IBN BAKLARISH’S BOOK
OF SIMPLES

MEDICAL REMEDIES BETWEEN THREE FAITHS
IN TWELFTH-CENTURY SPAIN

edited by
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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-Mustaʿāni 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 manāfiʿ material found in the manuscripts of Ibn Bakhtishuʿ’s Kitāb Manāfiʿ al-ḥayawān (The Book on the Usefulness of Animals).

ʿUbayd Allah ibn Jibraʿil ibn Bakhtishuʿ 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 Bakhtishuʿ’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 Bakhtishuʿ 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 Judeo-Arab physician who lived and operated in Almería where he wrote the Kitāb al-Mustaʿāni for his patron, the Hudid ruler of Saragossa, al-Mustaʿ in bi-llah Abu Jaʿfar Ahmad ibn Yusuf al-Muʿtamim bi-llah, who reigned between 1085 and 1109 (478–503); see Albert Dietrich, ‘Ibn Biskirnish’, Encyclopedia of Islam, new edition, Suppl. p. 383. Hitherto scholarly attention has focused on the importance of the Kitāb al-Mustaʿāni for the Romance words that it contains, while Reinhardt Dozy used it for his Supplément aux dictionnaires arabes, Leiden 1881.
Fig. 42.
Top: Hippopotamus (al-faras al-bahrî); middle: Beaver (al-qâstâriyân); bottom: Weasel (ibn ‘îrs). Dioscorides, Khwârîsî al-ashjîr (De materia medica).
Samarkand, 475 A.H./1083
A.D. Leiden, University Library, Cod. Or. 289, fol. 61b

The number of animals touched upon in the Kitâb al-Musta‘înî is some 58, and includes man, woman and child (see list below), as in the manâfî literature, where human beings are generally considered as part of the animal kingdom.6 One obvious difference from the manâfî texts, however, is in organization. In the Kitâb al-Musta‘înî 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 manâfî 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 Kitâb al-Musta‘înî 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 (bawîl) we have the following series of entries (pp. 68–71):

~ urine of a man (însân)
~ children (îfîl)
~ a pig (khînzîr)
~ cows (baqar)
~ buffaloes (jawâmîs)
~ a goat (mâ‘îz)
~ camels (ibîl)
~ sheep (da‘în)

6. This is the case for all manuscripts in the Ibn Bâhîshû tradition as well: see Contadini, ‘The Ibn Bâhîshû Bestiary Tradition’.
Fig. 43.
Elephant (al-fil) and Pig (al-khinzir). Dioscorides,
Khawāṣṣ al-ashjār (De materia medica), Northern Iraq or Syria,
626 A.H./1229 A.D. Istanbul,
Library of the Topkapi Saray,
MS Ahmet III, 2127, fol. 67a

Fig. 44.
Rooster (al-dīḥ). 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-Musta’īnī, The Arcadian
Library manuscript, pp. 88–9:
hedgehog and lamb brain
(dimāgh al-qunfūdāh wa-l-hamāl)

FOLLOWING OPENING
Fig. 46.
Ibn Baklarish, Kitāb
al-Musta’īnī, The Arcadian
Library manuscript, pp. 262–3:
crow (al-ghurāb)
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**Notes:**
- dirhous
- emathitus, petra turcica
- m. d. scroful
- Galus alector
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العربية وحيدة ركبة لله
We have, in all, twelve such groups:

~ rennet (inšīha): of hare (arnab); cows; deer/stag (ayyil); camel and antelope (jamal wa-zaby); horses (khayl); dog (pp. 46–7)
~ droppings (ba’r): 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 (thu’bān, pp. 84–5); man; bear (dubb); lambs (khifān); turtle-doves (shafānūn); doves (fawākhit); billy goats; kid (jady); hare; dog; bull (thaur); frogs (dajādī); pigeons (hamām) (pp. 90–3)
~ dung (zibl): of man; boy (sabī); cows; sparrows (aṣāfīr); pigeons; chickens (dajāj); mice (fa’r); Egyptian vulture (rakham); lizard (dabb); donkeys (hamir); horses; pig; elephant (fīl); dog; wolf (dhi’b) (pp. 116–17)
~ spleen (tiḥāl): of pig; goat; fox (sha’lab) (pp. 146–7)
~ liver (kalb): of goat; hedgehog; pig; donkey; bear; dog (pp. 162–3)
~ milk (labān): of cows; sheep; goat; women (nisā’); horses; she-asses (utun) (pp. 170–1)
~ meat (lahm): of chameleon (hirbā); vipers (afā’i); donkeys; mice; cows; hedgehog (pp. 172–3)
~ gall-bladder (marārā): of sheep; goat; bull; pig; bear; chickens; wolf; partridge (hajal); fish (samak); hyena (dab’); crane (kurkī); doves; eagle (uqāb); sea scorpion (‘agrāb al-mā’); turtle (sulahfāh bahri); gazelles (zibā);8 elephant (pp. 184–9)
~ fat (shahm): of sheep; goat; stag; bear; fox; donkey; duck (batf); 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 (bayd): egg white (bayād al-bayd); boiled eggs (bayd masliq); soft eggs (bayd nīmrashī); very lightly cooked eggs (bayd 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 atīqa, pp. 80–1)
~ hedgehog and lamb brain (dimāgh al-qunfudh wa-l-hamal, pp. 88–9)
~ ear wax (wasakh al-ādhān, pp. 102–3)
~ hoof (hāfrī, pp. 140–1)
~ bone marrow (mukkhh al-‘izām, pp. 188–9)
~ sweat (‘araq; pp. 212–13)
~ charred bones (‘izām muhraqa, pp. 212–13)
~ goat penis (dhakar al-tays, pp. 260–1)

8. The manuscript has d-bāḥ, but since ri’m and shādīn are given as equivalents, it may be read as a plural of zaby.
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~ human hair (sha'ir al-insān, pp. 270–1)
~ various fats (shuḥūm mukhitāfīya; 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 (ḥalazūn, pp. 142–3)
~ swallow (khūṭṭāf, pp. 257–8)
~ Spanish flies (dharārīh, pp. 260–1)
~ flies (dhubāb, pp. 260–1)
~ crow (ghurāb, pp. 262–3)
~ scorpion (ʿaqrab, pp. 212–13)
~ spider (ʿankabūṭ, 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 manāfiʿ 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. 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 manāfiʿ 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 Bakhtishuʿ, as represented by the Kitāb Naʿt al-hayawān, concerning one of the bizarre processes to which the crow [Figs. 47 and 48] is subjected:

Ibn Baklarish [Fig. 46]:

الطبري: تأخذ الغراب وهو حي وبصيره، كما هو في إرائه جديد ويصب عليه ثلاثة سكرات خل وترك أياماً
حتى يعفن ثم يخرج ويسحق على صلاة من اسرب ويضعب به الشعر فإنه يسود.

Ibn Bakhtishu’:

إذا أخذ غراب وطرح كما هو حي في إرائه مقير جديد ويصب عليه ثلاثة سكرات خل وترك أياماً حتى
يعفن و يخرج ويسحق على صلاة من رصاص ويطلني به الشعر فإنه يسود.

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’’s Book on the Usefulness of Animals, an almost
identical passage occurs [Fig. 48]. 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 manāfī’ 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 ثم يرآ من ساعته

Ibn Bakhtishu’:

إذا بل بالخل ووضع على عضة كلب كلب ففع من ساعته

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

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 خبرت المرأة بالشعر من وقع الرحم

Ibn Bakhtishu’:

إذا خبرت به المرأة من وقع 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 Manāfī’ al-hayawān, San Lorenzo del Escorial, Biblioteca Real, MS ar. 898 (dated Rabi’ al-awwal
755/March 1354); see Contadini, ‘The Kitāb Manāfī’ al-hayawān in the Escorial Library’.
11. The comparable section of the Escorial text is missing.
Fig. 47.
Crow (al-ghurāb), Kitāb Naʿī al-hayawān, North Jazīra, dateable c. 617-22/1220-5.
London, British Library, MS Or. 2784, fol. 40b (detail)
Thus, whereas Ibn Baklarish refers to a generalized pain in the womb, Ibn Bakhtishu’ speaks specifically of ‘suffocation of the womb’. Similarly, the conclusion of Ibn Baklarish’s text on the crow (‘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 Na’t and the Escorial text of Ibn Bakhtishu’.

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 Bakhtishu’s Na’t 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 manâfi’ literature is further underlined when one compares coverage. For, despite the much wider range of animals and hence accumulated body parts in, say, Ibn Bakhtishu’s Na’t 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 infisha (rennet), a term only mentioned in the Na’t in relation to the dog. When we turn to other parts that are mentioned by both Ibn Baklarish and the Ibn Bakhtishu’ texts we find, for example, that the Na’t 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 Na’t 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 Na’t 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

لا يمكنني قراءة النص العربي من الصورة.
the Kitāb al-Mustā‘īnī for horse dung and the five in the Escorial text, 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 manāfī 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-Ṭabari and al-Masihī. The first, Ishaq ibn Sulayman al-Isa’īlī (c. 855–c. 955 / 243–343), was a court physician to the Aghlabids of Qayrawan and later to the first Fatimid caliph ‘Ubayd 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-Ṭabari mentioned by Ibn Baklarish may be identified with a certain ‘Ali ibn Rabban al-Ṭabari, 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 ‘Isa b. Yahya al-Masihī al-Jurjānī was also a Christian physician, and was a teacher of Ibn Sīna (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-mi‘ā fi al-sinā‘a al-tibbiyya (The Hundred Books on the Medical Art).16

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

13. See Kruk, 'Elusive Giraffes'.
17. I include here not only the Na‘t and the Escorial text, but also the Kitāb Manāfī al-hayawān in Paris, Bibliothèque nationale de France, MS ar. 2782, dated 700/1300: see Contadini, 'The Kitāb Na‘t al-hayawān (BL Or. 2784)', pp. 166–70.
Similarly, Dioscorides\(^9\) 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: Ahron, 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 *'Isā ibn 'Ali*, a Nestorian physician educated at Jundishapur, a pupil of Hunayn ibn Ishaq and physician to the Caliph al-Mu'tamid (reigned 256–72/870–90). He wrote a *Kitāb al-Manāfi* 'allātī tustafādu min 'adā' al-hayawān (The Book on the Usefulness of the Organs of Animals) of which several manuscripts survive.\(^{26}\)

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, *Diyyuskuridīs*, *Encyclopedia of Islam*, new edition, II, pp. 348–50.
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‘īnī27). 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-Adwiyah 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).