

⁴⁷ leggendo *tuṣīqqu* per *yṣyaq*.

⁴⁸ *kamā* per *kaimā*.

⁴⁹ Integrando <*mā*>.

⁵⁰ Cfr. X.881,8 (*Med. meth.* 13,5) in conseguenza di piaghe nella testa.

⁵¹ Cfr. 89,17.

⁵² ὑγρότητα δ' οὔτε πολλήν οὔτε παντάπασιν ἐλαχίστην.

⁵³ 144,15.

⁵⁴ Interpretata come zinco a *Glauc.* 52 15

⁵⁵ Sc. parte.

⁵⁶ Il pensiero di Galeno è riprodotto fedelmente più sotto 88,17r.

⁵⁷ Ἡ φλεγμονή πολλάκις μὲν ἐν κυρίῳ μορίῳ γινομένη, ποιεῖ τὴν λειποθυμίαν. πολλάκις κἂν ἐν ἀκύρῳ γένηται τόπω, διὰ τὸ οἰκεῖον μέγεθος ἀμετρίαν ὀδύνης ἐπάγουσα.

⁵⁸ Diversamente Galeno in *De methodo medendi* X 850 ss.

⁵⁹ ὡσπερ διὰ σωληνός τινος ἀψύχου ἐκκρίνεσθαι, ὅθεν καὶ οἱ ἰδιῶται σῶληνα τὸ πάθος ὀνομάζουσιν.

⁶⁰ Emendando *mt 'b* in *maḡ 'ab*, σωλήν.

⁶¹ om. L

⁶² اخرجت W.

⁶³ وغسلاته om. L.

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Articoli/Articles

THE IBN BUḤTĪŠŪ' BESTIARY TRADITION. THE TEXT AND ITS SOURCES

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SUMMARY

The Ibn Buḥtīšū' Book on the Usefulness of Animals is extant in several copies, five of them illustrated. After giving an account of the text, the Author of the article investigates its sources, finding that they are two-folded: partly coming from a Greek tradition ultimately related to Aristotle's Zoology, and partly coming from Ibn Buḥtīšū' medical writings, which seem to stem from the lengthy tradition of the famous School of Gondēšāpūr. A profile of the main representatives of the Ibn Buḥtīšū' family, for the first time translated here from the Arabic sources, is also given.

Introduction

Within the Arabic scientific literature of the Middle Ages a particularly successful text was a bestiary known as that of Ibn Buḥtīšū', of which several copies of different dates remain, five of them illustrated¹.

The texts always open with man and woman, proceeding then to domestic quadrupeds and beasts of prey; birds and birds of prey;

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fish; reptiles and, finally, insects. The average number of animals treated is 90, and, of the various categories, that of the quadrupeds has the longest number of entries (on average 35), followed by that of the birds (on average 28). Also, the text is longer for the quadrupeds, and for some of the most common birds and fish, while it is quite short for insects. The animals treated have a wide range of habitats, spreading from India to North-East Africa. There are, in addition, mythical animals, such as the unicorn, the simurgh, and the phoenix.

In these manuscripts the discussion of each animal is divided into two parts: the first is a general introduction in which the principal characteristics of Man, Woman and all the other animals are treated, their habits, and their reactions to different situations. The second deals with the different parts of the animal and how they may be used to cure various human illnesses.

The Sources of the Ibn Buḥtīšū' Text.

According to the *Kitāb na't al-ḥayawān* (Book on the characteristics of animals)², the earliest extant work on this tradition (datable to ca. ad1220), the two sections in each entry derive from different sources: the first comes from Aristotle's *Zoology*, and only the second is by Ibn Buḥtīšū' himself. The anonymous compiler of the *Na't* states quite specifically (fols. 95r-v) that his text draws upon Aristotle but, finding that his account failed to include material on the usefulness of animals, drew for this upon the *Manāfi' al-ḥayawān* by Ibn Buḥtīšū'.

Aristotle.

Aristotle's zoological writings include five books which are commonly known under their Latin titles: *Historia Animalium*, *De Partibus Animalium*, *De Generatione Animalium*, *De Motu Animalium*, and *De Incessu Animalium*, all of which form what is

usually known as Aristotle's *Zoology*³. Some information concerning animals is also found in a brief collection of treatises known as *Parva Naturalia*⁴. In the Arabic translation, the first three books of the *Zoology* are combined into a single, large corpus known as *Kitāb al-ḥayawān*, which was translated from Greek into Arabic, probably through a Syriac intermediary, by Yaḥyā ibn al-Bitrīq, in the 8th- 9th century AD⁵. His version has not been definitely identified, but it is now generally accepted to be preserved in a manuscript in the British Library⁶, and in a brief fragment in Leyden⁷. The Arabic version, in turn, was later translated into Latin. The Latin version from the Arabic was the work of Michael Scot, probably to be dated circa 1210⁸. No Arabic translation of the remaining two books of the *Zoology* is known.

The *Historia Animalium* was the most popular of all of Aristotle's zoological works among the Arabs, and references to this particular book are much more frequent in Arabic literature than to the other four. However, a comparison of the Ibn Buḥtīšū' text with Aristotle's *Zoology*, particularly with that part referred to as *Historia Animalium*, reveals that there is no direct correspondence between these and the Arabic translation of Aristotle's *Zoology*⁹, let alone with the original Greek text¹⁰. It is therefore obvious that, despite the mention of the name of Aristotle and, in the *Na't*, a miniature which represents him (on fol. 96r) transmission was not directly from Aristotle but through a pseudo-Aristotelian intermediary. One such text is the 10th century *Kitāb na't al-ḥayawān* (Book on the characteristics of animals)¹¹ which seems to have a link with Timotheus of Ġazza's book on animals¹². Examination of the various transmissions of the *Historia Animalium* to the Arabic indicates, in the case of the *Na't*, that the source is likely to have been a translation into Arabic of the pseudo-Aristotelian text on animals by Timotheus of Ġazza¹³, *Peri Zoon*, usually referred to by its Arabic title, *Kitāb al-ḥayawān al-*

qadīm, written at Ġazza in the 6th century AD, during the reign of Emperor Anastasius.

The Aristotelian section of the Ibn Buḥtīšū' text not only explains the various characteristics of an animal, but also reflects a complex moralizing attitude towards various animals and what might be called their psychology (real or alleged)¹⁴, which the text itself terms *aḥlāq*. The combativeness of the ram, the concupiscence of the pig, the jealousy of the bull, the rancour of the camel, the madness of the goat, the astuteness of the fox - these are commonplace examples which can be identified also in the European traditions¹⁵.

Other characteristics, such as intelligence, sagacity, good memory, courage or incompatibility with other animals are variously stressed according to species. Many further examples might be given of the treatment of animals according to such familiar psychological types; here are but a few: the bear is a cowardly animal, but also has other diverse and amazing characteristics: it eats the same things as carnivorous wild animals, as domesticated ruminant herbivores, and as human beings; the magpie is a thief which steals as much as it can and hides it from the sight of other animals; the cock is characterized by courage and jealousy and by how well and often he covers: not being satisfied with a single female, he gathers around him several hens whom he treats with equity, not preferring one to another; he is endowed with a voice and is of good appearance; he is proud, fraudulent and boastful and does not love his young; he has knowledge of the hours of sunrise and sunset and sings at these times.

On the other hand, there are animals of which amazing characteristics are told, such as the *arḡhun* or pelican which has a big beak with numerous holes producing different sounds and beautiful melodies which have the power to charm those who happen to hear them.

Ibn Buḥtīšū'.

The direct source for the material included in the second section of the Ibn Buḥtīšū' bestiaries is, according to the *Na't*, 'Ubayd Allāh ibn Ġibrīl ibn Buḥtīšū'. Members of his family had run the School of Medicine at Gondēšāpūr¹⁶, the transformation of which into an important medical centre was undoubtedly the work of Nestorians¹⁷. The city itself had been founded by Šāpūr I in the third century AD, and the Nestorians transferred their scientific centre, including a medical school, from Nisibis in Mesopotamia to Gondēšāpūr in the first half of the 6th century, after their expulsion from the Byzantine Empire¹⁸. Encouraged by the emperor Khusraw Anūshirwān (about 531), the school of Gondēšāpūr quickly became a major centre, attracting Greek physicians as well as physicians and scholars from Persia and India, and creating and maintaining a tradition of cosmopolitan learning, especially in medicine.

As a result, philosophical and scientific works in Greek and Sanskrit were translated into Syriac and Pahlavi. When the 'Abbāsīd caliph al-Ma'mūn established the House of Wisdom (*Bayt al-ḥikmah*) in Baġdād in ah215/ad830 as the central institute for Arabic translations of scientific texts¹⁹, (from Greek, Pahlavi, Sanskrit, and Syriac), it was on scientific literature that scholars would call for medical works.

Although other Nestorian medical centres existed, most were influenced by Gondēšāpūr, particularly in the organization and administration of hospitals: the first important Islamic hospital (*bīmāristān*), founded by Hārūn al-Rašīd in Baġdād, was designed and staffed by Gondēšāpūr physicians²⁰. The influence of Gondēšāpūr resulted in a shift from a theoretical orientation, typical of the Greek and Galenic tradition, to an empirical tradition in Islamic medicine. The approach of this school is clearly

articulated in the important treatise by our Ibn Buḥtīšū' which argues against medicine's tutelage to philosophy (*Risālah fi'l-tibb wa'l-aḥdāt al-naḥsāniyyah*, "Treatise on medicine and psychological phenomena")²¹. It is to be considered the first work in which an independent status is claimed for medicine, on the grounds that philosophical theory is incapable of dealing with medical questions²².

The ultimate sources for the material on the usefulness of animals in the Ibn Buḥtīšū' bestiaries are unknown. 'Ubayd Allāh ibn Ġibrīl ibn Buḥtīšū' lived in the 11th century and was the last member of this celebrated family of physicians, and it is highly likely that the material preserved in the bestiaries represents the culmination of a lengthy experimental (and textual) tradition going back at least to the beginning of the Gondēšāpūr School. Unfortunately there are no earlier texts through which the evolution of this specific tradition could be traced, despite numerous references to medical works, apparently no longer extant, by Ibn Buḥtīšū's forbears.

What is, however, clear is that whereas the bestiaries (and hence, presumably, also earlier works from the Gondēšāpūr School) cannot be related except in the most indirect way to the Arab tradition of zoological enquiry as represented, for example, in the *Kitāb al-ḥayawān* of al-Ġāḥiẓ (9th century AD)²³, it is related to Syriac tradition as represented by the zoological work of 'Īsā ibn 'Alī (9th century AD)²⁴, which is one of the sources mentioned in the bestiaries themselves.

The material on each animal in this second section of the bestiaries derived from Ibn Buḥtīšū's medical treatises could be described as homeopathic medicine, consisting as it does of a series of recipes explaining how to use different parts of man, woman, and all the other animals in order to cure illnesses and diseases.

Among the benefits mentioned, the majority are strictly medical. The camel's lung, for example, when mixed with mountain celery and dried in the sun, then cut and mixed with

broad-bean flour, relieves asthma. But there are other benefits which are industrial, commercial, or even magical. A magical property is ascribed, for example, to the bladder of the cow: if a woman has sexual intercourse with her husband holding in her hand a mixture of cow's bladder and laurel leaves she becomes pregnant. Similarly, if a woman no longer a virgin eats the jugular vein of a sheep she becomes a virgin again. (The compiler enthusiastically adds: *This is proved!*).

Other animals have uses of a cosmetic sort, or simply make one look healthy. Others, quite a number in fact, can prevent the hair from falling out or, on the contrary, are to be used in depilatory preparations. The hedgehog, for example, is taken and placed inside an earthenware cooking pot. Oil is poured over it until it is covered and it is then cooked. Then, in July, the pot is placed in the sun for forty days and what remains inside is strained through a linen cloth. If this is spread daily on the body and lightly rubbed in, then washed off in a lukewarm bath (for seven days), it removes the hair.

The Ibn Buḥtīšū' Family of Physicians

The main source of information about the Buḥtīšū' family and our Ibn Buḥtīšū' is Ibn Abī Uṣaybi'ah's (ca. ah 600/ad1203 - ah668/ad1269) '*Uyūn al-anbā' fi ṭabaqāt al-aṭibbā'*' ("Sources of Instructions about the Generations of Physicians")²⁵. as this material has never been translated in its entirety it may be useful to summarize here his accounts of the main members of the family.

The first is Ġirġīs ibn Ġibrīl, d. about ah154/ad771, physician to the caliph al-Manṣūr (ah136/ad754 - ah158/ad775). Ġirġīs gained the favour of al-Manṣūr who, suffering from stomach illness, had given orders for the best physician in his kingdom to be found. He was advised to call Ġirġīs, the chief physician of the great hospital at Gondēšāpūr, who arrived in Baġdād, cured him and, at the Caliph's request, remained at Baġdād and also translated for the

Caliph several works from Greek into Arabic²⁶. The picture of Ğirġīs we get from Ibn Abi Uṣaybi'ah is that of an outstanding figure, not only as a physician and scholar, but also as a man of great wisdom and dignity. It is, moreover, interesting as showing great respect and tolerance for Christians. The Caliph, aware of Ğirġīs' suffering because of his distance from his home and relatives, tried to make his life in Baġdād as pleasant as possible: he would always reward him not only with great respect but also with magnificent gifts. He also asked him to call his sons to Baġdād, but Ğirġīs refused, considering that without his sons the hospital of Gondēšāpūr could fall into disgrace. The Caliph also understood Ğirġīs' worries about his old and sick wife left behind at Gondēšāpūr, and sent him three beautiful slaves, whom Ğirġīs refused indignantly, telling the Caliph that his religion did not permit polygamy. Finally, when Ğirġīs was very ill and about to die, the Caliph asked him to become a Muslim and by that guarantee himself paradise. But Ğirġīs not only refused to abandon the religion of his fathers, but asked the Caliph for permission to go back to Gondēšāpūr and see for the last time his wife and sons, a favour that the Caliph accorded him.

The second member of the family is **Buḥtīšū' ibn Ğirġīs**, d. ca. ah185/ad801²⁷. Buḥtīšū' equalled his father in competence and knowledge of the art of medicine. He was at the court of Hārūn al-Rašīd (r. ah170/ad786 - ah193/ad809), and when he arrived from Gondēšāpūr, he greeted the Caliph in Arabic and Persian. Hārūn al-Rašīd wanted to test him, so a urine sample from a beast of burden was presented to the physician, who immediately recognized it as not being human. But the Caliph insisted that it was the urine of his favorite, to which Buḥtīšū' retorted that if the Caliph was telling the truth, his favorite had become a quadruped.

His son **Ğibrīl ibn Buḥtīšū' ibn Ğirġīs** also excelled in medicine, and the caliph Hārūn al-Rašīd held him in such respect that he would say: *Anybody in need of something from me, talk first to Ğibrīl, since I will do whatever he will ask me to do.* Hārūn al-

Rašīd was a corpulent man and ate and drank too much. Once he got very ill at Raqqah. Ğibrīl was called immediately, and when he arrived the state of the patient was serious. He immediately ordered cupping glasses to be applied and called a surgeon to make incisions and let blood. The caliph returned to himself and was soon able to talk. Ğibrīl and the others consoled him and gave him a pot of francolins (*durrāġ*) to eat, some good wine to drink, and good odours to smell. But towards the end of his life, Hārūn al-Rašīd fell ill and was unable to recover. He asked Ğibrīl why he was not able to cure him, to which Ğibrīl answered that he had always advised the Caliph not to eat too much and to be moderate in his sexual life, things that the Caliph had never wanted to hear. So now, at this stage, only Allāh could save the caliph. The caliph ordered him to be put in prison, but when Hārūn died and al-Amīn (r. ah193/ad809 - ah198/ad813) ascended the throne Ğibrīl was restored to favour. However, when al-Ma'mūn [r. ah198/ad813 - ah218/ad833]²⁸ seized power Ğibrīl again suffered imprisonment²⁹. He was set free in ah202/ad817 to attend the wazīr Ḥasan ibn Sahl³⁰. In ah210/ad825 al-Ma'mūn became very ill and consulted the greatest physicians, among them Yūḥannā ibn Māsawayh, who was to become the director of the *Bayt al-ḥikmah*³¹. But they were not able to cure him, and he was advised to call Ğibrīl, who *changed the treatment completely*. The illness diminished and in three days the Caliph was cured. Al-Ma'mūn rewarded him with *a million dirhams and a thousand measures of grain* and he was honoured even more than his father. Ğibrīl died in ah213/ad828 with an immense fortune built up during his service at the court.

The fourth member is **Buḥtīšū' ibn Ğibrīl ibn Buḥtīšū'**, for whom Ḥunayn ibn Ishāq translated many books by Galen into Syriac and Arabic³². Buḥtīšū', a man of outstanding character, acquired a reputation, and a fortune, that no other doctor of the day could match. But envious rivals poisoned the Caliph's mind against him, with the result that he was stripped of all his property and

exiled to Gondēšāpūr in ah230/ad844. al-Mutawakkil (r. ah232/ad847 - ah247/ad861) restored him to favour and fortune, but he became so rich - even dressing like the Caliph himself - that he incurred the Caliph's displeasure and fell into disgrace again³³, only to be summoned back to treat al-Mutawakkil when he fell seriously ill. The pattern was to continue, a period of disgrace under al-Mustansir (r. ah247/ad861 - ah248/ad862) being followed by renewed activity as a court physician under al-Musta'in (r. ah248/ad862 - ah252/ad866). He died in the year ah256/ad869.

Two further members of the family are described in much less detail: **Yuhannā ibn Buḥtīšū'**, who translated books from Greek into Syriac and was physician to Muwaffaq Bi'llāh Ṭalḥa ibn Ġa'far al-Mutawakkil; and **Buḥtīšū' ibn Yuhannā**, physician under al-Muqtadir Bi'llāh and then under al-Rāḍī Bi'llāh, who died in the year ah329/ad941 in Baġdād.

They are followed by a figure of greater significance, **Ġibrīl ibn 'Ubayd Allāh ibn Buḥtīšū'** (the father of our 'Ubayd Allāh), a distinguished physician under the reign of al-Muttaqī (r. ah329/ad940 - ah333/ad944). In ah357/ad967 he went to Shirāz, and subsequently to Baġdād in the entourage of 'Adūd al-Dawlah [Fannā Khusraw] where he restored the hospital. Ġibrīl is also reported as having travelled to Jerusalem, where he fasted for one day, and he came back to Baġdād via Damascus. His fame reached al-'Azīz in Cairo, who wrote to Ġibrīl to call him. Ġibrīl answered with an excuse that he was very busy in Baġdād, where he finally returned, after the death of 'Adūd al-Dawlah, and completed his *Kunnāš al-kabīr*. He was called by the King of Daylam to go to Rayy and stayed with him three years. He then returned to Baġdād, only to move to Mosul called by Husām al-Dawlah to cure him. He subsequently moved to Mayyāfāriqīn at the invitation of the Amīr Mumahhid al-Dawlah, and when he got there the Amīr welcomed him with great honour. He died at the age of 85 in the year ah396/ad1005 and was buried at Mayyāfāriqīn.

Finally comes our '**Ubayd Allāh ibn Ġibrīl**, the son of Ġibrīl ibn 'Ubayd Allāh ibn Buḥtīšū', chronologically the last member of the family. The following is a translation of Ibn Abī 'Uṣaybi'ah's biographical notice:

Abū Sa'īd 'Ubayd Allāh ibn Ġibrā'il ibn 'Ubayd Allāh ibn Buḥtīšū' ibn Ġibrā'il ibn Buḥtīšū' ibn Ġirġīs ibn Ġibrā'il. He was a distinguished physician, renowned for the practice of medicine, skilled in its principles and branches, and one of the most prominent figures among those in this profession. He was also very knowledgeable in Christian science and its schools. He wrote several books on the art of medicine. He lived at Mayyāfāriqīn. He was a contemporary of Ibn Buṭlān³⁴ and very close to him: indeed, there was a great friendship between them. 'Ubayd Allāh ibn Ġibrā'il died sometime during the ah450s/ad1058s.

There follows a list of disparate medical works ascribed to Ibn Buḥtīšū', nine in all, the last to be mentioned being the *Kitāb ṭabā'i' al-ḥayawān wa ḥawāṣṣihā wa manāfi' a'dā'ihā* (A book on the characteristics of animals and their properties and usefulness of their organs)³⁵.

Ibn Abī Uṣaybi'ah completes his survey of the Buḥtīšū' family by stating that the people of Ġirġīs' lineage and his sons were the most perfect people of their time, from the nobility of their souls, the generosity of their minds, their piety, their good conduct and liberality.

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¹ These are: *Kitāb na't al-ḥayawān*, (in Arabic), probably North 'Irāq, datable to around ad1220, London, British Library, Or. 2784; *Kitāb manāfi' al-ḥayawān*, (in Arabic), Egypt (?), dated ah700/ad1300, Paris, Bibliothèque Nationale, Ar. 2782; *Kitāb manāfi' al-ḥayawān*, (in Arabic), Syria, probably Damascus, dated ah755/ad1354, San Lorenzo del Escorial, Biblioteca Real, Ms. Ar. 898; *Manāfi' al-ḥayawān*, (in Persian), Maragha, dated between ah695/ad1295 and ah699/ad1299, New York, Pierpont Morgan Library, M. 500; *Manāfi' al-ḥayawān*, (in Persian), Persia (?), datable to around ad1300, dispersed in various public and private collections. For these manuscripts see CONTADINI (1992); CONTADINI (1988-89); CONTADINI (1986); RUIZ BRAVO VILLASANTE (1980); GRUBE (1978). The manuscript in the Escorial has been recently reproduced in a facsimile edition: ...

² British Library Or. 2784 (see note 1), at fols. 95r-v.

³ See ARISTOTLE (1552), where a list of differences between the Greek and the Arabic text is added; and the fundamental works by PETERS (1968a); and PETERS (1968b). On *De Generatione Animalium* see BRUGMAN, DROSSAART (1971). For an edition and an English translation of *De Partibus Animalium* see KRUK (1979), which is also a survey of the whole contents and of the Arabic transmission of Aristotle's *Zoology*; for the *De Partibus Animalium* see also FURLANI (1922). For a translation into English of *Historia Animalium* see D'ARCY THOMPSON (1910); see also PECK (1965-70).

⁴ See STEINSCHNEIDER (1889-91); ROSS (1955); PINES (1974).

⁵ See DUNLOP (1959); de LACY (1949), p. 159.

⁶ Add. 7511. See RIEU (1871), 2nd vol., p. 215, no. 437. An edition of al-Bitriq's translation is BADAWI (1977), which is based on the British Library manuscript Add. 7511, and on a manuscript in Teheran, National Library (*majles-e šowra-ye melli*), no. 1143.

⁷ Oriental 166. See PETERS (1968a), p. 47 ff.

⁸ Ibid., p. 47; KRUK (1979), p. 36. For Michael Scot see THORNDIKE (1923), vol. 2, Book V, pp. 307-337; THORNDIKE (1965).

⁹ As in British Library, Add. 7511.

¹⁰ See the Bekker edition of Aristotle *Historia Animalium*, BEKKER (1831). See also ARISTOTLE (1874), where the Greek version is based on Bekker, in particular vol. 3: *De Animalibus Historia*, pp. 1-217.

¹¹ See ULLMANN (1972), p. 23 and note 4. This text is possibly preserved in a manuscript which has been studied by MAYRHOFER H. in his dissertation *Kritische Einleitung zu einem arabischen Tierbuch*, München, 1911, of which only an abstract has been published, München 1925.

¹² ULLMANN (1972), pp. 23-24.

¹³ For Thimotheus of Gazza see HAUPT (1869); BODENHEIMER, RABINOWITZ (1949). See also ULLMANN (1972), p. 15. For a general view of the Arabic transmission of pseudo-Aristotelian texts, see DUBLER (1961); also THORNDIKE (1923), vol. 2, Book IV, pp. 246-278. For general studies on the Arabic transmission of Greek science see STEINSCHNEIDER (1897); de LACY (1949); GABRIELI (1949). For science and medicine in addition to the fundamental and scholarly work by ULLMANN (1972) see ELGOOD (1951); PLESSNER (1958); WÜSTENFELD (1963); ULLMANN (1978).

¹⁴ This tendency has its first bases already in al-Ġāḥiẓ (d. ah255/ad868) who can be considered the precursor of animal psychology. For al-Ġāḥiẓ see PELLAT, *al-Djāḥiẓ*. See also ASIN PALACIOS (1930). For a general study of al-Ġāḥiẓ's work see Nefti BEL-HAKH (1977), who focuses on the psychological-intuitive character of the *Kitāb al-ḥayawān*.

¹⁵ With a common late antique source such as the *Physiologus* tradition.

¹⁶ The site is now called Shahabad, in the province of Khuzistān in south-west Persia. See BROWNE (1921), p. 19, note 1; HUART, SAYILI *Gondēšāpūr*.

¹⁷ For a discussion on the date of this transformation see DOLS (1989). It is likely that the Gondēšāpūr medical teaching was modelled upon that of Alexandria and Antioch but became more specialized and efficient in its new Persian home. Apart from its influence as a medical centre, Gondēšāpūr may, more generally, be considered as a place through which the Nestorian heritage of Greek learning of Edessa and Nisibis passed to Bagdād. See SIASSI (1963); SCHOEFFLER (1979).

¹⁸ See CROSS (1978), pp. 961-963.

¹⁹ See Klein-FRANKE (1982), p. 70; see also SOURDEL, *Bayt al-ḥikma*.

²⁰ See DUNLOP, *Bimāristān*.

²¹ This text is extant in a manuscript in Leiden, no. 1332 = Cod. 584,2 Warn., dated ah617/ad1221. It has been edited and translated by Klein-FRANKE (1977).

²² Ibid. p. 17; see also Klein-FRANKE (1982), p. 103. Contemporary of Ibn Buḥtīšū' was also IBN RIḌWĀN (b. ah388/ad998, d. ca. ah460/ad1067-68) the great physician who lived in Cairo and is considered a follower of the school of Alexandria, and wrote the famous *Kitāb daf' maḍarr al-abdān*. Famous is his great dispute with the Iraqī physician Ibn Buṭlān. See DOLS (1984), which has the Arabic text, and a translation with a comprehensive introduction and bibliography on medicine in Islam. For Ibn Riḍwān see IBN ABĪ UṢAYBI'AH (1882), 2nd vol., p. 99.

²³ For al-Ġāḥiẓ see the biography by AL-HAĠIRĪ (1962). Also PELLAT, *al-Djāḥiẓ* and PELLAT, *al-Ḥayawān*.

²⁴ 'Isā ibn 'Alī, a Nestorian physician educated at Gondēšāpūr, pupil of Ḥunayn ibn Ishāq, and physician to the caliph al-Mu'tamid (r. 256/870 - 279/892). He wrote a *Kitāb manāfi' allatī tustafādu min a'ḍā' al-ḥayawān* (*Book on the usefulness of the organs of animals*) of which several manuscripts survive. See a list in ULLMANN (1972), p.22; AL-NADĪM (1970), p. 699: 'Isā ibn 'Alī. He was one of the pupil of Ḥunayn [ibn Ishāq] and an excellent man. Among his books there was. The Benefits Made Use of from the Organs of an Animal.

²⁵ IBN ABĪ UŞAYBĪ'AH (1882), vol. I, pp. 123-148. SANGUINETTI (1855) translated only a part of this 8th chapter, including the following members: Ġirġis ibn Ġibrā'il, Buḥtišū' ibn Ġirġis, and Ġibrā'il ibn Buḥtišū'.

²⁶ This would contradict the general belief, as propagated by de LACY (1949), p. 160, that the translation of medical works began later than mathematical and astronomical works.

²⁷ IBN ABĪ UŞAYBĪ'AH tells us that the meaning of the name Buḥtišū' is *Christ's servant*, because in the Syriac language *baḥt* means servant, and *Išū'* is Jesus (pp. 125-126). SANGUINETTI (1855), p. 140, note 1, considers this etymology to be mistaken and suggests that *baḥt* is a Persian name meaning bonheur, and *Išū'* is a Syriac or Hebrew name for Josue, Jesus, etc. This is definitely nearer the mark. See also BROWNE (1921), p. 23, note 2.

²⁸ With a break in ah201-3/ad817-19 for the interregnum of Ibrāhīm ibn al-Mahdī, with whom Ġibril was in good terms.

²⁹ Since all those who had been supporters of his brother al-Amīn fell into disgrace. See de LACY (1949), pp. 159-160.

³⁰ While al-Ma'mūn preferred to remain at Marw where he had been while his brother al-Amīn was in power at Bagdād. Ḥasan's rule in Bagdād lasted six years, a period of tyranny culminated in the city's rebellion and the election of Maṣū' ibn Mahdī before al-Ma'mūn took over control in person. See de LACY (1949), p. 161-162.

³¹ He also was a Nestorian and physician at Gondēšāpūr. Ḥunayn ibn Iṣḥāq was his pupil. Among more famous books, he also wrote a *Kitāb al-ḥayawān*, which seems to survive in excerpts in the Latin manuscript *Liber de naturis animalium ex eis quod [sic] filius Messye dixit in libro de animalibus*, Oxford, Bodleian Library Digby 69. See GAS III, pp. 231-236; VADET, *Ibn Māsawayh*; de LACY (1949), pp. 163-164; ULLMANN (1972), p. 19.

³² Cfr. DEGEN (1981), pp. 131-166.

³³ This might also have been occurred because under al-Mutawakkil Nestorianism was, for a period, repressed. See CROSS (1978), p. 963.

³⁴ Abū'l-Ḥasan al-Muḥfār ibn Buṭlān (d. about ah458/ad1065) was a celebrated Christian physician in Bagdād, known for his *Taqwīm al-ṣiḥḥah* (Almanac of Health), the Latin version of which was published in 1531 at Strasburg under the title *Tacuinum sanitatis*. See SCHACHT, *Ibn Buṭlān*.

³⁵ To these Brockelmann adds *Kitāb al-'išqi maraḍān* (A treatise on love as a disease), extant in a manuscript in the University Library in Leiden: see BROCKELMANN, *Bakhtishū'* and GOEJE, JUYNBOLL (1888-1907), n. 1332.

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Articoli/Articles

L'EPISTOLA SUL CONCEPIMENTO NELL' ENCICLOPEDIA DEGLI IḤWĀN AL-ŞAFĀ'

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SUMMARY

THE EPISTLE OF CONCEIVING IN THE ENCYCLOPAEDIA OF THE IḤWĀN AL-ŞAFĀ'

This study illustrates the physiology of the embryo as it is described in the Conception Letter of the Iḥwān al-Şafā'. The Author compares this text with Hippocratic and Galenic writings, to underline all the points in which the Iḥwān detach themselves from the classical tradition. Here, as elsewhere, the originality of these Authors seems to be connected to the religious and sapiential features of their production.

Introduzione.

In questo studio prenderemo in esame alcune parti dell'*Epistola sul concepimento* degli Iḥwān al-Şafā'¹, l'XI della Sez. II (vol.II, p.417-455 dell'ed. di Bayrūt in 4 voll., 1957), la sola di argomento specificamente medico, anche se l'intera Enciclopedia è ricca di allusioni alla medicina, fatte dai più svariati punti di vista.

La trattazione è sostenuta da interessanti considerazioni di tipo astronomico-astrologico ma, per ragioni di spazio, ci limiteremo

Parole chiave/Key words: Conceiving Epistula-Iḥwān al-Şafā'-Encyclopaedia