of basic technologies. Moreover, apart from these technological standards used daily without thought to the processes underlying them, we have to overcome other obstacles to facilitate the exchange of knowledge online. Three such obstacles are:

- The problem of standardization: Since computers were first used in the humanities, scholars have been trying to find a format that facilitates the sustainable use of information facilitating their use beyond a single and temporary project.

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<sup>3</sup> See Kai Lehmann and Michael Scheltsche, ed., *Die Google-Gesellschaft. Wissen im 21. Jahrhundert* (Bielefeld: transcript, 2005).

<sup>4</sup> Erik Möller, *Die heimliche Medienrevolution. Wie Weblogs, Wikis und freie Software die Welt verändern* (Hannover: Telepolis, 2005).

<sup>5</sup> In order to find out whether this would be an appropriate platform for our project, we conducted a pilot study with a group of students at Central European University. See below.

- The structure of the data: What information do we want to include? Are general or detailed descriptions preferred?
- Proper and good documentation of the collected information.

It is obvious from the very large number of previous projects that there will never be one standard that can meet all demands.

## The DUBLIN-CORE Metadata Initiative

Initiatives in the fields of cultural studies and cultural heritage management institutions (such as archives, libraries and museums) led to the so-called “Dublin Core Metadata-Standard”.<sup>6</sup> There are several projects that work on the basis of the Dublin Core (DC).<sup>7</sup>

In order to discover whether the DC standard is suitable for our animal project, we carried out a pilot study working with MA-students enrolled at Medieval Studies at the Central European University. First we asked them to gather various material on animals in the Middle Ages. This task was intentionally phrased broadly so that the participants had the freedom to decide what they found relevant or interesting. For each of their finds they had to write a description of no more than one page – listing the animals found in the source and setting them in their cultural context. These descriptions and additional data, for instance, digitized images, were to be collected in a digital format for further access via internet.

Once the students completed this first task, they worked with the DC-standard. This means that they were asked to describe their findings following the criteria of the DC Metadata Initiative. DC prescribes a set of fifteen fields that have to be sufficient to describe the document which may be anything, from a historical source to a contemporary work of art or a website.

For the collection of the data we used a form accessible on the internet (DC-DOT) that contains a useful feature facilitating later establishment of a web-based database:<sup>8</sup> It transfers the data by e-mail or saves them locally and, in this process, automatically transforms them into the XML-format.<sup>9</sup> We prepared ‘guidelines’ and instructed the participants on how to fill in the forms by using specific examples.

This pilot initiative presented us with several problems, which need to be resolved before such a collaborative project may be opened to the wider public:

- The problem of language: While the annotated documents can be written in any language, there needs to be a general agreement about the language used for the DC descriptions. Under the current circumstances, English was the first choice.

<sup>6</sup> See <http://www.dublincore.org/>.

<sup>7</sup> See, e. g., <http://www.vektor.at/download/vektor%20summary%20english.pdf> (the Austrian project “Archiving the Present”).

<sup>8</sup> <http://www.ukoln.ac.uk/cgi-bin/dcdot.pl>.

<sup>9</sup> XML = “extended markup language,” one of the commonly used current exchange formats.

- Should one use a free or controlled vocabulary? In the pilot project we permitted a largely free vocabulary. However, it became immediately obvious that it would be sensible to formulate some rules. This holds true for the use of singular and plural in the object fields, for example. Furthermore, it certainly proved necessary to use fixed lists of terms for the defining animal field. It is also clearly necessary to provide guidelines for the field containing the abstract of the whole data case.
- As the definitions of the DC fields are very abstract and open, this openness offers a large number of possibilities for entering data. However, our project aims to reach a wide range of interested people and to motivate them to contribute their knowledge on a voluntary basis. Therefore, we have tried not to deter them with an incomprehensible entry form.

### **WIKI – a useful tool for historians?**

A rather different and probably easier option for building a database is to use the idea underlying the above-mentioned Wikipedia and to establish a WIKI collection of material on animals in the Middle Ages. WIKIs are specific kinds of websites that combine elements of a database-supported content management system with a collective writing tool. They only work on the internet. Further preconditions are:

- a large number of people, really as many as possible, prepared to write articles on a voluntary basis;
- a number of administrators who are responsible for the content of the specific WIKI, who formulate the thematic framework and, if necessary, edit the incoming articles.

I tested this possibility with a group of history students in a tutorial at the University of Vienna.<sup>10</sup> The initial task was similar to that given to the student group in Budapest, that is, gathering and describing information and ideas on the topic ‘Animals in the Middle Ages’. The students had almost no problems in handling the software (we used MEDIA WIKI).<sup>11</sup> It is this easy use that makes the tool so convincing. It only takes one click to publish the text on the internet which means that one can immediately see the result of one’s work. Furthermore, one does not have to devote any time to the design of the website or to creating one’s own webspace. And it is relatively simple to include images and links to other websites.

Whether WIKIs are also a suitable platform for heterogeneous collections of knowledge, remains to be seen. They are very close in their format to books and subscribe to an ideal of collaborative writing. That means that any existing text can be continued or changed by anybody. While this is the key to success in

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<sup>10</sup> The tutorial dealt with “New Media in History” (summer term 2005).

<sup>11</sup> For some results, see <http://gerda.univie.ac.at/im/sose2005/wiki/index.php/Kurswiki:Portal>.

the Wikipedia, it did not work too well in our small project. This is probably because some kind of a learning process is required before the participants of the project overcome their fear of changing texts written by others or using these as a basis for their own further elaborations.

As mentioned above, animals – whether, from today’s “knowledge,” real or fantastic – were omnipresent in the Middle Ages. They are diverse research objects that demand transdisciplinary approaches. A question that still remains to be answered, therefore, is whether it is possible to mix information on animals in the most diverse settings without decontextualizing them.

### **What does an ideal system look like?**

An ideal system should facilitate the collection of data and information on the internet. That means that it should incorporate all the practical functions of a complex research database such as selection options by terms, dates and regions as well as specific search functions. At the same time, entering data should be as simple as possible (like writing a WIKI article). It should also permit the creation of links between resources already gathered on the internet so that none of the existing information would have to be duplicated.<sup>12</sup>

Moreover, we do not only aim at including links to existing databases but also want to take account of the many other digital resources scattered throughout the WWW. These were also included in our pilot study. The participants collected a broad range of links including some extremely informative and well-designed web pages.<sup>13</sup> There is already a wealth of material available on the WWW that deals with animals in the Middle Ages. Collecting new material using a participative approach as described above is, therefore, one aim of our project. Gathering the existing digital resources is another aspect.

An ideal system would combine the approach of standardized and exchangeable metadata (like Dublin Core) with a flexible and easily to apply data management (like Wikipedia).<sup>14</sup> We hope to offer such a possibility by fall 2006

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<sup>12</sup> To cite an example: A search for domestic animals from medieval German literature in the Middle High German Conceptual Database (<http://mhdbdb.sbg.ac.at>) yields more than 7000 hits (most of them for horses but there are also quite a few dogs, pigs, cats etc). Regarding the M(edieval) A(nimal) D(atabase) project, we have gathered the animals found in the image database REALonline of the ‘Institut für Realienkunde’ of the Austrian Academy of Sciences [<http://www.imareal.oew.ac.at/realonline/> (catalogue “Tiere”), the descriptions currently still only in German] in a separate catalogue (altogether over 3000 animals).

<sup>13</sup> E.g., the website on medieval bestiaries (<http://www.bestiary.ca>) or on a cookbook (<http://www.imareal.oew.ac.at/mad/resources/cookbook.htm>), and several other types of sources. See <http://www.imareal.oew.ac.at/mad/resources/madlinks>.

<sup>14</sup> Benjamin Burkard, *Collaboration on Medieval Chartres. Wikipedia in the Humanities?* ([http://www.monasterium.net/at/tagungen/abstracts/Abstract\\_Burkard.pdf](http://www.monasterium.net/at/tagungen/abstracts/Abstract_Burkard.pdf)).

and to be able, then, to establish an active and international MAD online-community.<sup>15</sup>

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<sup>15</sup> See Christian Eigner, Helmut Leitner, Peter Nausner and Ursula Schneider, *Online-Communities, Weblogs und die soziale Rückeroberung des Netzes* (Graz: Nausner & Nausner, 2003).

ANIMAL DIVERSITIES

Edited by

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**MEDIUM AEVUM QUOTIDIANUM**

HERAUSGEGEBEN VON GERHARD JARITZ

**SONDERBAND XVI**

# **ANIMAL DIVERSITIES**

Edited by

Gerhard Jaritz and Alice Choyke

Krems 2005

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## Table of Contents

Preface .....	7
Aleksander Pluskowski, Wolves and Sheep in Medieval Semiotics, Iconology and Ecology: a Case Study of Multi- and Inter-disciplinary Approaches to Human-Animal Relations in the Historical Past .....	9
Alice M. Choyke, Kyra Lyublyanovics, László Bartosiewicz, The Various Voices of Medieval Animal Bones .....	23
Grzegorz Żabiński, Swine for Pearls? Animals in the Thirteenth-Century Cistercian Houses of Henryków and Mogiła .....	50
Krisztina Fügedi, Bohemian Sheep, Hungarian Horses, and Polish Wild Boars: Animals in Twelfth-Century Central European Chronicles .....	66
Hilary Powell, Walking and Talking with the Animals: the Role of Fauna in Anglo-Latin Saints' Lives .....	89
Gerhard Jaritz, Oxen and Hogs, Monkeys and Parrots: Using "Familiar" and "Unfamiliar" Fauna in Late Medieval Visual Representation .....	107
Sarah Wells, A Database of Animals in Medieval Misericords .....	123
Zsófia Buda, Animals and Gazing at Women: Zoocephalic Figures in the Tripartite Mahzor .....	136
Taxiarchis G. Koliass, Man and Animals in the Byzantine World .....	165
Ingrid Matschinegg, (M)edieval (A)nimal (D)atabase: a Project in Progress .....	167

## Preface

Over the last two decades, interests in animals and the relationship between humans and animals in the past have increased decisively. This is also true particularly for the research into the Middle Ages. A variety of perspectives and approaches can be traced concerning

- the questions asked;
- the used source evidence: zooarchaeological, textual, visual;
- the embedding of the analyses into the wider fields of the study of the history of nature, environment, economy, religion and theology, signs and symbols, social history, and so on;
- the degrees and levels of the application of interdisciplinary and comparative methods;
- the level of consciousness of the diversities of use and functions of animals in medieval society, on the one hand, and of the contextualized networks of their meanings, on the other hand.

Such a consciousness of animal diversities and, at the same time, of animal networks has been the basis for this volume of collected essays. They originate from a number of international research collaborations, communications, and presentations at international meetings, such as the annual Medieval Conferences at Kalamazoo and Leeds. All the contributors have aimed to show individual aspects of human-animal relations and have also been interested in the social contexts animals occur in. Therefore, the book is meant to represent *Animal Diversities* but certainly also, in particular, the indispensable *Animal Contexts* and *Contextuality*: from zooarchaeological evidence to zoocephalic females in visual representations of Ashkenazi Jews; from the economic function of animals in Cistercian houses to the role of their representations in Gothic misericords; from animals in chronicles or hagiographical texts to their images at different levels of late medieval visual public space.

Some recently initiated projects, two of them introduced in the volume, others referred to in the contributions, will hopefully also open up possibilities for new insights into the variety of roles and functions that were played by and constructed for all kinds of fauna in the Middle Ages.

“Zoology of the Middle Ages” may then perhaps be seen, in general, as one of the model fields for representing the importance of relations and connections between the sciences and humanities, economy and theology, daily life

and symbolic meaning, nature and culture, intention and response, as well as construction and perception, ...

December 2005

Gerhard Jaritz