

IBN BAKLARISH'S BOOK
OF SIMPLES

MEDICAL REMEDIES BETWEEN THREE FAITHS
IN TWELFTH-CENTURY SPAIN

edited by
Charles Burnett



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THE ZOOLOGICAL-MEDICINAL MATERIAL IN THE ARCADIAN LIBRARY MANUSCRIPT

Although the manner of presentation is quite different, the zoological material in the twelfth-century *Kitāb al-Mustaʿinī* of Ibn Baklarish in the Arcadian Library is clearly capable of being related to the more specifically zoological-medicinal literature of the period.¹ However, its affiliations are difficult to establish, and the following notes must be viewed as a preliminary contribution. They attempt to characterize the nature of this material, and to compare it to the equivalent *manāfi* material found in the manuscripts of Ibn Bakhtishu's *Kitāb Manāfi al-ḥayawān* (*The Book on the Usefulness of Animals*).

ʿUbayd Allah ibn Jibraʿil ibn Bakhtishu was a member of an illustrious family of physicians who ran the school of medicine at Jundishapur and later were personal physicians to a number of Abbasid Caliphs.² The last known member of this line, he lived in the eleventh century, and it is likely that the material preserved in his zoological-medicinal writings represents the culmination of a lengthy experimental and textual tradition. Ibn Bakhtishu's *Book on the Usefulness of Animals* is extant in several copies in Arabic and Persian, and three of the Arabic ones are illustrated.³ The earliest known copy, in the British Library, has the title *Kitāb Naʿt al-ḥayawān* (*The Book of the Description of Animals*). In this work the discussion of each animal is divided into two parts. The first is a general introduction, in which the principal characteristics of the animals are treated, as well as their habits and their reactions to different situations. This part, according to the earliest extant copy, derives from Aristotle's *De animalibus*. The second part, attributed to Ibn Bakhtishu himself, deals with the different parts of the animal and how they may be used to beneficial effect, principally to cure various human illnesses.⁴

As for the compilation of simples made by Ibn Baklarish, although plants provide the majority of the entries, there are a considerable number of zoological entries (and also, incidentally, some mineral ones), and in this respect it is akin to Dioscorides' *Khawāṣṣ al-ashjār* (*The Properties of Plants; De materia medica*), which contains a small-

1. Ibn Baklarish, Yusuf ibn Ishaq al-Israʿili, a Judaeo-Arab physician who lived and operated in Almería where he wrote the *Kitāb al-Mustaʿinī* for his patron, the Hudid ruler of Saragossa, al-Mustaʿin bi-llah Abu Jaʿfar Ahmad ibn Yusuf al-Muʿtamin bi-llah, who reigned between 1085 and 1109 (478–503); see Albert Dietrich, 'Ibn Biklārish', *Encyclopedia of Islam*, new edition, Suppl. p. 383. Hitherto scholarly attention has focused on the importance of the *Kitāb al-Mustaʿinī* for the Romance words that it contains, while Reinhardt Dozy used it for his *Supplément aux dictionnaires arabes*, Leiden 1881.

2. Ibn Abi Usaybiʿa, *ʿUyūn al-anbāʾ fī ṭabaqāt al-aʿtibāʾ*, ed. August Müller, Cairo 1882–4, I, pp. 123–48; see also Anna Contadini, 'The Ibn Baḥtīshū Bestiary Tradition: the Text and its Sources' in: *Medicina nei secoli: arte e scienza*, 6.2, 1994, pp. 349–64.

3. For a list of manuscripts see Anna Contadini, 'The *Kitāb Naʿt al-ḥayawān* (BL Or. 2784) and the So-called Ibn Bakhtīshū Illustrated Bestiaries', School of Oriental and African Studies, University of London, 1992 (unpublished PhD thesis), pp. 149–50 and p. 152.

4. Ibn Bakhtishu, *Kitāb Naʿt al-ḥayawān*, London, British Library, MS Or. 2784, datable to c. 617–22/1220–5, fols. 94a–95b. For this manuscript in general and its Aristotelian connection see Anna Contadini, 'A Bestiary Tale: Text and Image of the Unicorn in the *Kitāb Naʿt al-ḥayawān*', *Muqarnas*, 20, 2003, pp. 17–33 (see pp. 19–20); eadem, 'The *Kitāb Manāfi al-ḥayawān* in the Escorial Library', *Islamic Art*, 3, 1988, pp. 33–57.

Fig. 42.

Top: Hippopotamus (*al-faras al-bahri*); middle: Beaver (*al-qastariyūn*); bottom: Weasel (*ibn 'irs*). Dioscorides, *Khawāṣṣ al-ashjār* (*De materia medica*), Samarkand, 475 A.H./1083 A.D. Leiden, University Library, Cod. Or. 289, fol. 61b

ler section (varying in size depending on the version) dealing with animals and their parts [Figs. 42–4].⁵ The verso side of the folio (the even-numbered page, right-hand) of the Ibn Baklarish manuscript has the beginning of the entries, the recto side (odd-numbered, left-hand page) the continuation, so that the text has to be read horizontally across the double spread. Typically, there are six entries per page, separated by thin red lines. The verso side comments on the name, often giving equivalents in other languages, while the recto is devoted to the medicinal uses [Figs. 45, 46].

The number of animals touched upon in the *Kitāb al-Musta'inī* is some 58, and includes man, woman and child (see list below), as in the *manāfi'* literature, where human beings are generally considered as part of the animal kingdom.⁶ One obvious difference from the *manāfi'* texts, however, is in organization. In the *Kitāb al-Musta'inī* the same animal may reappear at various points throughout the tables, as the text (in alphabetical *abjad* order) is arranged according to individual components and not, with few exceptions, by animal. The logic of the alphabetical organization thus means that the various organs of a given animal are dispersed and scattered. The *manāfi'* literature, on the other hand, deals globally with each animal, discussing its characteristics and then listing the properties of various organs. Furthermore, the animals are presented within groups according to a zoological taxonomy. A typical order is: man, domestic mammals, wild mammals, domestic birds, wild birds, reptiles, fish, crustaceans and insects.⁷

The alphabetical arrangement of the *Kitāb al-Musta'inī* often produces a group of entries where the initial term provides the common feature of a single body part or substance. Thus, for instance, under urine (*bawl*) we have the following series of entries (pp. 68–71):

- ~ urine of a man (*insān*)
- ~ children (*atfāl*)
- ~ a pig (*khinzīr*)
- ~ cows (*baqar*)
- ~ buffaloes (*jawāmīs*)
- ~ a goat (*mā'iz*)
- ~ camels (*ibil*)
- ~ sheep (*da'n*)

5. Among the manuscripts of Dioscorides, for Leiden University Library, Cod. Or. 289, dated 475/1083, and Istanbul, Topkapı Saray Library, Ahmet III, 2127, dated 626/1229, both of which have a section on animals, see Mahmoud M. Sadek, *The Arabic Materia Medica of Dioscorides*, Quebec 1983; for Istanbul, Süleymaniye Library, Aya Sofya 3703 (dated 612/1224), see Alain Touwaide, *Farmacopea araba medievale: codice Ayasofia 3703*, 2 vols., Milan 1992. For Dioscorides in general see Albert Dietrich (ed. and trans.), *Dioscorides Triumphans: ein anonym arabischer Kommentar (Ende 12. Jahrh. nach Chr.) zur Materia Medica*, 2 vols., Göttingen 1988; Michael Rogers, 'The Arab Contribution to Botany and Pharmacology', *Arab Affairs*, 6, 1988, pp. 71–86 and idem, 'Text and Illustrations. Dioscorides and the Illustrated Herbal in the Arab Tradition' in: Anna Contadini (ed.), *Arab Painting. Text and Image in Illustrated Arabic Manuscripts*, Leiden 2007, pp. 41–7; Minta Collins, *Medieval Herbals. The Illustrative Traditions*, British Library Studies in Medieval Culture, London – Toronto 2000, chapter 2.

6. This is the case for all manuscripts in the Ibn Bakhtishū' tradition as well: see Contadini, 'The Ibn Baḥtīshū' Bestiary Tradition'.

7. Contadini, 'The Ibn Baḥtīshū' Bestiary Tradition', pp. 349–50.

اسباب



علا لخش النمر الحري والعرب
والعراق الحريه نفع من ساعته
العطوما وهو الهرب الحري
حبي هذه اذا بستت ودوت
وسرت بطلا نفع من لدغ الهوام
جند بيدا ستر

هو نوار بلور ولعنت في البر والحر لعند السمك
والسراطر بوجذ خصاه وسحق
ويشرب منه لسرا لعض الهوام
والسوم والادويه الفناكه وهو
معطر واد اشرب منه ور معالين
مع الفوح التي ادرت الطمشه



انضبت الحس المشمه وقد سرك للنع والمعصر والقواو واد اخلط خل ودهن
ورد ومع به الراس او اشتم منه تشييار او سيات نفعه وكذلك يفعل اذا
شربه واد اشرب او شربه واقو الاربعاس والوجع الطمسي اسهوسر وشبع
او جاع الاعصاب وناجته تونه محنه والمخار منه المزدوحه اعني
الملتصقه لعنه اسعور وحمما في حجاب واخذ الى النور واحد وما في داخلها
تشبه الموم كثره الطعم زهر حاد لراع هير الفرق من تقسم في كثيره
طعمه واد اشرب اشوا او الصمغ بار يعر دم الحديد ستر وفعال في مثانه
ويجف وير تهور ارهه اللانه اذ اخلقها الصنادور تسلي خصيتها اخلقها
وذا كذب محاك ولا خصيتها الاصقه هو صغها مثل حصي الخنزير وندعي
ان شوا الطيب وخرج اخصي مع الحجاب الذي تجويها وهي رطوبه تشبهه بالعتل
ويجفف في ذلك وتسمى بنها
ان عرس نوري

اد اسلي وامزج بطنه وطرح به ثم
عند ربه وبيد رصفه والظا ونرب
منه ودر من معالين شراب نفع من بهش



الها كذا وها ازه مضاد لعشرب اللوا الفناك الذي ستر
سرب اشرف وسوار لعسل حرقه وشمي كثره ووطيح ثم ستر منه

Fig. 43.
Elephant (*al-fīl*) and Pig
(*al-khinzīr*). Dioscorides,
Khawāṣṣ al-ashjār (*De materia
medica*), Northern Iraq or Syria,
626 A.H./1229 A.D. Istanbul,
Library of the Topkapı Saray,
MS Ahmet III, 2127, fol. 67a



Fig. 44.
Rooster (*al-dīk*). Dioscorides,
Khawāṣṣ al-ashjār (*De materia
medica*), Samarkand, 475
A.H./1083 A.D. Leiden,
University Library, Cod.
Or. 289, fol. 63b

NEXT OPENING

Fig. 45.
Ibn Baklarish, *Kitāb
al-Mustaʿīnī*, The Arcadian
Library manuscript, pp. 88–9:
hedgehog and lamb brain
(*dimāgh al-qunfudh wa-l-ḥamal*)

FOLLOWING OPENING

Fig. 46.
Ibn Baklarish, *Kitāb
al-Mustaʿīnī*, The Arcadian
Library manuscript, pp. 262–3:
crow (*al-ghurāb*)

من الفرع من الآ وخذ فوم ناب الملك الكلب اذا عضر انسانا
 فتحبونه وفي قطعه حلاه وشدونه في العصد لحيه طمر شد عليه من
 اللدائم الكلبه φ وضعت الابل ادا ووضعت
 ينع من نهنه الاوعى φ حرفا لحمير ادا احرفت وسر
 منها انا ما كتبه درهمين ونصف وفي كل يوم نعت المصروعين واذا
 حطت نوبت ووضع على الحارز حلائها واذا ضمدها ابراق الشفاو
 العارض من البرد φ لحم اوقس وهي زوائد عدد طائفة
 قرب ركب الخبز وعلا الحواف ادا دقت وسحق وسربت مخل
 ابراق من الصرع وكذلك حوافرها φ اطلاق الماعز
 ادا احرفت وحطت مخلوط بها موضع النعلت ابراق منه φ
النعان الخلفار الخ للخب ادا احرفت وسحق ودرت على حرو
النار وعلى السخ العارض من الحف ابراقه φ

قطووش وهو اللبك
 ادا سحق ووضع
 وهي سحقه على نهنس الهواء
 ابراق منه وسعي ابراقه
 وكاوت ودماعها
 شرب سرار ينع انصامه
 ووطع نرف الدم العارض
 من حجاب الدماغ الذي
 له من حرس واللبك ادا
 امر وواخذ الحار اللدغ
 باطر الحوصلة فحده وسحق



وسرقت لسراب وافوم كابت معذ من سحره وهو اللبك العنوش
 لاسهان الطرود في رخرج احوافه او صبر من انصامه وميطد لونها و
 تشرب هو طول ما دعه نفي منه نلت هو طول و سحره وسرقت وهو الناس رطمه
 حرمي او انما المسمى او لسنور سطره وسرقت وسرقت وسرقت

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 ١٥٣
 ١٥٤
 ١٥٥
 ١٥٦
 ١٥٧
 ١٥٨
 ١٥٩
 ١٦٠

المعروب بل الخلام ومضربا امتنان واللثة الزايله عن الاعتزال الى البرودة امر لطيفا
بل انه عمر مضربا حـ ان اللين اذا اخرج من الصرع فيجذب طول مـ له وبعد
الغليظه يلمع من الفروع ويطلق المكن لاسيما اذا طبقت باللبس بل يبع

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منابعها وخواصها ووجوب استعمالها

يلعب من الخمره والاورام الجرايه اذا طلى عليها واذا خلط بالعبس الثقلب
او ما في العالم طان بعله افوى ومن خلط برفيق الشعير وجيل على الاورام
في التريز والخصوتين

يقطع جره الصغرا وبرد المعره والكبر ويقطع العظم ويقطع جزاره النرم
ونفوت المعره ويمسك الطيبه

وهو نافع للفروع الجارده في العزله والذير ويدخل الفروع الخبيثه المنتشره
في البروز واذا خلط بصمغ النكم او فيروزيه حلل الزيلان ويلعب من فروع البعر
ان استعمل وحده او مع العسل المنزوع الرغوه ويلعب من مر اواد الخوان في فوه
الرمر وحس بلاسه يجبه منفيه له فوه جملر ويقطع العجر الزاير في الفروع

اذا شرب من محكه شان الشم نفعه بعض النبع واذا جمل على مواضع لرغ
العقارب سكتها وان يحومنه شي ودن بالخل وذلك به موضع الفوايد الجارده
في الجمر من المره السودا اذ يجمع ويلعب من السعبه في الراس ويجمع الجمر

اذا استعمل تفلوا نفع من فرجه الامعاء ويقطع الامتعال الرمن واذا شرب الجمر
فعل مثل ذلك عن بعض اطباء واذا اكلت بالزنجبيل والبصل يبعث شهوه الجماع ويزاد
في اي ه الطير من شر من مزج الجمل مسال بالخل والعسل نفع من عسل البصر

اذا شرب ووضع على فوش العوام وهو د في جين يشق نفع منه وجب ان يواتر وضعه
على فوش العوام ولسع العقارب المره بعمر المره وديارحه تخلفه ليشق كل واحد منهما
في الرضايه والرجاح ليعمل مثل ذلك وفيل جمع الطير را على خراشه واذا شرب جماع
الربط نفع من فوش المسوكم ويقطع الدم العارض من جحد الرباع

والربو ووجع المفاصل وبع المعره ومن يطبخ بالكرنب او الفرفم او الشبث والكمون

ع

ع

ع

ع

ع

ع

ع

ع

وخرافه النبع من الفروع
ويعمل من الرمن
ويعمل من الرمن

وصحبه ما بل الر الحلاوة بعرب من حلاوة عروو السوم مع قيم يسير ومرارة جفيدة ومن
القليبيكس وهو يثبت في الصب في قو الورق ويجمع الاغصان كـ انـ
مما يحلب في كل سنة واما الاول الحبير فيسقا العام كله ولا سيما في المواضع الرطبة والمروج

منافعها وخواصها ووجوه استعمالها

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تافع من اوجاع الكبر محلل الحمايماء وبعث السرد العارضة بهما وورق من النبات اذا
دوخ وانما وخلق لحم الحنظل العتيق ووضع على الفروع العسرة الاثر مال ابراما
حـ العاقف تافع من الحمايم المنقادة ونخامه حمال الروح وحبات الصبان وقد
تجعل الروم نورة ومغروا خضر في دبر الر حاجه فينبض كل يومه ونزع عيه لاه اهلافة لا يسور

اذا عمل منه حسو وشرب بعق من نعت الهم والفتح عن اسحق فالجيرة اذا عمل منه
حسو ونعس قاتر ابعزاز اوفيه ونصبه وبقو نعت الهم واذا ضمربه كانت له قوة
تغري وتنفج

المستعمل من عزة الشوخته حيا وجم فادبضه لعقل الطبيعة وبعمل منه سويون كما عمل من
النسب ويشرب للاسهل وذكرا من النبات كشم الرباب في بلاد البربر وتاجه
الغبر وان وهو معروف مشهور في مال هـ

لـ

ما عمل منه في جلود البقر وانه اذا ذاب بالخل والخبخ به في القوبا ويفسر الجرب المتفوح
الوزن ليس يغاير وينفع من حر والتهار واذا حل بالمال الحار واذا حل بالعسل والخل في الحار الحار
وعثر السمك يصلح ان يخلط في مرهم اليراس واذا ونبه الجرب هـ

الطبر في ناخل القراب وهو حر ويصره حيا هو في انا جلد ويصعب عليه ثلاثة ستر
جات خل وينزل اياها حتى يعفن ثم يخرج ويسق على ملائنه من اسرب ونخصبه
الشعر فانه ليسود هـ وقال ايضا انه يفتح فيه الزود فهو خذ الزود وسقو ويطلع به
الراس في يسود هـ

الشبذ على بركة الله وثايبه

الاسود كوزو الزينور فيه ما هـ ايزه منه صبر رجم الزود تعرفه العامة يشبذ
الزود اخضر ويعتبر
الاسود كوزو الزينور فيه ما هـ ايزه منه صبر رجم الزود تعرفه العامة يشبذ
الزود اخضر ويعتبر
الاسود كوزو الزينور فيه ما هـ ايزه منه صبر رجم الزود تعرفه العامة يشبذ
الزود اخضر ويعتبر

الغراف أربعة أصناف منها صنف كبير الورق ولونه البياض يلقب بالبر وله ثوران أصغر
منها النوع يوضع العطاره لانه ارجح انواع الغراف وأكثر ما يبه ومنه صنف يلقب بالغراف
أصل الحنب والرفيق الورق أحمر الورق نواره صغير ورأينه كراينه الكبير ولحمه مثل لحمه وهو

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الاسماء	تفسيرها باختلاف اللغات	الاسماء
الاسماء	لقاله بالعجمه مشكته ارجح ما يبه من طير وان يلقب بالبر وبالعبويه الغراف ويسمى بالعجمه ايضا التارده و بالبرديه النور ملاز وبالعجمه ايضا التالفيره ومن حشيشه البر اعيت ه	الاسماء الاسماء
الاسماء	هو عيار يجمع على حيطان الرجم مما ينسب طائر عند الحجر ومنه يعمل عرا المفسر بليلصونه الكتب ه	الاسماء
الاسماء	فيل هو شجرة مشوكه لا ارتفاع لها اغصانها حمر و رفها تشبه ورق الصنوبر البري ولها ثياب من ورق عنب الورق ولذلك قيل لها عنبيرا وهو الجوزن بالبريه ه	الاسماء
الاسماء	يراد معنا بالخرام يوضع من جلود البقر التي يلقونها المواجر وخر الحوت الذي يستعمله الفواسق وهنواع العيران وهو اصل ما يلقونها ه	الاسماء
الاسماء	الغراب هو الغراب وهو ابو المرفا وهو لا يخرج انه يحل كانه مغير ومن اسمائه خاتم ويقال له الحور نقلا و دانه لو فوجعه على دانه المعبر عن موضع دونه ويقال ان الغراب يقول سواد اللحم منعا ويقال للصغير الحور	الاسماء
الاسماء	الغبن على بركة الله ه	الاسماء

قل

ومنه صنف ثالث على الثبات يرتفع على الارض
البر اعيت ويقال ما وقع
عوارده فليمة الورق
الاصغر
الاصغر

We have, in all, twelve such groups:

- ~ rennet (*infḥa*): of hare (*arnab*); cows; deer/stag (*ayyil*); camel and antelope (*jamal wa-ḡaby*); horses (*khayl*); dog (pp. 46–7)
- ~ droppings (*baʿr*): of sheep; goat (pp. 68–9)
- ~ urine (as above)
- ~ skin (*jild*): of hedgehog (*qunfudh*); ram and billy goat (*kabsh wa-tays*) (pp. 78–9)
- ~ blood (*dam*): of snake (*thuʿbān*, pp. 84–5); man; bear (*dubb*); lambs (*khirfān*); turtle-doves (*shafānūn*); doves (*fawākhit*); billy goats; kid (*jady*); hare; dog; bull (*thawr*); frogs (*ḡafādiʿ*); pigeons (*hamām*) (pp. 90–3)
- ~ dung (*zibl*): of man; boy (*ṣabī*); cows; sparrows (*ʿṣāfir*); pigeons; chickens (*dajāj*); mice (*faʿr*); Egyptian vulture (*rakham*); lizard (*ḡabb*); donkeys (*hamīr*); horses; pig; elephant (*fīl*); dog; wolf (*dhiʿb*) (pp. 116–17)
- ~ spleen (*tihāl*): of pig; goat; fox (*thaʿlab*) (pp. 146–7)
- ~ liver (*kabid*): of goat; hedgehog; pig; donkey; bear; dog (pp. 162–3)
- ~ milk (*laban*): of cows; sheep; goat; women (*nisāʿ*); horses; she-asses (*utun*) (pp. 170–1)
- ~ meat (*lahm*): of chameleon (*ḡirbāʿ*); vipers (*afāʿi*); donkeys; mice; cows; hedgehog (pp. 172–3)
- ~ gall-bladder (*marāra*): of sheep; goat; bull; pig; bear; chickens; wolf; partridge (*ḡajal*); fish (*samak*); hyena (*dabʿ*); crane (*kurkī*); doves; eagle (*ʿuqāb*); sea scorpion (*ʿaqrab al-māʿ*); turtle (*sulahfāh bahri*); gazelles (*ḡibāʿ*);⁸ elephant (pp. 184–9)
- ~ fat (*shahm*): of sheep; goat; stag; bear; fox; donkey; duck (*baṭṭ*); chickens.

There is, as one might expect, an emphasis on domestic species, birds as well as mammals, but, as the above inventory shows, there are also a number of other animals. As a further group entry we may mention eggs:

- ~ eggs (*bayḡ*): egg white (*bayād al-bayḡ*); boiled eggs (*bayḡ maslūq*); soft eggs (*bayḡ nīmrashī*); very lightly cooked eggs (*bayḡ khafīf jiddan*)

In addition, there are a few other body parts or secretions for which there is only a single entry. In order of occurrence these are:

- ~ spittle (*buṣāq*, pp. 68–9)
- ~ old skins (*julūd ʿatīqa*, pp. 80–1)
- ~ hedgehog and lamb brain (*dimāgh al-qunfudh wa-l-ḡamal*, pp. 88–9)
- ~ ear wax (*wasakh al-ādḡān*, pp. 102–3)
- ~ hoof (*ḡāfir*, pp. 140–1)
- ~ bone marrow (*mukḡḡh al-ʿiḡām*, pp. 188–9)
- ~ sweat (*ʿaraq*; pp. 212–13)
- ~ charred bones (*ʿiḡām muḡraqa*, pp. 212–13)
- ~ goat penis (*dhakar al-tays*, pp. 260–1)

8. The manuscript has *d-bāh*, but since *riʿm* and *shāḡin* are given as equivalents, it may be read as a plural of *ḡaby*.

- ~ human hair (*sha'r al-insān*, pp. 270–1)
- ~ various fats (*shuhūm mukhtalifa*; the animals mentioned are fish, lion, goose and pigs, pp. 272–3).

Finally, there are a number of entries devoted to particular animals, in order of occurrence:

- ~ hare (pp. 48–9)
- ~ snail (*halazūn*, pp. 142–3)
- ~ swallow (*khuttāf*, pp. 257–8)
- ~ Spanish flies (*dharārīh*, pp. 260–1)
- ~ flies (*dhubāb*, pp. 260–1)
- ~ crow (*ghurāb*, pp. 262–3)
- ~ scorpion (*aqrab*, pp. 212–13)
- ~ spider (*ankabūt*, pp. 212–13).

When we turn from these differences in formal arrangement to consider what is said about the properties of each organ, extruent or species, we enter a familiar world. The means of preparing the remedies, with the animal part being variously cooked, stirred into a potion or paste, crushed and ground, and the liquids, plants and other substances used in conjunction with it, can all be matched in the *manāfi'* literature, as can the conditions and diseases for which they are most frequently prescribed, ranging from, among many others, curing blisters and inflammations, stopping nosebleeds, alleviating toothache and the pains of childbirth, to stimulating sexual desire and potency and conception. One would expect, accordingly, to find a considerable amount of common material, reflecting a consensus among doctors in the Islamic world about the particular virtues of a given body part, enshrined in what might be described as a common body of knowledge with a related teaching syllabus expressed through a common textual tradition. The material selected by Ibn Baklarish might then be expected to represent this common tradition.

But things are not quite that simple for, as I have observed elsewhere, the appearance of familiarity conveyed by these texts is often deceptive.⁹ Typological similarities certainly abound, but when one moves from the general to the specific, the uses different texts describe for a given ingredient are frequently not the same. This warns us that the relationship between Ibn Baklarish and the other *manāfi'* texts may be far from straightforward, that lines of affiliation may be difficult to detect, and that common sources may only occasionally be established with confidence.

This is not to say that there are no clear instances of congruence, and it is possible, indeed, to find one or two cases of virtual identity. A particularly clear example of shared material may be shown by juxtaposing the texts of Ibn Baklarish and Ibn Bakhtishū', as represented by the *Kitāb Na't al-ḥayawān*, concerning one of the bizarre processes to which the crow [Figs. 47 and 48] is subjected:

9. A fuller discussion of this point is found in Contadini, 'The *Kitāb Na't al-ḥayawān* (BL Or. 2784)', pp. 73–4. See also Remke Kruk, 'Elusive Giraffes: Ibn abi l-Ḥawāfir's *Badā'ī al-akwān* and Other Animal Books' in: Anna Contadini (ed.), *Arab Painting*, pp. 49–64.

Ibn Baklarish [Fig. 46]:

الطبري تاخذ الغراب وهو حي ويصيره؟ كما هو في إناء جديد ويصب عليه ثلاثة سكرجات خل وترك أياما حتى يعفن ثم يخرج ويسحق على صلاية من اسرب ويخضب به الشعر فإنه يسوده

Ibn Bakhtishu^f:

وإن أخذ غراب وطرح كما هو حي في إناء مقير جديد ويصب عليه ثلاثة سكرجات خل وترك أياما حتى يعفن ويخرج ويسحق على صلاية من رصاص ويطلّى به الشعر فإنه يسوده

You take a crow while still alive. It is put [?] just as it is into a new vessel and three saucers of vinegar are poured over it. It is left for some days until putrid, and is then taken out and pounded on a lead pounding block and the hair is dyed with it: it will turn black.

In the Escorial version of Ibn Bakhtishu^f's *Book on the Usefulness of Animals*, an almost identical passage occurs [Fig. 48].¹⁰ Considered in isolation, this passage provides strong grounds for assuming access to a common source, and suggests that much of the material in Ibn Baklarish dealing with animals may be related to corresponding passages in *manāfi^f* texts. This assumption is reinforced by one of the uses to which human hair is put, where Ibn Baklarish's text is again virtually identical to that of the *Na^t*:

Ibn Baklarish:

إذا بل بالخل ووضع على عضة الكلب الكلب برأ من ساعته

Ibn Bakhtishu^f:

إذا بل بالخل ووضع على عضة كلب كلب نفع من ساعته

*When wetted with vinegar and applied to a rabid dog bite it will cure/help instantly.*¹¹

A further point of congruence is provided by another use of human hair, but here the *Na^t* is more specific about the condition to be treated:

Ibn Baklarish:

إذا بخرت المرأة بالشعر منع من وجع الرحم

Ibn Bakhtishu^f:

إذا دخن به امرأة منع من الورم المعروف بخناق الرحم

When a woman is subjected to the smoke of [burning] hair it prevents pain in the womb/the inflammation known as 'suffocation of the womb'.

10. *Kitāb Manāfi^f al-ḥayawān*, San Lorenzo del Escorial, Biblioteca Real, MS ar. 898 (dated Rabī^f al-awwal 755/March 1354); see Contadini, 'The *Kitāb Manāfi^f al-ḥayawān* in the Escorial Library'.

11. The comparable section of the Escorial text is missing.



Fig. 47.
Crow (*al-ghurāb*). *Kitāb Naʿt
al-ḥayawān*, North Jazīra,
dateable c. 617–22/1220–5.
London, British Library, MS
Or. 2784, fol. 40b (detail)

OPPOSITE

Fig. 48.

The crow (*al-ghurāb*), the raven (*al-ghudāf*), the magpie (*al-ʿaqʿaq*). *Kitāb Manāfiʿ al-ḥayawān*, Syria, probably Damascus, dated Rabīʿ al-awwal 755 A.H./March 1354 A.D. San Lorenzo del Escorial, Biblioteca Real, MS ar. 898, fol. 101b

NEXT OVERLEAF

Fig. 49.

Hedgehog (*al-qunfudh*). *Kitāb Manāfiʿ al-ḥayawān*, Syria, Probably Damascus, dated Rabīʿ al-awwal 755 A.H./March 1354 A.D. San Lorenzo del Escorial, Biblioteca Real, MS ar. 898, fol. 58a

FOLLOWING OVERLEAF

Fig. 50.

Hedgehog (*al-qunfudh*). *Kitāb Naʿt al-ḥayawān*, North Jazīra, dateable c. 617–22/1220–5. London, British Library, MS Or. 2784, fol. 202a

Thus, whereas Ibn Baklarish refers to a generalized pain in the womb, Ibn Bakhtishuʿ speaks specifically of ‘suffocation of the womb’. Similarly, the conclusion of Ibn Baklarish’s text on the crow *إنه نفع فيه الدود فيؤخذ الدود وسحق ويطلق به الرأس فيسوده* (‘it is useful with worms in: the worms are taken, pounded and applied to the head, turning [the hair] black’)—is clearly to be identified as a shorthand version of a complicated and lengthy process detailed in both the *Naʿt* and the Escorial text of Ibn Bakhtishuʿ. But there is also a significant difference: in the *Naʿt* (fol. 42a) and the Escorial text (fol. 102b), the resulting concoction, which includes sesame oil, is used to treat something wholly unrelated: instead of a means of turning hair black it is a remedy for leprosy (and, in the *Naʿt*, also palsy).

In the event, the degree of congruence exhibited by the first passages quoted is the exception rather than the rule. Generally, we find something quite different. For when it comes to specifics there is actually very little common material: if in Ibn Baklarish x is prepared in manner y and is used to cure z , in Ibn Bakhtishuʿ’s *Naʿt* and the Escorial text it is likely to be prepared in manner p and used to cure q . In short, what seems to be universal is not agreement upon a particular treatment for a particular condition, but rather what might be categorized as a treatment syntagm: condition > choice of body part > manner of preparation > specification of dosage > result, where the ‘body part > preparation > dosage’ sequence calls upon a set of conventional (paradigmatic) choices that nevertheless allow for a myriad of combinations. This would seem to give a rather negative answer to the question of possible textual affiliations, despite the existence of certain common elements: the processes described are the same, but the ingredients and the conditions treated may well not coincide.


The difference between Ibn Baklarish and the *manāfiʿ* literature is further underlined when one compares coverage. For, despite the much wider range of animals and hence accumulated body parts in, say, Ibn Bakhtishuʿ’s *Naʿt* and the Escorial text, there are several entries in Ibn Baklarish for which they contain no equivalent. It is striking, for example, that the first set of six animal part entries relate to *infīḥa* (rennet), a term only mentioned in the *Naʿt* in relation to the dog. When we turn to other parts that are mentioned by both Ibn Baklarish and the Ibn Bakhtishuʿ texts we find, for example, that the *Naʿt* fails to mention the blood of the hare, dog and bull; and the Escorial text, likewise, has nothing on the gall bladder of sheep and goats. To take a fairly average animal in terms of the number of times it appears in Ibn Baklarish—the hedgehog [Figs. 49 and 50]—we find that, of the four body parts cited (skin, liver, meat and brain), the *Naʿt* mentions only one, while in the lengthy account in the Escorial text, which includes such specifics as the right eye and left testicle, two fail to appear. When we turn to the items that are held in common we find that, of the several uses for hedgehog meat listed in the *Naʿt* and the Escorial text, not one appears in Ibn Baklarish, while the account of the liver in the Escorial text likewise has nothing in common with that of Ibn Baklarish. On the other hand, there are instances of partial overlap. For example, among the four uses proposed in

12. See Anna Contadini, ‘The Horse in Two Manuscripts of Ibn Bakhtishuʿ’ in: David Alexander (ed.), *Furusiyya. The Horse in the Art of the Near East*, 2 vols., Riyadh 1996, I, pp. 142–7, where a full translation of the section on the horse in the Escorial manuscript is given and the original text is reproduced.

اننه  فان اراد انسان ان يعلم ايما كملو الشعر والهما
 نبتة فليكر البيضة ويدخل فيها ريشته فان خرجت مختلفه قد
 اندر بعضها في التي كملو وان خرجت سلمه صبيحة في التي
 نبت الشعر للغراب والغداف والقوق

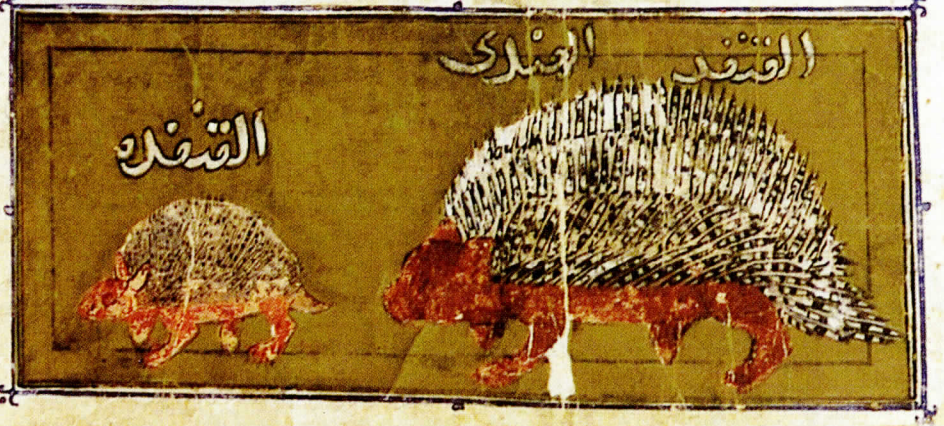
Pica *Graculus* *Corvus montanus* *Corvus*



من طبيعه الغراب الاستتار عند السفاد لا يفرخ في السنه
 اكبر من فرخين وله حدر شديد وفطر عجمه وفيه شاهر
 اذا صاح احدهما مستجيرا واوقوه من كل ناحيه
 ناصر له وشينه ويز طيور الليل عداوة شديده 
 ومن طبيعه الغداف الابيض ولا يفرخ من سفاد بل من

التراق

حَتَّى يَكُونَ سَطْرًا طَوِيلًا وَحَرَّ تَغَبَّ الشَّمْسُ بِهِ نَضَّ وَأَلْهَمَ مِنَ الطَّرْفِ
 الْأَمْرِ فَمَشَى وَرَأَى طَوْرَهَا حَتَّى يَفْعُدَ إِلَى الْأَقْصَا فِي الطَّرْفِ
 الْأَيْسَرِ فَإِذَا قَعَدَ صَاحَ فَهَضَّ الَّذِي كَانَ يَدْمَى فِي الطَّرْفِ
 الْأَيْسَرِ فَعَمِلَ مِثْلَ فَعْلِهِ يَفْعُدُ لَكَ لَيْلَتَهَا أَجْمَعُ فَيَسْتَوِي رِاضًا
 وَيُصْبِحُ فِي آخِرِي وَمِنْهَا فَعْدَانٌ قَلْبُهُ إِذَا شَوَى وَجَفَّفَ
 وَشَرَفَ مِنْهُ وَزَادَ دَرَاهِمًا مَسْحُوقًا مَبِيدًا عَسَلًا عَيْتُوقًا نَفْعًا مِنَ الْحَقَّارِ
 وَسَقُوطِ النَّفْسِ وَشَجَّ الْجَبَانِ وَزَيْدُ فِي جُودَةِ الدَّهْرِ وَنَفْعُ مَرِّ
 الصَّدَاعِ القنفذ القنفذ



crozo

مِنْ طَبْعَتِهِ أَنْ يَجْعَلَ كَحَيَّةِ الدِّيَابِ وَأَوْ يَبِينُ أَحَدَهُمَا مِنْ تَأَمُّلِهِ

لِيَلَايَاتِهِ الدِّبُّ فَيَأْكُلَهَا

تَعْنِي الْقَنْفُذَ الْهِنْدِيَّ وَصُورَتَهُ

حاز



مِنْ طَبَعَتِهِ أَنْ يُحْمِلَ الْحِجْرَةَ الَّتِي يَسْكُنُ

the *Kitāb al-Mustaʿīnī* for horse dung and the five in the Escorial text,¹² two match exactly: used as fumigant, it brings forth the foetus (alive or dead, Ibn Baklarish grimly adds); and drops of the expressed juice, mixed with rose oil, alleviate earache. But it is equally important to note that the others do not match, so that we remain faced with tantalizing hints of contact emerging out of a body of material that points to a general cultural agreement about methods of treatment, but all too frequently fails to agree on specifics. This general picture also emerges clearly from other *manāfiʿ* texts. Indeed, in the manuscripts examined by Remke Kruk approximately half the uses mentioned in each text are unique to it.¹³

It is relevant in this context to note that the sources mentioned in these texts fail to match also. The three cited by Ibn Baklarish in his zoological entries are Ishaq ibn Sulayman, al-Tabari and al-Masihi. The first, Ishaq ibn Sulayman al-Israʿīli (c. 855–c. 955 / 243–343), was a court physician to the Aghlabids of Qayrawan and later to the first Fatimid caliph ʿUbayd Allah al-Mahdi, and the author of several medical treatises that were used within the Jewish and medical community in general. The degree to which his works were influential is indicated by the fact that they were translated not only into Hebrew but also into Latin, and were esteemed throughout the Middle Ages.¹⁴

The al-Tabari mentioned by Ibn Baklarish may be identified with a certain ʿAlī ibn Rabban al-Tabari, a ninth-century Christian (probably Nestorian) physician who converted to Islam and wrote several medical works while serving Abbasid caliphs in Samarra and Baghdad.¹⁵ ʿIsa b. Yahya al-Masihi al-Jurjani was also a Christian physician, and was a teacher of Ibn Sina (Avicenna), who dedicated some of his works to him. He lived between the end of the tenth and the beginning of the eleventh century, and was active in Baghdad, Khurasan and Khwarazm. Among his medical writings the best-known is a comprehensive encyclopedia, the *Kutub al-miʿa fī al-ṣināʿa al-tibbiyya* (*The Hundred Books on the Medical Art*).¹⁶

As for the sources mentioned in the Ibn Bakhtishuʿ manuscripts,¹⁷ we have Aristotle and, even if they do not call upon Galenic medicine, there is a reference to Galen.¹⁸

13. See Kruk, 'Elusive Giraffes'.

14. Constantine the African and Gerard of Cremona translated works of Ishaq Israʿīli into Latin; see Alexander Altmann, 'Ishāq b. Sulaymān al-Isrāʿīlī', *Encyclopedia of Islam*, new edition, IV, p. 111, Carl Brockelmann, *Geschichte der arabischen Litteratur*, 2 vols., Weimar 1898–1902, I, pp. 235–6, no. 10 and *Supplementband I* (1937), p. 421, no. 10; Fuat Sezgin, *Geschichte des arabischen Schrifttums*, 9 vols., Leiden 1967–2000, III (1970), pp. 295–7 and V (1974), p. 413.

15. See David Thomas, 'al-Masīhī al-Djurdjānī', *Encyclopedia of Islam*, new edition, X, p. 17, Brockelmann, *Geschichte der arabischen Litteratur*, I, pp. 414–15, no. 1a, Sezgin, *Geschichte des arabischen Schrifttums*, III, pp. 236–40 and VII (1979), pp. 237–40.

16. See Albert Dietrich, 'Ṭabarī ʿAlī b. Rabban', *Encyclopedia of Islam*, new edition, VI, p. 726, Brockelmann, *Supplementband I*, pp. 423–4, no. 20, 2nd edition (1943), I, pp. 273–4, no. 18, and Sezgin, *Geschichte des arabischen Schrifttums*, III, pp. 326–7 and V, pp. 336–7. For the manuscript in Oxford, Bodleian Library, MS Hunt. 202, dated Shaʿbān 592/July 1196, see Emilie Savage-Smith, 'Between Reader and Text: Some Medieval Arabic Marginalia' in: Danielle Jacquart and Charles Burnett (eds.), *Scientia in Margine: études sur les marginalia dans les manuscrits scientifiques du moyen âge à la Renaissance*, Geneva 2005, pp. 75–101 (at pp. 86–92).

17. I include here not only the *Naʿt* and the Escorial text, but also the *Kitāb Manāfiʿ al-ḥayawān* in Paris, Bibliothèque nationale de France, MS ar. 2782, dated 700/1300: see Contadini, 'The *Kitāb Naʿt al-ḥayawān* (BL Or. 2784)', pp. 166–70.

18. See Brockelmann, *Geschichte der arabischen Litteratur*, I, p. 205, no. 7; Manfred Ullmann, *Die Natur- und Geheimwissenschaften im Islam*, Leiden 1972, pp. 12–14.

Similarly, Dioscorides¹⁹ is mentioned, and also Kasuqratis, probably to be identified as Xenocrates of Aphrodisias who lived in the first century A.D.²⁰ Other sources mentioned are: Ahrun, probably to be identified with Ahron (otherwise known as Aaron), a Christian priest who lived in Alexandria in the sixth/seventh century and wrote medical treatises, especially the *Pandectae Medicinae*, which was translated from Syriac into Arabic;²¹ al-Ahwazi, an unidentified figure whose name suggests that he originated from Ahwaz, a town situated on the Khuzistan plain;²² Yanis ibn Istifan al-Turjuman, possibly to be identified with Istifan ibn Basil, the first translator of the *Materia medica* of Dioscorides;²³ Shaykh Abu al-Hasan, probably a learned figure of the circle of Mayyafariqin;²⁴ Muhammad ibn Musa al-Munajjim, cited as the author of a *Kitāb al-mamālik* and evidently one of the Banu al-Munajjim, the famous translators, as well as copyists and binders, employed in the Bayt al-ḥikma;²⁵ and ʿIsa ibn ʿAli, a Nestorian physician educated at Jundishapur, a pupil of Hunayn ibn Ishaq and physician to the Caliph al-Muʿtamid (reigned 256–72/870–90). He wrote a *Kitāb al-Manāfiʿ allatī tustafādu min adāʾ al-ḥayawān* (*The Book on the Usefulness of the Organs of Animals*) of which several manuscripts survive.²⁶

19. For Dioscorides, see n. 5 above; also Brockelmann, *Geschichte der arabischen Litteratur*, I, pp. 206–7, *Supplementband I*, pp. 369, 370–1; Ullmann, *Die Natur- und Geheimpwissenschaften*, pp. 11–12.

20. Carmen Ruiz Bravo-Villasante, *Libro de las utilidades de los animales*, Madrid 1980, p. xvi, already suggested this identification. Sezgin, *Geschichte des arabischen Schrifttums*, III, p. 57, says that the Arabic name for Xenocrates occurs either as ʿIksānuqrāṭisʿ or ʿKisānūqrāṭisʿ; see also Ullmann, *Die Natur- und Geheimpwissenschaften*, pp. 10–11.

21. Ibn al-Nadim reports under this name a priest: ʿAhron the Priest. Living in the first part of the regime [of Islam] he wrote in Syriac his book which Masarjis translated. Among his books there was The Pandect. He wrote it in thirty sections and Masarjis added two more sections to it: Ibn al-Nadim, *Fihrist*, trans. Bayard Dodge, 2 vols. (continuous pagination), New York and London 1970, p. 698. See Max Meyerhof, ʿThe Book of Treasure, an Early Arabic Treatise on Medicineʿ, *Isis*, 14, 1930, pp. 55–76 (at p. 55). Ibn al-Qifti, *Tārīkh al-ḥukamāʾ*, Leipzig 1903, p. 126 records that ʿUbayd Allāh wrote a ʿmissiveʿ (*risāla*) on Galen based on the historical work of a monk called ʿHārūn ibn ʿAzzūnʿ. Ibn Abi Usaybiʿa, ʿUyūn al-anbāʾ fī ṭabaqāt al-aṭibbāʾʿ, I, p. 72, calls him ʿHārūn ibn ʿAzzūrʿ. Max Meyerhof, ʿAn Arabic Compendium of Medico-Philosophical Definitionsʿ, *Isis*, 10, 1928, pp. 340–9 (at p. 343, n. 17), suggests that this could be the Ahron ibn Aʿ in the priest, who lived in Alexandria, or possibly the Nestorian historian Ahron mentioned in J. Baumstark, *Geschichte der syrischen Literatur*, Bonn 1922, p. 241. The Ahron cited in the *Naʿt* is more likely to be the Alexandrian priest who wrote on medicine. For this identification see also Sezgin, *Geschichte des arabischen Schrifttums*, III, pp. 166–8.

22. See Laurence Lockhart, ʿAl-Ahwāzʿ, *Encyclopedia of Islam*, new edition, I, p. 305.

23. Originally the *Materia medica* of Dioscorides was translated from Greek into Syriac, and the latter provided the basis for the Arabic version. This was made by Istifan ibn Basil, with the original text in front of him, and corrected by Hunayn ibn Ishaq in Baghdad in the ninth century; see César Emil Dubler, ʿDiyūskuridīsʿ, *Encyclopedia of Islam*, new edition, II, pp. 348–50.

24. Sezgin, *Geschichte des arabischen Schrifttums*, III, p. 351; Ullmann, *Die Natur- und Geheimpwissenschaften*, p. 22.

25. See Dominique Sourdel, ʿBayt al-Ḥikmaʿ, *Encyclopedia of Islam*, new edition, I, p. 1141.

26. See the list in Ullmann, *Die Natur- und Geheimpwissenschaften*, pp. 21–2. Ibn al-Nadim, *Fihrist*, p. 699, writes: ʿIsa ibn ʿAli. He was one of the pupils of Hunayn [ibn Ishaq] and an excellent man. Among his books there was The Benefits Made Use of from the Organs of an Animal.ʿ Ibn Abi Usaybiʿa, ʿUyūn al-anbāʾ fī ṭabaqāt al-aṭibbāʾʿ, I, p. 203, mentions this book on animals (*Kitāb al-manāfiʿ allatī tustafād min aʿdāʾ al-ḥayawān*). See also Sezgin, *Geschichte des arabischen Schrifttums*, III, pp. 259 and 377. He is confused with ʿAli ibn ʿIsa al-Kahhal (e.g. in Brockelmann, *Geschichte der arabischen Litteratur*, I, p. 233, no. 8, *Supplementband I*, p. 417, no. 8), who lived in the eleventh century and never wrote, as far as I could ascertain, treatises on zoology. See also Eugen Mittwoch, ʿAlī ibn ʿĪsāʿ, *Encyclopedia of Islam*, new edition, I, p. 388; Sezgin, *Geschichte des arabischen Schrifttums*, III, pp. 337–40; George Sarton, *Introduction to the History of Science*, 3 vols., Baltimore 1927–48, I, p. 731.

Of these, only the classical sources, Aristotle, Galen and Dioscorides, are shared with Ibn Baklarish (they are mentioned in the Introduction of the *Kitāb al-Musta'īnī*²⁷). Given that the obeisance to classical authorities may be ritual, material derived from them having been consulted in later works, it might be concluded that we are confronted with textual (and human) lines of transmission that had for some time lost contact with each other. If that were so, it was only to be expected that Ibn Bakhtishu' should fail to be mentioned by Ibn Baklarish (and likewise by al-Ghafiqi, his younger contemporary, whose *Kitāb al-Adwiya al-mufrada* cites both the *Kitāb al-Musta'īnī* and the same sources mentioned by Ibn Baklarish).²⁸ But, although most of Ibn Bakhtishu''s authorities seem to have had primarily Iraqi connections, the notion of self-contained, geographically separate schools is hardly sustainable. Doctors travelled vast distances to study with eminent authorities, and it is in any case clear that the sources cited by Ibn Baklarish hailed from far and wide. One of them, indeed, 'Ali ibn Rabban al-Tabari, may reasonably be assumed to have had contacts with some of Ibn Bakhtishu''s forebears during his time at the Abbasid court.

Nevertheless, at this stage in our knowledge of the corpus it is not possible to be specific about the textual affiliations of the zoological element of the *Kitāb al-Musta'īnī*. Although the passages that can be matched in other works clearly demonstrate, if not the existence of a common stock of material, then at least access to other texts, they provide insufficient evidence to identify specific sources. With time we may hope to say rather more about the contents of this particular segment of the *Kitāb al-Musta'īnī*, but even if much still remains obscure at present, it is at least obvious that it provides a substantial supplement to the zoological literature, and one eminently worthy of further study.

27. See Henri Paul Joseph Renaud, 'Trois études d'histoire de la médecine arabe en occident', *Hespéris*, 10, 1930-1, pp. 135-50 (see pp. 148-9).

28. Albert Dietrich, 'al-Ghāfīkī', *Encyclopedia of Islam*, new edition, Suppl. pp. 313-14. In the same way we may note that Ibn Bakhtishu' is mentioned by al-Marwazi (b. c. 1050, d. after 1120) as a source in his *Kitāb Ṭabā'i' al-ḥayawān*: Contadini, 'The *Kitāb Na't al-ḥayawān* (BL Or. 2784)', pp. 72-3.