### A BIOGRAPHICAL NOTE ON IBN BAJJAH (AVEMPACE) AND AN ENGLISH TRANSLATION OF HIS ANNOTATIONS TO

#### AL-FARABI'S ISAGOGE

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"The first important point to note about the spirit of Muslim culture [...] is that for purposes of knowledge, is fixes its gaze on the concrete, the finite. It is further clear that the birth of the method of observation and experiment in Islam was due not to a compromise with Greek thought but to a prolonged intellectual warfare with it." <sup>71</sup>

Iqbal

#### Ibn B«jjah and his Times

Ibn B«jjah, with full name Abë Bakr MuÁammad b. YaÁy«" b. al-«'igh al-Tujâbâ al-Andalusâ al-SaraqusÇâ<sup>72</sup> and known to Latin medieval Europe as

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<sup>&</sup>lt;sup>71</sup> Sir Muhammad Iqbal, *The Reconstruction of Religious Thought in Islam* (Lahore: Sh. Muhammad Ashraf, 1999 [reprint]), p. 131.

The information on the life and works of Ibn Bøjjah given in this assignment are based on D. M. Dunlop, "Ibn Bøjjah", Encyclopedia of Islam, new edition [henceforth EI<sup>2</sup>], vol. 3 (1986) pp. 728-29. Dunlop's article contains also an invaluable bibliography. The perhaps most comprehensive introduction into the civilization of Islamic Spain in English is Salma Khadra Jayyusi (ed.), The Legacy of Muslim Spain (Leiden, New York and Cologne: E. J. Brill, 1992, Handbuch der Orientalistik, 1. Abteilung, 12. Band). See therein in particular on Ibn Bøjjah Miguel Cruz Hernández, "Islamic Thought in the Iberian Peninsula", pp. 787-88. Refer also to the short account on Ibn Bøjjah in S. M. Imamuddin, Muslim Spain 711-1492 A.D. A Sociological Study, p. 153. See also Claude Cahen, Der Islam I. Von den Ursprüngen bis zu den Anfängen des Osmanenreiches (Frankfurt am Main: Fischer Taschenbuchverlag, 1980, Fischer Weltgeschichte, vol. 14), pp. 234 and 308-11. More detailed is Montgomery Watt and Pierre

Avempace, originated from the northern Spanish city of Saragossa (SaraqusÇah)<sup>73</sup> or its environs. His ancestors had probably been of local Spanish descent. Not many details about his youth, which he may have spent in the area of his hometown, and his educational background are known to us today. However, Ibn B«jjah was perhaps about twenty years old toward the end of the fifth/eleventh century.

Cachia, A History of Islamic Spain (Edinburgh: Edinburgh University Press, 1979, paperback edition, Islamic Surveys 4), pp. 91-102.

<sup>73</sup> In 503/1110 Saragossa was conquered by the Almoravids (al-MurwbiÇën), who, coming from North-West Africa, had crossed the Straits of Gibraltar, in order to put an end to the political fragmentation of Spain at those days. Spain, or as it had been called throughout the Muslim sources, al-Andalus, had been ruled by the so-called 'Party Kings' (Spanish: Reyes de Taifas; Arabic: Mulëk al-Çaww'if) after the final collapse of the Umayyad regime in 422/1031<sup>73</sup>. The absence of any kind of central government tempted in the following decades neighbouring northern Spanish Christian states, Castilia, Leon and Aragon in particular, to attack the Muslims in the South in the course of that what was perceived by them as 'reconquest' (reconquista). The Muslims had not been able to unite themselves in order to repulse the aggressors.

With his crossing over the Straits of Gibraltar in 479/1086 at the head of a large army the Almoravid Yësuf b. T"shufân, himself of Berber descent, brought temporal relief to the Muslims of al-Andalus. After sweeping away the *Taifas* he was in the same year in the position to crush the army of King Alfonso VI of Leon and Castilia in an open field battle at Zall«qah near Badajoz. However, the Muslim victory was not meant to last. Difficulties in Morocco forced the Almoravids to turn their attention away from the Iberian Peninsula with the result of the loss of Saragossa, Ibn B«jjah's hometown, to the Christian kingdom of Aragën in 512/1118.

In 503/1110 the Almoravids had with Ibn TâfalwâÇ installed a governor at Saragossa, whom they had chosen from among themselves, removing thus the dynasty of the Hëdids from that city. Ibn B«jjah became Ibn TâfalwâÇ's vizier. His new lord sent him on a diplomatic mission to 'Im«d al-Dawlah b. Hëd, who had managed to maintain his rule after the despite the Almoravid onslaught, residing now as an exile in the city of Rueda de Jalón (RëÇah). 'Im«d al-Dawlah threw his former subject into prison, disregarding thus Ibn B«jjah's rank as an envoy. Although Ibn B«jjah managed to regain his freedom he decided not return to Saragossa. Instead he went to Valencia (Balansiyyah), where he was reached by the news of Ibn TâfalwâÇ's death. As already mentioned, his home town fell to the Christians in the following year 512/1118. Facing the impossibility of return to Saragossa, he embarked on a travel across Spain. He was again arrested, now by the Almoravids. In spite of his release from prison his restless life continued until he finally passed away in the North African city of Fez (F«s) in 533/1139.

## IBN B«JJAH'S MAIN WORKS AND HIS ANNOTATIONS ON AL-F«R«BÂ'S ISAGOGE

Among Ibn B«jjah's most important philosophical works are the Ris«lat al-Wad" (The Letter of Farewell), the Ris«lat al-IttiÄ«l al-'Aql bi 'l-Ins«n (Treatise of the Union of the Intellect with Man) and, above all, his Tadbâr al-MutawaÁáid (The Rule of the Solitary), all of which had been edited and translated into Spanish by the late Spanish scholar Miguel Asín Palacios<sup>74</sup>, one of the leading experts on Ibn B«jjah. The original texts of Ibn B«jjah's works are today for the most part only extant in unique manuscripts. A discussion of Ibn B«jjah's philosophical system, which was influenced by the thought of al-F«r«bâ (d. 339/950), is beyond the scope of this brief biographical note<sup>77</sup>, but it should be mentioned that most of his works focussed on the question of the possibility of the arrival at the Ultimate Truth by way of the human intellect. Ibn Khaldën (d. 809/1406), the well-known 'philosopher of

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<sup>&</sup>lt;sup>74</sup> Miguel Asín Palacios, "La 'Carta de Adiós' de Avempace," *Al-Andalus* 8 (1943), pp. 1-87; idem, "Tratado de Avempace sobre la unión del intelecto con el hombre," *Al-Andalus* 7 (1942), pp. 1-47; idem, *El Regimen del Solitario por Avempace* (Madrid and Granada: Consejo Superior de Investigationes Científicas, Instituto Miguel Asín, 1946). The last mentioned work had not been available to me. Refer also to D. M. Dunlop, "Ibn B«jjah's Tadbâr almutawaÁÁid (Rule of the Solitary)," *Journal of the Royal Asiatic Society* (1945), pp. 61-81, and furthermore idem, "The Dâw«n attributed to Ibn B«jjah (Avempace)," *Bulletin of the School of Oriental and African Studies* 14 (1952), pp. 463-77.

<sup>&</sup>lt;sup>75</sup> Dunlop, "Ibn B«jjah", p. 728.

<sup>&</sup>lt;sup>76</sup> On influences on Ibn B«jjah's political philosophy from the part of al-F«r«bâ see Abë NaÄr Al-F«r«bâ, FuÄël al-Madanâ. Aphorisms of the Statesman, ed., trans. D. M. Dunlop (Cambridge: Cambridge University Press, 1961), p. 19 (Dunlop's intro.), and for a sketch of the contributions made by Al-F«r«bâ furthermore R. Walzer, "Al-F«r«bâ" EI², vol. 2 (1983), pp. 778-81.

<sup>&</sup>lt;sup>77</sup> See M. Âaghâr Àusain al-Ma'Äemâ, "Avempace - the Great Philosopher of al-Andalus", *Islamic Culture* 36 (January 1962), pp. 35-53 and *Islamic Culture* 36 (April 1962), pp. 85-101; D. M. Dunlop, "Philosophical predecessors and contemporaries of Ibn B«ijah," *Islamic Quarterly* 2, no. 2, (July 1955), pp. 100-16; W. Montgomery Watt, *Islamic Philosophy and Theology* (Edinburgh: Edinburgh University Press, 1979, revised paperback edition, Islamic Surveys 1), pp. 137-38 and 144. On his political philosophy see E. I. J. Rosenthal, "The Place of Politics in the Philosophy of Ibn B«ijah," *Islamic Culture* 25 (1951), pp. 187-211.

<sup>&</sup>lt;sup>78</sup> Dunlop, "Ibn B«jjah", p. 728.

history', found in his *Muqaddimah* or 'Introduction [to History]' the following words of praise for Ibn B«jjah: <sup>79</sup>

Abë NaÄr al-F«r«bâ and Abë 'Alâ Ibn Sân« (Avicenna) in the East, and Judge Abë 'l-Walâd b. Rushd (Averros) and the wazâr Abë Bakr MuÁammad b. YaÁy«" b. al-«'igh (Avempace) [i.e. Ibn B«jjah] in Spain, were among the greatest Muslim philosophers, and there were others who reached the limit in the intellectual sciences. The men mentioned enjoy especial fame and prestige.

As an example from Ibn B«jjah's work, we would like to present to a wider audience in the following an English translation of his Annotations to the Isagoge or the Goal of the Isagoge (Ta'lâq 'al« 'l-¥s«gàjâ aw Gharaî ¥s«gàjâ), one of his writings this field of formal logic (al-manÇiq al-Äërâ).<sup>80</sup> It had so far not been translated into any European language. The Annotations are a commentary on one of the works of al-F«r«bâ in this field, which is in turn a reconsideration of the introduction to that science given by Porphyry (fl. 232-between 301-306 C.E.).<sup>81</sup> Al-F«r«bâ's text, the Kit«b ¥s«gàjâ aw al-Madkhal (The Book of the Isagoge or the Introduction), had been edited and translated by D. M. Dunlop.<sup>82</sup> While comparing both texts with each other, the reader will soon notice that Ibn B«jjah has quoted his master Abë NaÄr al-F«r«bâ at times almost literally. Edward W. Warren has translated Porphyry's Isagoge, which set the patterns for the respective works in this field by al-F«r«bâ and

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<sup>&</sup>lt;sup>79</sup> [Abë Zayd 'Abd al-RaÁm«n ibn MuÁammad ibn MuÁammad] Ibn Khaldën, *The Muqaddimah. An Introduction to History*, transl. Franz Rosenthal, ed., abr. N. J. Dawood (Princeton NJ: Princeton University Press, 1981, first impression), p. 374. The additions in the brackets are Rosenthal's.

<sup>&</sup>lt;sup>80</sup> For an introduction to the subject refer to R. Arnaldez, "ManÇiq," EI<sup>2</sup>, vol. 6 (1991), pp. 442-52.

<sup>&</sup>lt;sup>81</sup> Porphyry the Phoenician, *Isagoge*, trans. Edward W. Warren (Toronto: The Pontificial Institute of Mediaeval Studies, 1975). On Porphyry see ibid., 9 (Warren's intro.).

<sup>82</sup> D. M. Dunlop, "Al-F«r«bâ's Eisagoge," *Islamic Quarterly* 3, no. 2 (July 1956), pp. 117-38. For editions of further writings of al-F«r«bâ in the field of logic (including English translation) refer to D. M. Dunlop, "al-F«r«bâ's Introductory *Ris«lah* on Logic," *Islamic Quarterly* 3, no. 4 (January 1957), pp. 224-35, and idem, "al-F«r«bâ's Introductory Sections on Logic," *Islamic Quarterly* 2, no. 4 (December 1955), pp. 264-82. The last mentioned was, together with al-F«r«bâ's *Isagoge*, one of the patterns for Ibn B«jjah's *Annotations*. See also Mubahat Türker, "F«r«bâ'nin bazi Mantik Eserleri," *Ankara Dil ve Tarib-Co<sup>a</sup>rafya Fakültesi Dergesi* 16 (1958), pp. 165-286, especially pp. 187-94.

Ibn B«jjah. Concerning the significance and the subject in question he stated:

The significance of Porphyry's modest *Isagoge* is determined largely by the controversy over universals that arose during the Middle Ages and by the metaphysics developed with the aid of Aristotelian logic. The *Isagoge* is not an original contribution to metaphysics or logic nor is it intended to be. Rather it is an introduction to, an attempted explanation of, the Aristotelian terms, later called predicables. His purpose was to help the student understand the Aristotelian text by making clear the meanings of genus, species, difference, property and accident. Aristotle discusses the predicables in detail in the Topics, a largely early work according to current scholarship, and it is on this Aristotelian treatise, that Porphyry builds the Isagoge.

While studying Ibn B«jjah's text it will thus prove very helpful to compare it with al-F«r«bâ's text, the *Kit«b ¥s«gàjâ aw al-Madkhal*, and, above all, with Porphyry's *Isagoge*. Porphyry's brief work might be felt to be the clearest formulation of the subject-matter.

The edition of the original Arabic text of Ibn B«jjah's *Annotations*, which is preserved in a manuscript at the Escurial<sup>84</sup> and on which the following English translation is based, had been prepared by the late Iranian scholar Professor MuÁammad Taqâ D«nishpazhëh.<sup>85</sup> In the text of the following

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<sup>83</sup> Porphyry, Isagoge (trans. Edward W. Warren), pp. 11 (Warren's intro.).

<sup>84</sup> Escurial MS 612. See Hartwig Derenbourg, Les Manuscrits arabes de l'Escurial, Publications de l'École des Langues orientales vivantes, II<sup>e</sup> série, vol. X (Paris, 1884), pp. 419-23. Confer Miguel Casir (ed.), Bibliotheca Arabico-Hispana Escurialensis. Recensio et explanatio Michaelis Casiri, 2 vols. (Osnabrück: Biblio Verlag, 1969, facsimile reprint of the edition of 1760-70). The work of Ibn Beijah concerned with here is dealt with in vol. 1, p. 179, no. 612. The compiler of the catalogue described it in his brief Latin note as a text in kufic writing, without mentioned year of compilation and the beginning of the text missing ("...codex literis cuphicis exaratus, sine anni nota et operis initio...").

<sup>85</sup> MuÁammad Taqâ D«nishpazhëh (ed.), "Ta'lâq 'al« 'l-¥s«gàjâ aw Gharaî ¥s«gàjâ", Al-Mantiqiy«t li 'l-F«r«bâ, ed. idem, 3 vols. (Qumm: Maktabah-yi ÿyatull«h al-'Uïm« al-Mar'ashâ al-Najafâ, 1410 lunar/1989), vol. 3 ("Al-ShurëÁ 'al« al-NuÄëÄ al-ManÇiqiyyah'"), pp. 40-51. For obituaries see Charles-Henri de Fouchécour, "Mohammad Taqi Danèche-Pajouh, membre d'honeur de la Société Asiatique (1911-1996)," Journal Asiatique 285, no. 1 (1997), pp. 23-30, and [anon.] ¥r«n-N«mah 15, no. 1 (Winter 1375 solar/1997), p. 164.

translation square brackets [] indicate additions from my part, whereas other brackets {} signify the beginning of a new page in Professor D«nishpazhëh's edition. The following English translation tries to follow closely the Arabic original.<sup>86</sup>

# An English Translation of Ibn B«jjah's Annotations on al-F«r«bâ's Isagoge (Ta'lâq 'al« 'l-¥s«gàjâ aw Gharaî ¥s«gàjâ)

"Abë NaÄr's [i.e. al-F«r«bâ's] aim with regard to the Isagoge has already been stated by his saying: "Its intention [lies] in this book, [i.e.] the Book of the Enumeration of Things, 87 which deals with judgements (al-qaî(v)ah) and their subdivisions. The benefit of the Book of the Isagoge is derived from the Book [or: chapter] of the Categories (al-magëlat) on imagination (al-taÄawwur), and from the remainder of the book [which deals with] the setting of judgements. The item of the relation of imagination to the categories does include that, what [al-F«r«bâ] has enumerated in the Book of the Isagoge. [Therein] he has elaborated [further] on imagination. All judgements are in general made up by them.<sup>88</sup> He presented in the Book of the Isagoge that, from which in general all judgements are conceived. At the beginning of his deliberation on the Isagoge he discussed the universal concept (al-taÄawwur al-kullâ) in any respect. From it the five predicables (al-aÄn«f al-khamsah) are derived, which are the subject of the Isagoge. The benefit that is obtained from the conception of each of the two<sup>89</sup> is magnificent. Firstly, he proceeds to the mind (al-dhihn) in its capacity as genus (al-jins). [In his book] are sections on each of the five predicables which are extant due to the categories in the mind.

<sup>86</sup> The following works have also been consulted during the translation: Najm al-Dân al-K«tib al-Qazwânâ, "Matn al-Shamsâyyah", in: ShurëÁ al-Shamsâyyah: Majmë'at Àaw«shâ wa ta'lâq«t. Al-juz' al-th«nâ (Cairo: Sharikat Shams al-Mashriq, n. d.), pp. 287-309 [Arabic text], and A. Sprenger (trans.), "First Appendix to the Dictionary of the Technical Terms Used in the Sciences of the Mussalmans, Containing the Logic of the Arabians in the Original Arabic, with an English Translation" (Calcutta: F. Carberry, Bengal Military Orphan Press, 1854, Asiatic Society of Bengal, Bibliotheca Indica no. 88), pp. 1-36 [English translation of Najm al-Dân al-K«tib al-Qazwânâ's Al-Ris«lat al-Shamsâyyah].

<sup>87</sup> Kit«b IÁÄ«' al-Ashy«'.

<sup>88</sup> i.e. the categories.

 $<sup>^{\</sup>rm 89}$  I.e., the universal concept and the five predicables.

The [following] statement is the starting point [of his discussion]: "Literally, the application of the specification (al-takhÄäÄ) of the vague<sup>90</sup> is in most cases accepted, because of the nunnation of the noun, that is connected with it. It is permanently connected with the noun, which is pointing towards universal meaning (al-ma'n« al-kullā), in order to lead to it through specification of its meaning. This, nevertheless, is a vague specification".

The specification, however, is an allotted quality (al-Āifah) that has been imposed upon the universal meaning. It is merely a vague quality on which one has always has to investigate further. [Al-F«r«bâ] proceeds [then] straightaway to the peculiar vagueness of this quality. As for the 'notification' {41} of its importance it is similar to the saying: "To put on arms for one reason or another", [a saying,] in which is stupidity. Or as it is said: "When it becomes too troublesome, Zayd moves out". This then, is what can be understood by 'notification'. Its absurdity lies already in its quality. But [its quality] leads in general to the specification of the vague, in case [the quality] directs towards the quality of the peculiar (al-Āifat al-takhaĀĀuĀ). But that quality is in need of explanation by things which elaborate further on the utterance, or it requires an explanation of things which had not yet become clear, in order to clarify them afterwards.

In this manner, Abë NaÄr has in the course of his discussion arrived at the explanation of the proven meaning (al-ma'n« al-madlël) by way of its name, in accordance with his statement: "Every name (al-ism) has an expression (al-lafi)." He connects 'm'" [i.e. 'what'] with the word lafi and the word 'ism'. The name is generally perceived by the meaning of the expression. In this way, any expression specifies that what is intended to be said on the meaning of the expression. [Because of] that it is said concerning the meaning, that it is generalized by the expressions, or that the expressions are more specific than it.

The definition (Aadd) is always in accordance with the expression, which is equivalent to the meaning. The meaning [in turn], which we derive effectively or occasionally, will always be deduced by us from the expression which is equivalent to it and [thus] not in accordance with the more universal

<sup>&</sup>lt;sup>90</sup> Or: the ambiguous.

or specific. Whenever the meaning of the definition is deduced in accordance with the general or specific meaning, error will occur in the understanding and interpretation of this meaning. The definition does [in that case] occur as that what is [actually] not the specific name of that meaning.

What has been presented by him here distinguishes between the equivalent expression and the general expression, which is not more general and not more specific. Often we do not understand the meaning of that what specifies it, because of its difficulty. We intend to understand that what is more specific or more general than it, in order to enhance its perception, including that what specifies or confines it. At that moment, it will be understood from its equivalent expression. Whenever we deduce from a meaning any [other] meaning, which we had confined or made effective or subjective, we are perceiving this meaning in accordance with the equivalent name, and not according to what is said to be the 'more general' or the 'more specific' [meaning].

From among the two topics, Abë NaÄr [al-F«r«bâ] has dealt thoroughly with that expression which is equivalent to the meaning. In this way, we are able to single out the universal definition (al-Áadd al-kullâ) and the individual definition (al-Áadd al-mushtarak). And from this we select in the same manner the common name (al-ism al-mushtarak). If a name is deduced from the meaning, the common name does share its familiarity. It even subdivides from this {42} the name that is on par with the intended meaning, in accordance with the definition.

That what had been deduced subjectively or objectively must be kept in mind by us. We are [usually] satisfied with the abstract meanings (al-ma'(mâ)) of the expressions, through abstraction of the expression. We understand the meaning through its synonym and not through that what is more general or more specific than it. Furthermore, we do interpret the meaning by its equivalent name and not by that what is more general or specific. When the meaning is explained by an equal expression, the explanation of the name is equivalent, since the explanation and the expression are both equal to the meaning. Therefore, it is incumbent upon the explanation that it is on par with the equal expression.

It is necessary, that the illustration (*al-rasm*) of the universal meaning is in accordance with Abë NaÄr's statement, since he said: "To any meaning leads an expression, and it is either universal or individual". It is necessary for the definition of the universal meaning that it is a meaning which leads to an expression equal to it, being at the same time its definition. The universal meaning is depending on the expression on par with it. In this respect, the two do resemble each other strongly.

In the same way the individual definition has to be deduced. The individual depends on the expression that is equal to it. It is by no means possible that the two [individual definitions] are resembling each other. Often the individuals of accidents (al-a'rai) are understood as addition to the name which is not equivalent to it. This is the case with the additional individuals, for which there do not exist equivalent names. If something else than the equivalent is deduced from its name and conveyed to an individual or individuals, similarity (al-ashk«l) will occur, and it will be assumed that they are universals. This is the case with all additions: One of the additions multiplies in respect to the others, as in our utterance: "So-and-so and Soand-so and So-and-so are in this house". Our saying "in this house" is a quality of each of So-and-so and So-and-so and So-and-so. Or like our saying: "So-and-so and So-and-so are in front of Zayd" or "are the servants of Zayd". Therein, errors are to be detected. Therefore, we rephrase our statement: "In the house" and "in front of Zayd" are qualities. In more than one regard they bear the common name (al-ism al-mushtarak). Therefore, we adopt this attribution without its synonym to each of the attributions. The attribution of Zayd to the non-attribution of 'Umar to this house is precisely the same. It has been necessary, that {43} to each of those two attributions belongs an equivalent name. This had not been the case. It has been impossible to derive the expressions of each of them. This is, what has been understood from the attribution in regard to the species (al-naw') of the attribution, but not from the individual of the attribution. A junction of the name has occurred.

Among this group, a designation of the individual is extant from among the names of origin. It is even surpassed by [other] attributions, such as the supreme generic attribution (al-nisbat al-ajn«s al-'«liyah) or the intermediate generi (al-ajn«s al-mutawassiÇah), the other species and their individuals. All of

those concurrences do appear in the expression. Therefore, all of them are to be attributed to a single thing outside the mind, as already mentioned. However, [this is] on the condition that one of the two additions is the cause of those attributions from outside the mind, such as 'father' as an individual. Both of them may also share the same individual agent (al-fwil), such as [in the utterance] "the two others". [It may also be, that] the two individuals were the two agents of that attribution, such as "the one and the other", if they both were individuals, and so on. To sum up: All things do attribute a single attribution to a single thing, if that single thing were to be individual, outside the mind. It is necessary, that there is between each of those things a connection, because there is that [particular] attribution extant to it. However, it is equalized in regard to what is attributed to it. In short: any accident (al-'araî) of an attribute or of something else does exist in the aforesaid individual, which is [thus] accidental individual. Therefore, whenever that accident is extant by itself conceptionally, it perceives in comparison with that individual [and with] nothing else. It constitutes a single imagination (al-khiy«l) and its character constitutes nothing else. It perceives only what is outside the essence (al-dhat), and it does not know the essence [itself]. [The imagination] knows whatever thing is outside the essence. It perceives that, on which it had no information besides this and is [thus] accidental individual. The individual has already been split into parts. Each of them [in turn] is [also] individual. Those parts do relate each individual to another single individual. It assumes in regard to this individual attribution, that the [respective] individual originates from an attribution, which is common to it. That is as if you were to take an individual aspect of Zayd. We say [for example]: "This individual is Zayd. There are the hand and the foot of Zayd and others of his limbs." Each of Zayd's parts are individuals, as well as his entirety [constitutes an individual]. Therefore, any individual, that is perceived from his parts and attributed to him, is individual, and each of his parts is [as well] individual and is attributed to him

{44} Likewise, all individuals are attributed to an individual in its entirety in regard to who is that individual, like [it is said,] that there exists an agent to them, similar to numerous buildings which are ascribed to a single agent, or similar to the existence of a single [particular] position to each extremity. In likewise manner, to numerous individuals is attributed that they are in a

particular house at the same time, such as numerous individuals during a fixed year. Or just like: "So-and-so was born in the year such-and-such and so-and-so was born in the same year". This does include that what does effect the individuals. It is a vital point that all of them are individual qualities which are conveyed by the way of sharing expressions for numerous things. Abë NaÄr has [already] mentioned how many the single universal categories are in general. [Furthermore, he explained], what each of them [actually] is, and what their extent is in regard to the conception, that has been ascribed to each of them, since to some of them has been ascribed complete conception and to some [others] incomplete.

Know, that from them derives the setting of concepts and the setting of information data, which all of them share in universality, singularity, subjectivism and cognition, and that there does exist a predicate to them. [Al-F«r«bâ] said concerning their number, that they are five, which had [already] been enumerated many times by the ancients. It is a sectioning that is generally accepted, and in it is truth. He has already explained this in his *Book of Demonstration (Kit«b al-Burh«n)*.

If they are split in accordance with the well-known, we say that they are subjective. The subject [in turn] is divided into two parts: [the first one is] the subject that is anteceding the thing which is known, distinguished and interpreted by things, that are shaping it. [The second is the] subject that is posterior to [the thing] which is known, distinguished and interpreted by things that are not shaping it. But it does arrange them, and its arrangement subjectivity occurs. To each of these two subjective parts exists a general, a specific and an equivalent. There are six of those single universal categories. However, the part of the later [subject] is not equivalent to a thing, but is always either more general or more specific than it. This is *one* part. Thus, five [more] categories do remain.

Concerning the three predicables from among the anterior ones: the more specific is the genus and the more general is the species. The equivalent is the differentia. Concerning the three predicables from among the posterior ones: The more specific and the more general are accidents of which no equivalents do exist. Whenever equivalence to a thing does occur, it is specific, and the equivalent to the posterior is {45} the specific, except it

employs the more specific and the more general directly to the sharing of the name. In this case this sectioning is not enumerated.

Furthermore, he said: "What are those two?", [referring] to the genus and the species, [treating] them together in one statement. That is to say that each of those two does not complete its conception without the other, since they are added, and between them exists a correlation. If we impose that correlation upon the more general it is commonly called genus. If it is imposed upon the more specific it is called species, since under this species there is [another] species. We do not imagine a species which is equivalent to the genus, but we always imagine something which is only a part of it or more specific. And since the genus and the species are considered to be in concurrence, there are definitions that cause each of them to be conceived as being in seclusion. Genus and species are [also] called absolute. He [al-F«r«bâ] presents their definitions by stating: "The genus, in short, is more the general of the two universals. It befits to answer the question 'what is it?' The species is the more specific of the two". The genus is also considered the supreme genus and the intermediate genus. In the same way the species is considered the posterior species and the intermediate species. He presented the definitions of each of the two isolated from each other in one single discussion. He included in it what is said [on them] in generalization, accomplishing it virtually. He stated: "They are single universals, contending [with each other] in general and in particular. Each of them seemly complies with the question 'what is this individual?' It is general, and there is nothing more general than it. And it is specific, noting being more specific than it. The mediators between those two advance to the arrangement of the specifics of the general. The general leads eventually to that what is more general than it. The more general of each of the two is genus and the more specific is species". He had thus given the definitions of the genus and the species in any respect. Then he stated: "The more general of them, to which no other general does exist, is the supreme genus". By this, he has given the definition of the supreme genus, to which there is no species, that distinguishes it [further].

Furthermore, he said: "The most specific, to which there does not exist anything more specific, is the posterior species". By this, he has presented the posterior species, to which there is no genus that distinguishes further.

{46} Then he stated: "Each of the means between them is genus and species. [It is] genus in comparison with the more specific below it, and [it is] species compared with the more general above." By this he has presented all the definitions of the middle generi and species in extenso. He presented [also] the five meanings entirely in a single discussion in the utmost condensation and in the utmost completeness of concept. In this way, he has given the definition of the genus and the species in any respect, [as well as] the definition of the supreme genus, the posterior genus, the genus that does occur as species and [finally] the definition of the species, that does occur as genus.

You have to be aware that these five predicables had been taken as models by Abë NaÄr in his substantial discussion in order to facilitate their conception. He exposed and explained [them] in [this] essential utterance. All what he pointed out, rests on the patterns. Thus, it is necessary that you set out for the remaining categories. We [will] take examples from them concerning the category of quality (al-kayfiyyah) and one of its species.

[Let us take] warmth [as an example]. From among warmth is the [kind of] warmth, that occurs in the human body. We say, that a human is warm, either by natural warmth or by extraordinary warmth. Each of the two is a species under the warmth of human beings, and each of those two species is a genus which is subdivided - one arranged under the other. It is conveyed concerning the extraordinary warmth in the human [body], that is its intermediate genus which is divided into the division of the [four] humors (alakhluC). Each of the [kinds] of harmful warmth of the humours is in fact [further] subdivided according to its occasions, localities and detriments. In accordance with their state they are [additionally] subdivided until they reach the aforesaid fixed individuals. To each species of them belongs a genus, differentiae, properties and accidents.

Likewise [is the case] in respect with the remainder of the categories. In engineering - in regard to quantity - generi, species and accidents do exist. However, the accidents subjective to these things are more numerous than that what does exist in the sciences, the additions [found] in engineering in particular. It is necessary for you to know, that genus and differentia had been taken by Abë NaÄr as models and as illustration of his saying: "They complete the conception and make it known, since they are crucial".

However, generi and differentiae (al-fuĀēl) had already been received and the reasons had been explained. Likewise is our saying concerning matter (al-muddah): "The statue is made of copper; {47} a pitcher [too] is [made] of copper". [Or:] "Human beings consist of bones and flesh; a horse consists of flesh and bones [as well]". The differentia does also exist in matter. Similar to our utterance: "Garments are made of wool, and there are other garments, that are made of cotton".

The goal (al-ghayah) may be genus to numerous thing, in case it is existent [in them] and originating from them. [This is] similar to nourishment, that is existent in many foodstuffs, from which one is nourished. Likewise, the differentia may be a goal, and this [occurs] in deed very often. It replaces the form (al-Äërah), whether it fashions the form or not. Some of the things do fashion their form and the goal of those forms. From among them are some, which fashion their goal, but not their form. This is in fact very often the case.

The agent, too, may be genus when different goals are attached to it, like our indispensable acts. Often the agent is used as differentia, like in our saying in regard to the wall: Its frame<sup>91</sup> has been erected. It has been by a mason using stone, bricks or clay in order to bear the roof'. In this saying on the differentiae use has been made of the form, the agent and the goal. Concerning his statement on the differentiae: "It is the single universal, that separates [from itself] each of the partial species of its substance from the other species, which is in joint-ness with its genus". The differentia is in regard to that, what deduces, a logical reception. The joint-ness perceives that, what is from among the species and its sharer in regard to genus. If a natural reception is deduced, its nature portrays from something else than what is perceived in its mind the joint-ness. The discussion has so far been about the single universal, which leads to the species, that is always solitary and its entirety.

He presented in this fashion also the definition of genus by the genus, which is emerging from his discussion, because of his saying: "Genus and differentia share in all, what each of them knows on the species, its essence and substance, though the genus knows of the species its substance, with

<sup>91</sup> Or: fundament.

which it shares something else or the substance, by which it shares something else". Out of this differentia two definitions for the genus do emerge: one of the two is the single universal, that knows from the species its essence and substance, with which it shares other [things]. {48} This is its definition with regard to its acceptance, that is recognized for the species. In this way joint-ness is perceived. It is characterized by that, what participates. The other definition is the single universal, that knows of the species its essence and substance by way of that, what shares with it something else. It perceives it and disregards any joint-ness. In this manner, it does arrive at the area of ambiguity, "2" even if it were of a joint generic character.

On the first [definition] he said: "From the species its essence and substance are known, through the things, that we perceive jointly". And on the second [he stated]: "From a species its essence and substance are known through a thing, whose state of affairs are joint". On the first one he deduced two designations concerning the joint-ness with the meaning. From the second one he deduced the meaning intentionally, but from the circumstances it shares.

From that, what he said about the differentia two definitions do emerge: One of them is the single universal, that knows of the species its essence and substance, which it specifies. It perceives by itself the specification [as well]. He said [concerning this]: "By the thing, that we perceive selectively". The second [definition] is concerning a thing, whose circumstances are specifying it, but not proceeding to the specification.

According to his statement, property (al-kh«ÄÄah) is the single universal, that is only a species in its entirety, being always from something other than from what is knows the essence and substance. By his statement he intended to say, that to a species does belong that species, to which there exists an equivalent accident, be it posterior or intermediate. By way of selection, then, it specifies from among the species that [particular] species, to which there does exist something from its accidents, that is equivalent to it.

According to his statement: "The accident equivalent to the species is the property". The definition of property is in relation to the species, since it is

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<sup>92</sup> Or: vagueness.

always employed as distinction of the species, in regard to the particular equivalent to that species. The genus is divided by the property, too, as already mentioned. The property is extant in the species, whether the species are intermediate to its arrangement or posterior to it. The property is [also] extant in those generi, that are species. It is also property to that species, that is disposed to it. That means, it selects<sup>93</sup> by it from all the species, that generalize it, a genus. He stated: "Therefore, its definition is related to the species to which the property is equivalent". Not called property is something, that is extant regarding a supreme genus, {49} since between the supreme genus and another supreme genus does not exist joint-ness. Therefore, that joint-ness is in need of something, that specifies it. For that reason, it supports the supreme genus from among the accident that, what equalizes them.

That accident is not called property, like the materialization of the category of substance from among the ten categories, the fixedness of the category of quantity, the stronger and the weaker [of the category of quality] and the equalization of cognition in regard to the objective of the addition, which is addition in truth. Similar to those accidents, the categories are shaped by us, which are supreme generi. Therefore, there does not exist anything, that rests on them, since they are supreme. Rather, it has been shaped by thing apart from it, [but] equivalent to it. Therefore, the category of addition joins the remainder of the categories of attribution in a firm participation of attribution. In them<sup>94</sup> those properties are kept, which are extant in the analogies to the supreme genus, from which the reflections and the definition ([here:] al-ta'râf) do come. This does not bear resemblance to an accepance of property besides the equivalence of the species. Except the equivalent accidents to the supreme generi were to be inside the properties, for they are not more general and nothing is more specific then them. [In that case] they do resemble the properties because of equivalence.

His statement on the definition of the accident is, that: "It is either more general or more specific". By this he meant, that nothing is equivalent to the single existing, since all from among the accidents, that do exist equivalent to a single, are accidents. The term accident is employed by him specifically.

<sup>93</sup> Or: it selects.

<sup>94</sup> The attributions?

The accident is commonly hold to be equivalent accident and non-equivalent accident. In particular the non-equivalent is hold single existing. It is necessary for you to know, that the absolute accident is extant in the substance, and, in regard to the intelligibles of the accident, that they take the place of another from among them - either a category replaces another category or a category [replaces] an accident of property. In relation to another category it is accident.

In regard to the category of substance he explained, that the categories of the accident, that is extant in them, is either equivalent or non-equivalent. The category of substance has already singled out the nine categories which are extant in it and not extant in others, such as the category of location (maqëlat 'al-ayn) and the category of possession (maqëlat 'lahë). Those two [categories] are not extant in essence, except in the category of substance (maqëlat al-jawhar). {50} In the category of quantity (maqëlat al-kam) the category of quality of quality category of quantity (magëlat al-kayf) is extant at a great deal, such as [in the utterance] "one of the pair" and "the single". Both are qualities in number. Or like the shape of three-dimensional bodies [on the one hand] and surfaces [on the other]. In it [i.e. category of quantity] the category of attribution is extant, such as in "the multiples" and "the portions". The category of location conceives from the quantity that, what follows the its utterance in order to become affected. In the category of quantity the category of position (maqëlat al-waî') is extant from among the categories of the accidents. In the category of attribution the remainder of the categories are extant as its constituents. To the remainder of the categories analogies do exist - such as "the son" and "the father" in regard to substance, "double" and "specimen" regarding quantity, "the intenser" and "the weaker" concerning quality and "the above" and "the below" in regard with location - if the two do occupy the two extremes of the [respective category].

The accident is employed regarding the distinctions of the generi and the species. Often it is used concerning the predicables of the species. We say, for instance, on the Nubians, that they are those, whose skins are black and who are living in such-and such place. They are [thus] distinguished by three categories, i.e. the category of possession, the category of quality and the category of location into common accidents, from among which that is

gathered, what equalizes them. This does resemble the distinction of the individuals by more general and more specific accidents and by what is above them. Likewise, we are saying: "Zayd is the white one, who does wear [a black] garment, [being himself] at the right side of So-and-so". Three categories are distinguished by this. It is if to a subject were something the equivalent to three of the attributes to the category, even, if it singles out from what is equal to it in regard to that place, besides who is in it. It separates from the remainder of the characteristic saying, that, what does not exist in the definition or descriptions.

His statement concerning the triangle is, that its angles are equivalent to two right angles. He said: "It is the property of the triangle". This brings forth a property to what has been said above, [namely] that it is in truth like that. Therefore, the equivalence of the two angles to two right angles is extant in others than triangles for angles, that are both existing at two sides of its lines. Moreover, it is also property to other [geometrical] figures. In the same way, the equivalence of the angles of quadrangles to four right angles is with regard to non-quadrangles extant in those angles with two intersecting straight lines. 95 [Concerning] the remainder of the figures [he stated, that] the equivalence of their angles, amounting to that what it is equivalent to them from among the right angles, is property in truth. {51} This is similar to what we are saying about the pentagon. Its angles are equal to six right angles. And in regard to the hexagon: [Its angles are equal] to eight right angles. And concerning heptagons: [Its angles are equal] to ten right angles. Likewise [will be the case] with all figures continuously. The [number of the] angles of all figures is in comparison with the previous ones exceeding about the equivalent of two right angles. Therefore, any figure does extend in comparison with the previous one about the shape of a triangle. Consequently, all of them are divided into triangles, however they [actually] may be shaped.

Any figure - supposed you were to place a spot in its middle at any place of the centre - and furthermore if you were to draw from that spot lines in the direction of the borders of each side of the angle - would be portioned by triangles in accordance with the number of sides. Whenever you multiply the number of the [triangle's] sides (al-aîl«') with any number to which the

<sup>95</sup> Translation not certain.

triangle is equal [?] from among the right angles, four combined [?] right angles will be subtracted from the sum <sup>96</sup> (mujtama') around the point. The remainder would then be a quantity ('adad) of what the angles of that figure constitute from among the right angles." <sup>97</sup>

<sup>96</sup> Or: addition (?)

<sup>&</sup>lt;sup>97</sup> Translation of this paragraph not certain.