

*JWAIDEH, WADIE. The introductory chapters of Yāqūt's *Mu'jam Al-Buldān* (Collection of Countries). xvi + 79 pp. Leiden: E. J. Brill, 1959. 15 guilders.
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YĀQUT

10968 MARGOLIOUTH, D. S. A hitherto undiscovered volume of Yāqūt's *Dictionary of Learned Men. Islamica I* (1925), pp. 100-105

Şimdiye kadar keşfedilmemiş olan Yāqūt us - eseri.

- LA'L
- YĀQUT

737. VESEL, Ž., «Sur la terminologie des gemmes: *yāqut* et *la'l* chez les auteurs persans», *St. Ir.*, 14, 2 (1985), pp. 147-155.

Analyse de la signification des deux termes dans les textes de minéralogie persans et dans la poésie persane. Dans le contexte de la minéralogie il s'agit de deux pierres distinctes: *yāqut* = corindon, *la'l* = spinelle. Dans la poésie en revanche, il s'agit de deux pierres assimilables. L'A. démontre à l'aide d'exemples que les deux termes signifient, dans la plupart des cas, la pierre rouge par excellence et peuvent donc être traduits par *rubis*, l'un comme l'autre.

M. G.

Bibliography: Partly given in the article; see also NAŞĀRĀ, with many bibliographical references.

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YĀĶŪT (A.), corundum, one of the outstanding gems according to early and later Islamic writers, the others being *zumurrud* (emerald) and *lu'lu'* (pearl) (al-Bīrūnī, *Ājamāhir*, 81; *Nawādir*, 73 [from a manuscript dated 390/1000]). *Yākūt* (ruby) is considered by al-Bīrūnī to be the first-rated, most valuable and most expensive of all gems (*ibid.*, 32).

Etymology. Al-Djawharī opines that the word *yākūt* is an arabicised Persian word (*Siḥāh*, ed. A. 'A. 'Attār, Cairo n.d. [ca. 1372/1956], i, 271). Ḥamza al-İṣfahānī, as quoted by al-Bīrūnī, derives *yākūt* from the Per-

sian *yākand*. However, the term is most probably derived from the Greek *hyakinthos* via the Syriac *yākundā* or *yākuntā* (there are further variants, see C. Brockelmann, *Lexicon Syriacum*, Hildesheim 1966, 307a); the Greek may also be the origin of the Persian term.

In the *Qur'ān*, *yākūt* is referred to only once to describe the young pure virgins in Paradise as resembling it (LV, 58); al-Bīrūnī says that *yākūt aḥmar* (ruby) is intended here, rather than any other variety of the stone (*ibid.*, 33).

Definition. A discussion of *yākūt* ought to begin with clarifying the common but erroneous modern use of the word as an equivalent to ruby. In mediaeval Arabic literary and scientific textual sources, *yākūt* is equivalent to all varieties of the mineral corundum that we know today. Corundum is a crystallised form of alumina (Al₂O₃) which occurs in many colours, among which *yākūt aḥmar* ("red corundum" or "ruby") is the finest. The second best, according to al-Tifāshī [q.v.], is the *yākūt asfar*, known in English as "yellow sapphire" or "oriental topaz" (Cipriani, *Macdonald Encyclopedia of Precious stones*, 106). The third in rank is the *yākūt akhāb* or *azraḳ* ("blue sapphire"), and the last is *yākūt abyad* ("leuco-sapphire"). Al-Bīrūnī wondered how transparent stones like *yākūt* crystallised and obtained their various colours, and thought that knowing this was beyond man's comprehension. We know now that the different colours of the various types of *yākūt* are due to traces of a metallic oxide present in the stone as an impurity (Webster, *Gems*, 60; Bauer, *Precious stones*, 261).

Each of the four main types has gradation in colour. The *yākūt aḥmar*, for instance, being the most valuable, has seven shades of red, ranging from deep red, *bahramānī* (Rubicelle, Escarboucle) or *rummānī* (defined at the present time as "carmine" or "pigeon's blood"), to the pale rose-pink *wardī*. The colours of the *yākūt asfar* range from the deeply saturated (*djullanānī*) to the palest or straw-coloured (*tibnī*). The *yākūt akhāb* or *azraḳ* ranges from the dark *kuhlī* (ink blue) down to the lighter *samāwī* or *asmāndjūnī* (sky blue). The *yākūt abyad* has two shades, the more prized of which is the *mahawī* or *billawī* (rock crystal-like).

These four types, classified according to colour and value by a number of mediaeval Islamic writers such as Ibn Māsawayh, al-Bīrūnī quoting al-Kindī, al-Tifāshī, Ibn al-Akfānī [q.v.] and others, represent essentially varieties of the same mineral with the same degree of hardness and density.

Provenance. The mines of *yākūt* are in the Mogok region in Burma, in Thailand, Cambodia, Sri Lanka and other places. Al-Ḳazwīnī in *Ādjā'ib*, 277, locates its mines in the countries around the equator. The rough *yākūt* is obtained from deposits eroded from the mother-rock, and thus is normally found among sand, gravel and clay brought down the mountains by torrents and wind (Ibn Māsawayh, *Djāwāhir*, 41-3; al-Bīrūnī, *Djāmahīr*, 44; al-Tifāshī, *Azhār*, 64; Bauer, 287). The best *yākūt* is that washed down by torrents, according to the first two of these authors.

Physical properties. *Yākūt* is brittle, though it is the hardest of all minerals after the diamond (*Djāmahīr*, 48; *Azhār*, 70; *Nukhāb*, 8), having number 9 in Mohs' scale of hardness (Bauer, 263; Webster, 74). It is also the densest of all precious stones, according to al-Bīrūnī, and it has a very high specific gravity of ca. 4 with insignificant variations (sapphire's specific gravity is 4.08, slightly higher than that of ruby which ranges between 3.99 and 4.06 (Bauer, 282). Al-Bīrūnī (*Djāmahīr*, 77) states that, if the weight of a sapphire

Tradition. A.J. Wensinck, *Concordances et indices de la tradition musulmane*, Leiden 1936-88, s.v. *z-l-m*, iv, 80-5; Bukhārī, *al-Adab al-mufrad*, Cairo 1979, 139-42, 193; Muḥammad b. Dja'far al-Kharā'itī, *Masāwī' al-akhlāk wa-madhūmuhā wa-tarā'ik makrūhihā*, ed. Maḍjīd al-Sayyid Ibrāhīm, Cairo 1989, 217-38; Tabarānī, *Makārim al-akhlāk*, ed. Fārūk Hamāda, Casablanca 1980, 65-6, 83-4; Bayhaqī, *al-Ādāb*, ed. Muḥammad 'Abd al-Kādir Aḥmad 'Aṭā', Beirut 1986, 116 ff., 124-7; *Thamānūn hadīth' fi 'l-zulm wa 'l-zalama wa 'l-maḥlūmūn*, ed. Djamāl 'Abd al-Mun'im al-Kūmī and Ḥasan 'Ashūr, Cairo 1992.

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Adab. Ibn Qutayba, *Uyūn al-akhbār*, 4 vols., Cairo 1925-30, i, 74-9; Ibn 'Abd Rabbih, *al-Iqd al-farīd*, ed. Aḥmad Amīn and Aḥmad al-Zayn, 7 vols., Cairo 1953-65, i (1965), 7 ff., 28 ff.; al-Rāghhib al-Iṣfahānī, *Muḥāḍarāt al-udabā'*, 4 parts in 2 vols., Beirut 1961, i, 215-21; Nuwayrī, *Nihāyat al-arab fi funūn al-adab*, 31 vols., Cairo 1963-92, vi, 39 ff.; Muḥammad b. Aḥmad al-Ibshīhī, *al-Mustatraf fi kull fann mustatraf*, 2 vols., Cairo 1292/1875, i, 128-33.

Fiḥh. al-Khaṣṣāf and al-Djaṣṣās, *Adab al-kāḍī*, ed. F.J. Ziadeh, Cairo 1979, 29 ff.; Ibn Abi 'l-Dam, *Adab al-kaḍā'*, ed. Muḥammad 'Abd al-Kādir Aḥmad 'Aṭā', Beirut 1987, 33 ff.; E. Tyan, *Histoire de l'organisation judiciaire en pays d'Islam*, Leiden 1960, 287 ff., 433 ff.

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Studies. F. Rosenthal, *Political justice and the just ruler*, in *IOS*, x (1980), 92-101; S.A. Arjomand, *The shadow of God and the hidden Imam*, Chicago and London 1984; Ann K.S. Lambton, *State and government in medieval Islam*, Oxford 1981, repr. 1985; A.A. Sachedina, *The just ruler in Shi'ite Islam*, Oxford etc. 1988; U. Haarmann, "Lieber hundert Jahre Zwangsherrschaft als ein Tag Leiden im Bürgerkrieg". *Ein gemeinsamer Topos im islamischen und frühneuzeitlichen Staatsdenken, in Gottes ist der Orient—Gottes ist der Okzident. Festschrift für A. Falaturi*, ed. U. Tworuschka, Cologne and Vienna 1991, 262-9; Ch.E. Butterworth (ed.), *The political aspects of Islamic philosophy. Essays in honour of Muhsin S. Mahdi*, Cambridge, Mass. 1992. Different

aspects are dealt with in Majid Khadduri, *The Islamic concept of justice*, Baltimore 1984; *Oxford Encyclopedia of the modern Islamic world*, ed. J.L. Esposito, Oxford and New York 1995, 4 vols., arts. (concept of) justice, *zulm*. (ROSWITHA BADRY)

2. In contemporary political usage.

In the modern period, new experiences, perceptions and ideas, both at home and abroad, reshaped the theory and practice of politics in the Islamic lands. First, reports from Western lands, then the massive Western presence in the Islamic world changed Muslim perceptions of good and therefore also of bad government. The ideas and methods of the French Revolution, the German ideal of the Rechtsstaat, the example of English parliamentary government all had their impact. They were followed by such European ideas as nationalism, socialism, and the combination of the two in national socialism, each with its own definition of the functions and duties of the state, and of the circumstances when resistance to it is justified or even required.

The first external influences came from Western Europe, and the new ideal of government that they brought was that of constitutional, representative government, through elected assemblies. As good government was redefined, bad government was redefined as a departure from it. The old Islamic notions of *mashwara* and *shūrā* [q.v.] were reinterpreted to provide a traditional Islamic justification for parliamentary democracy; the term *istibdād* was revived to connote autocratic personal government. As used in classical texts, it had a connotation of arbitrary and capricious rather than of illegitimate or tyrannical rule. It was used, for example, of a ruler who took decisions and actions on his own, without consulting his religious or bureaucratic advisors. In Arabic chronicles of the Mamlūk period it sometimes appears in a neutral or even in a positive sense, to indicate that one or another of contenders for power had got rid of his rivals and taken sole charge. In the 19th and 20th centuries, it came to be the term commonly used by advocates of liberal reforms to denounce the autocratic monarchs whom they wished either to restrain or to remove.

The rise of neo-Islamic movements brought a revival of the term *zulm*, and with it *zālim* and *maḥlūm*, to describe misgovernment, its practitioners and its victims. It was used in particular of rule by imperialists (understood to mean non-Muslims ruling over Muslims) and of apostates (used to condemn nominally Muslim rulers who adopt non-Muslim patterns of government and law). These terms figure prominently in the political statements of the Āyatullāh Khumaynī and more generally of the Islamic Republic of Iran, as well as of parallel movements in other Muslim countries. In the traditional Islamic world view, the converse of *zulm* is justice; in the democratic view, it is freedom. Modern Muslim thought and discourse reflect the meeting, and sometimes the contradictions, of the two.

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ZUMURRUD (A.), also ZUMURRUḌH, the emerald, according to Islamic works on gemology, the second-best of the precious gems, after the *yāqūt* [q.v.] "corundum" and before the *lu'lu'* [q.v.] "pearl". The most valuable gem of the beryl group, it was often confused with *zabardjad*, the peridot, a confusion which may have started rather early. Max Bauer goes even

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358 Eilhard Wiedemann, Über den Wert von Edelsteinen bei den Muslimen.

Mekka brachte und sie auf den Markt von Minâ für 1000 Goldstücke verkaufte. Wenn ihn jemand mit sich führt, so übt das Gift auf ihn keine Wirkung aus, und wenn man Gift in die Nähe legt, schwitzt er. Deswegen ist er hochgeschätzt.

Ich möchte nicht unterlassen, bei dieser Gelegenheit meinem verehrten Freund und Kollegen, Professor G. JACOB für seine vielfache freundliche Unterstützung den herzlichsten Dank auszusprechen.

12 MAYIS 2003

Beiträge zur Geschichte der Naturwissenschaften. LXV. Über die Eigenschaften des *Jâqût* (Hyazinthes).

Zum Teil im Anschluß an die Mineralogie von *al Tîfâschî* († 1253 Brockelmann 1, 491) und das Steinbuch von Aristoteles (ed. Ruska) führt *al Guxûlî* († 1212, Brockelmann 2, 65) in seinen *Maʿâliʿ al buḥûr fî manâxil al surûr* (Aufgänge der Vollmonde über die Stätten der Freuden) u. a. folgende Eigenschaften des *Jâqût* an.

Er schneidet alle Steine außer den Diamant; er wird nur vom Diamant geschnitten und kann nur mit diesem durchbohrt werden; dazu bringt man auf das Ende eines eisernen Rohres ein Stück Diamant und bohrt mit diesem, wie man Holz durchbohrt. Man kann den *Jâqût* nicht auf Holz schleifen (*ḥakk*) wie alle anderen Dinge. Man schleift ihn nur auf einer Kupferplatte. Dazu zerkleinert man Onyx aus Jemen und erhitzt ihn, bis er wie *nûra* (ein Enthaarungsmittel) geworden ist, dann zerreibt man ihn mit Wasser, bis er wie Leim geworden ist. Mit diesem poliert man den *Jâqût*. Poliert ist er glatter als irgendein Edelstein. Sein Strahlenwurf übertrifft den aller anderen durchsichtigen Edelsteine. Er ist von allen Steinen, die mit ihm gleiches Volumen haben, der schwerste (nach *al Bîrûnî* für den blauen $s = 3,96$, für den roten 3,86). Ferner ist er gegen Feuer widerstandsfähig. Er wird nicht wie andere Edelsteine kalzinert, wie z. B. der Smaragd. Ferner kühlt er sich schneller ab als die anderen Steine. Von seinen Farben ist nur die rote feuerbeständig. —

Zu dem *Jâqût* und seinen Arten vgl. auch die Angaben von *al Akfânî* in Beiträge XXX, 212.

Yakut (220095)