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NOTE.

The responsibility of every Paper rests with the Author.

THE BIRDS OF THE ASSYRIAN MONUMENTS AND RECORDS.

By the REV. WILLIAM HOUGHTON, M.A., F.L.S.

Read 7th February, 1882:

BEFORE I introduce some of the various names of birds mentioned in the records, or the actual figures represented on the monuments, to your notice this evening, it will be desirable to make a few remarks on the subject generally. And first I wish to say a few words on the nature and value of the evidence afforded. We have to depend on the information supplied by actual figures on the monuments, such as on the slabs, cylinders, bronze dishes or other objects, and by the description of the birds given in the records. Unfortunately, the figures occur very sparingly, and when they do occur they are almost always very rudely drawn. The Assyrians either were not able or did not care to attempt anything like artistic effect, or even rude accuracy, in their delineations of bird-life; these stand out in striking contrast to their often successful efforts to pourtray the forms of horses, cattle, sheep, goats, lions, dogs, hares, and other mammalia to which I have referred in my former paper on this subject. In the case of such birds as present at a glance some striking characteristic in real life, the absence of any correct pictorial form is, so far as relates to identification, of slight consequence. The figures, for instance, of the ostrich, ludicrous and grotesque as they are, at once speak for themselves. The ostrich is a peculiar looking bird, and therefore the drawings cannot be mistaken for anything else. The figures of the head and neck of the swan clearly point to that bird and to no other; but, on the other hand, where there is *nothing strikingly peculiar* in the form of a bird, it is often impossible to say to what species, or even to what family, the representation refers. The figures of the large rapacious birds which occur as accompaniments of a battle-field scene, do not clearly tell us whether they are meant for eagles or for

been bequeathed to you in some distant town, take this sum, and repay me when you can." When the man had accepted the money, R. Jochanan told him that he had intended it as a gift.¹

Such is a brief outline of the benevolent laws and usages which regulated the treatment of the poor among the ancient Hebrews. It would be difficult to prove that these institutions were simultaneously in force at any one period. But we may safely assume that the laws relating to agricultural produce were observed while the Jews inhabited Palestine, and the cancelling of debts must have been practised in the time of Hillel, who lived in the reign of the Emperor Augustus. The other usages to which I have referred are found in the Talmud, in passages acknowledged to date from the second century of the current era; we are therefore fully justified in concluding that the *latest* of these charitable practices were introduced not later than the second century of the Christian era, while many of them undoubtedly belong to a period of much greater antiquity.

¹ Shekalim, v, 15.

from Konjurjik. Layard II. pl. 40.

ASSYRIAN BIRDS. Plate I.

Vincent Thomas Lloyd Garrison

vultures, though they bear a more general resemblance to the former. The representations of certain smaller kinds of birds are still more puzzling; and were it not for slight clues afforded by other evidence, such as the presence of trees, or of nests and young birds on the trees, together with the parent-forms, or to that of fortresses or other buildings in close proximity to the birds, all attempts at identification would be absolutely fruitless. I may mention especially the figures of certain birds represented as being shot by bow and arrow, and carried in the hand, as climbing trees, after the fashion of woodpeckers and tree-creepers, and in other attitudes. At one time I thought that some of these birds were meant for some of the *Perdiciidæ*, or partridge family, such as the francolins, now common in Turkey and the adjacent lands, and doubtless well known to the ancient Assyrians; but the presence of these birds with their nests and young ones in the nests on *trees*, at once excluded francolins, which always build on the *ground*. Then I thought of pigeons, but the deep nest at once put a stop to that idea, for all the *Columbidæ*, I believe, make shallow nests; and then I thought of rooks, and as the figures of the birds in question may possibly be meant for rooks, and as the surroundings, such as congregating and building deepish nests on trees near inhabited places, are on the whole more or less satisfactory, I think that the evidence is more in favour of the rook than of any other bird; but still the figures may be intended for some bird quite different. The specimen shown as climbing a tree may well denote a woodpecker, the habits of which bird having been much noticed by the Assyrians. Pigeons are evidently here and there intended; the raven appears, and I think francolins are also intended to be represented.

As to the nature and value of the evidence afforded by the *names* of birds occurring in the records, we have to depend almost entirely (1) on the cursory notices of the feathered tribe in the Historical Inscriptions, or (2) to their simple names as they are given on the Bilingual and Trilingual Tablets. Now the value of the evidence afforded by the Historical Records is very small indeed if taken by itself; the notices are too general and vague, and the

information very scanty. "Like a bird he fled," a phrase of frequent occurrence, can convey no definite meaning beyond that of swiftness; "like a *cu-mu* or *tus-mu* bird he placed the ensigns of his royalty"; "like a *Šu-din-nu* bird he fled," "like to *Šu-su-di* birds their hearts were terrified"—all these are sentences which leave us almost in the dark as to what kind of birds these names respectively denote; all that the two last instances convey to us is that some *timid* species is intended; but in *connection with other evidence* such as that supplied by the Bilingual Lists, these and similar phrases may afford some information, more or less important, as to the bird intended.

The *nature* of the evidence afforded by the Bilingual and Trilingual Lists is chiefly, if not solely, philological; in the former we meet with columns of bird-names given sometimes in two of Assyrian, or in one of Assyrian and one of Accadian columns; in the Trilingual we meet with two Assyrian columns and their equivalents in one Accadian. The *value* of this kind of philological evidence is variable; we have to depend on the derivation of the name, and to compare that name with names occurring in the cognate languages in the case of Assyrian; in Accadian we have to ascertain the meaning or probable meaning of the syllabic parts which compose the whole bird-name. Where the similarity between an unknown Assyrian word and an ascertained Hebrew or Arabic name exists, there is, of course, very often strong evidence to believe that the bird itself is the same, other points, if such there be, being equal. But we must see, before we identify any bird-name with some particular species, that the philological evidence is in accordance with the general zoological facts, whether as regards the habits, form, or geographical locality of a species or family; or, the philological evidence, if it lacks actual zoological corroboration, should, at least, incorporate with it some notion or other, even if erroneous, prevalent at any time among the people who make use of the name. Fanciful and erroneous notions on natural history subjects, so common formerly, and still existing amongst uneducated persons in our own country, would naturally now and then find expression in a

name. This has to be taken into consideration. But still, as a rule, we must take care that the philological information conveyed by a name should be not contradictory to zoological fact. If, for instance, the meaning of a name points to a long-legged creature, and we identify that creature with a short-legged one, the evidence supplied by philology and natural history facts is contradictory and our identification false. This is an extreme illustration of what I mean; but caution is necessary in all our attempts to discover the meaning of the various names which in ancient times, whether in Asiatic records or in the works of the classical writers of Greece and Rome, were used for some mammal, bird, reptile, fish, insect, or other creature. If we identify any bird or *other* animal-name with some species which is known never to have existed—I speak, of course, within historical, or at least post-palæontological times—in the districts indicated, or which it is extremely improbable ever could have there existed, such identification must be erroneous. If evidence afforded historically by description, or philologically by the simple meaning of a name, point to some *strong* and *fierce* creature, and we refer the name to some animal which is almost harmless, our conclusion is wrong. But philological evidence, when *taken by itself*, may be misleading, and identity of sound between names in allied languages be no proof of the identity of the animal. It is also very important to bear in mind such a thing as the geographical distribution of animals in our attempts at identification as I mentioned just now. Again, birds or other animals may have existed within, comparatively speaking, recent historical times, in certain localities, and be no longer found there now; the absence of a certain creature in a particular area does not of necessity forbid the possibility of its existence there in early days; still there must be more or less *probability* of such an occurrence, a probability based on what we know of the actual conditions necessary for the maintenance and well-being of the life of such and such an animal. We must have regard to what knowledge we possess of the geographical distribution of animals, and thus compare the known present with the probable past.

In the writings of the Greek and Roman authors we meet with descriptions of animals, more or less full of information, sometimes very erroneous, sometimes very correct; now vague and uncertain, now vivid and exact. But in the Assyrian Records we meet with scarcely any help of this kind; descriptive accounts fail us almost entirely, the references to birds are scant in number and poor in information, and consequently we are driven to depend almost entirely on such philological evidence as is conveyed by the meaning of the names on the Bilingual or Trilingual Tablets, on the derivation and meaning of the Assyrian names and their Accadian equivalents.

These Accadian names often supply important materials for consideration. The frequent use of the determinative prefixes or suffixes is almost always of some definite value. In the case of the birds whose names occur in the lists the presence of the suffix 𒌦 (*khu*) informs us that the name is that of some bird. Here we start: we know that we have to do with the class *aves*, and no other. Then as to the probable bird denoted by the name. Although much at present remains obscure, most interesting and valuable help sometimes meets us on the analysis of the Accadian name. When the meaning or meanings of the syllabic parts which constitute the whole Accadian compound name are really known, then often the *whole* is known, and one peculiarity in the form or habits of a certain bird is admirably portrayed in one well expressed and well selected compound Accadian name; and when the information thus conveyed by the graphic single-word description accords with the form or habits of the bird supposed to be indicated, and when its equivalent Assyrian name answers to that of some ascertained species in the kindred languages, our evidence is perfectly satisfactory. Sometimes the Accadian bird-name clearly reveals itself, even without Assyrian help. I think that, for instance, the Accadian names of the swallow, which combined give the meaning of "the insect-bird which builds its nest or makes its seat on beams or wood-work, and which (in flight) closes its tail," are sufficiently indicative of that bird. Unfortunately, the part of the tablets which

*Battle Scene.
Layard I. pl. 64*

Layard I. pl. 22 Battle Scene.

Layard I. pl. 26 Battle Scene.

Layard I. pl. 14 Battle Scene.

Layard I. pl. 18 Battle Scene.

once contained these Accadian bird-names are often mutilated—sometimes absolutely nothing, sometimes next to nothing, is left. The Assyrian names of course we must compare with Hebrew or Arabic, and see whether similar words occur in these or other cognate Semitic languages, and discover what is *their* ascertained or probable signification. But unfortunately we are sometimes in the dark as to the birds which the names here represent, and we may in the interpretation of some Assyrian name be merely comparing one unknown quantity with another, or sometimes explaining in fact *ignotum per ignotius*. Modern Arabic (vernacular) names sometimes afford a clue to identification, but they are used often in a vague and general sense, and seldom bring important aid. Again, the Accadian and Assyrian characters of the syllabary are frequently polyphones: they have more phonetic values than one attached to them; so we do not always know for certain the real *sound* of a name, and how it was pronounced, so that the uncertainty of *reading* is added to that of *identification*. Sometimes, though rarely, we can obtain a clue by referring back to the earliest forms of the characters through their archaic types, as pictorially represented. When we consider therefore that the almost entire materials for help in *attempts at identification* stand on a philological basis, we must proceed with caution. Philology is in our case a very important factor in the solution of the ornithological equation, but as I said before questions relating to zoology of necessity present zoological claims.

It is from want of this recognition that some writers on this class of subjects and commentators have been led into very great mistakes, and given very unlikely or altogether impossible explanations of certain bird or other animal names under their consideration: thus we have the Hebrew *Rēm*, an animal described as being of great size, powerful, and fierce, identified with the oryx (*O. leucoryx*), one of the most harmless of antelopes, simply because the Hebrew name is in sound at least similar to the Arabic word for that animal. The narwhal (*Monodon monoceros*), that curious marine cetacean with its one developed tooth, a creature

almost exclusively confined to the North Sea, has been suggested as the *nakhiru* of the Assyrians obtained from the Mediterranean Sea. Parrots have been unhesitatingly placed as native birds in Palestine and the neighbouring countries, in utter disregard of the extreme improbability of their occurrence there, seeing that they belong pre-eminently to a tropical or sub-tropical group of birds. The frigate bird (*Fregetta*) has been suggested as the *Shâlâc* (שָׁלַץ) of the Hebrew Bible, a bird which in the case of both species of this genus is exclusively confined to tropical or sub-tropical parts.

I hope that we have at last seen the end of the claims of the *Oryx leucoryx* to represent the *r'ém* of the Hebrew Bible, and the *rému* or *am* of the Assyrians and Accadians. At length, amongst our German friends the *rému* is understood to denote a "wild-bull." Haupt, Lotz, Hommel, and quite recently Delitzsch, have decided in its favour. It seems surprising, when we consider the abundant evidence in favour of some large species of wild-ox, that its claims have not been universally accepted as being the *r'ém* of the Hebrew Scriptures.¹ I believe that Bochart, the learned author of the *Hieroicoicon*, who died in 1661, was the first—at any rate, the first author of note—who contended that the Hebrew *r'ém* (רֵאִים, רְאִים, רֵאִים) was identical with the Arabic رَيْم, the white antelope of North Africa and lands adjacent to Palestine. Bochart was followed by Rosenmüller, Winer, and most modern German commentators, as Ewald, Franz Delitzsch, Kalisch, etc. But did not Arnold Boot, in his *Animadversiones Sacrae*, as far back as 1644, show that the *r'ém* was probably some species of *Urus*, or wild ox? Did not the learned Schultens in his *Comment. in Jobam* xxxix, translate the Hebrew word by *Bos sylvestris*? Did not Gesenius (*Thes.*, p. 1249) show very forcibly that some *Bos ferus* or *bubalus* was to be preferred to the *dorca alba* of Arabian writers? Parkhurst, Maurer, Carey, Robinson,

¹ So long ago as 1862 I showed the probable identity of the *Bos primigenius* with the Scriptural *R'ém* (*An. and Mag. Nat. Hist.*, November, 1862). Tristram confirmed this opinion in his "Land of Israel," and the Assyrian records and figures also bear clear testimony.

Tristram, and lately Mr. Cheyne, in his valuable work on the Prophecies of Isaiah, have decided against the white antelope; and though some of these writers are wrong in referring the *r'ém* to the buffalo, which found its way westerly from India only in, comparatively speaking, recent times, yet such an animal would answer better to the fierce creature spoken of in the Book of Job, than "the white doe of Golius." The identity of the *r'ém* or *rému* with the *Bos primigenius* is, I maintain, fully established by the most convincing evidence, as I have shown in a former paper in the Society's "Transactions," evidence which stands on bases zoological, palæontological, and historical, as shown by the figures of the wild cattle on the Assyrian monuments compared with the form and size of the horn-cores and skulls preserved in our museums, as well as by the interesting fact that remains of this *bos* have been found in the very localities where an Assyrian monarch states he killed these animals. I should state that recently Dr. W. Lotz, in his valuable work, "Die Inschriften Tiglath Pileser's I," has written to show that the *am* and the *am-ši* of the Accadian records are two distinct animals, the former being the *rimu*, or "wild bull," the latter the "elephant," names which, with other writers, I had considered as synonymous, the latter term being merely the fuller form of the other. There are a few difficulties which at present strike me as attending Dr. Lotz's explanation; but these will probably vanish after a thorough investigation of the whole argument, and Dr. Lotz will be found to be right.

You will observe, in the course of this paper, that the names of several birds are onomato-poetic, mere human attempts to give an idea of the sounds emitted by various birds by incorporating that idea in the word thus imitatively formed. This is to be expected. Without saying a word on the question of the possibility of any language having been formed on the principle of imitation, or seeming in any way to be a disciple of what has been called the *Bow-wow* school of philologists, it is quite certain that the *Bow-wow* theory is to a considerable extent true in the formation of bird and other animal names. The old Accadians and Assyrians had their *ku-cus* and their *dic-dic-i* birds just as we have, and they

made use of such imitative words to a considerable extent to express different kinds of birds in their ornithological vocabulary. In some cases the resemblance of the name thus formed to the actual voice of the bird is self-evident, as for instance in the simple and easily simulated note of the cuckoo, the name of the bird almost everywhere wherever it is known. Similarly our peewit, or the Arabic *tadwît*, or the French *dix-huit*, discloses at once the bird intended by the name. But though it is, perhaps, generally the case that we may be able to say whether such or such a name, be it Accadian or Assyrian, Greek or Latin, or in other languages, is or is not meant to be imitative of a bird's voice, it is not easy to say *what bird* is actually denoted, partly because many birds of different kinds utter not very dissimilar notes, partly because it is not easy for the unpractised voice to utter ornithic sounds in human language, and partly, also, because the same notes sound differently to different ears.

Practised persons can sometimes most successfully imitate bird-voice, and counterfeit their call-notes so admirably as to deceive the birds themselves; but even such persons would find it a difficult matter to put into writing such a well-chosen selection of syllables as to express in any natural way the sound of the notes they had themselves learned so closely to imitate. The *toroto-tinx*, *toroto-tinx*, *popopoi-popopoi* of the birds of Aristophanes, can but give a very faint idea of the sounds uttered by a chorus of feathered songsters. Similarly, the imitative words in the Assyrian lists can but give us a very imperfect notion of the bird-voices which the names thus formed are intended to represent. Sibilants, speaking generally, are meant to express the chirping or warbling notes of the song birds, while gutturals will give us the harsh notes of some croaking raven or crow.

I have already stated that the references to birds in the records are few in number and almost destitute of information, consequently there are many questions relating to our subject which at present will have to remain either wholly unanswered or only partially responded to. What birds were domesticated, what kinds used as food, what methods did they employ to kill or take captive living birds? Did

the Assyrians practise falconry, or keep song-birds for the sake of their music? What particular birds were held sacred to their gods? All these are questions which can only very imperfectly be answered. Certain birds, we may be sure, were used for food; and the lists which have the determinative prefix (𐎶𐎶𐎶) of food enumerate some birds in the catalogue, but here again unfortunately the tablets are sadly broken, and the useful Accadian is often almost entirely lost. Such kinds as were considered to be injurious to the crops are mentioned as being good for food. This would comprise sparrows, finches, larks, buntings, and a host of the small insectorial birds. We may also be quite sure that they ate pigeons, wild-ducks, partridges, quails, francolins, and many other kinds perhaps. The swan, whose head and neck are drawn on the monuments as a figure-head of a soldier's bow—fitly there, perhaps, as emblematic of strength—perhaps was used as food. Whether any of the rapacious birds of prey were ever used as food, I know not; but we may be certain that the Assyrians made use of birds' eggs. To what extent, if to any, poultry-keeping, or the rearing of thoroughly domesticated fowls, ducks, and geese, as we understand the term, was practised, we know not. There is no mention of domestic fowls in the Old Testament writings, though we know that the art of hatching hens' eggs by artificial incubation was largely practised by the ancient Egyptians. The tame duck, however, as we understand the term by the familiar waddling bird of our farmyards, was not domesticated by the Egyptians, I believe, and even the Greeks and Romans kept ducks only in a semi-domesticated state, for they had to enclose their duck preserves (*nessotrophæa*) with nets to prevent the birds flying out. With regard to domestic fowls, when we remember that the cock is called by Aristophanes the Persian bird, and that the domestic fowl is said to be figured on a Babylonian cylinder of the sixth or seventh century before Christ, and that the cock under several names is mentioned in the food-lists, it is pretty certain that the Assyrians kept domestic poultry. Natural history evidence points to the East, as to India, for the origin of our domestic bird, with all its numerous

varieties, and it is from this source that our domestic fowls came, through Persia, to Greece and Rome, and elsewhere westerly. We know that the Assyrians kept different kinds of birds in confinement in what we may call aviaries, and that wild water fowls formed a pleasing feature in their gardens, and on their artificial ponds or lakes. From this source they may have obtained a portion of their eggs, which doubtless were used as food. Figures of ducks in a recumbent posture were carved out of marble and other kinds of stone, and used as weights. Specimens of these duck-weights may now be seen in the British Museum.

As regards the question whether the ancient Assyrians kept song-birds, there is no positive information. Sennacherib tells us that he made captive Hezekiah, King of Judah, and kept him as a bird in a cage (*ina kuppi*), *i.e.*, in some confined place. Mention is made in the lists of a bird called *pašpašu* and *its-tsur rabi*. It is called a small bird. *Pašpašu* is, I think, imitative, denoting some singing bird. The words *its-tsur rabi* can only mean bird of the great. These birds bred in confinement, for the young of these birds of the great are mentioned. Therefore the chirping or "singing bird of the great" seems to allude to some rare and perhaps foreign bird, which kings and great men would keep in their houses, or in their aviaries, and prize for its singing powers. Could they possibly know anything of parrots? A parrot-like bird is figured on the monuments. Parrots were known to the Greeks in the time of Aristotle, and there are several notices of these birds in the classical Greek and Latin authors, to whom they were first made known, perhaps, about the time of Alexander's Asiatic campaigns. The green *Palæornis torquatus*¹ is the species with which they were familiar. It is quite probable, therefore, that the Assyrian monarchs obtained parrots from India, and possibly some kind of parrot might be meant by the expression "small piping bird of the great." As to the methods adopted in killing winged-game, the monuments show us that the bow and arrow were effectively used. The larger kind were sometimes killed with clubs.

¹ *P. torquatus*, the rose-ringed parakeet, is well-known in Nubia, Abyssinia, as well as in India. The allied species, *P. Alexandri*, might also have been known.

Layard I. pl. 20. Battle Scene.

Layard I. pl. 18. Battle Scene.

Layard I. pl. 67^a.

Cylinder. Bibl. Nat. Paris.
Gazette. Arch. 1880. p. 254.

Botta I. pl. 75.

Sporting Scene.
Botta II. pl. 109.

Ornament from bronze vessel
from Nimroud. Layard II. pl. 63.

These, I suppose, would be such large birds of prey which, from being gorged with food, were unable to fly. Gins, nets, and such like devices were doubtless used by the Assyrians, though I am not aware of any definite statement to that effect.

That ideas of good or ill fortune prevailed among the Assyrians, as belonging to different kinds of birds, appears nearly certain, for the character ( ) which among others is that of "destiny," is also used to denote a "swallow," the bird or a bird of destiny, as foretelling or proclaiming (*nabu*) by its periodic returns the advent of spring, while the old pictorial form of the character, as I have on a previous occasion endeavoured to show, represents the figure of a bird in flight dropping its eggs, together with an ideograph which may be interpreted as representing "going away and again returning in the vault of heaven." The swallow clearly was, as among ourselves, so with the ancient Accadians and Assyrians, the harbinger of spring, and of the warm returning rains, when the herbage would grow again, and good fortune and prosperity attend mankind; and in connection with this idea it is interesting to note that one of the different Assyrian names for the swallow is *bu-li-li*, i.e., "the bird of beneficial rain,"—for the Arabic word to which I think it is to be referred denotes both "rain or moisture" and "prosperity"—as if the one depended on the other, which, indeed, is neither more nor less than absolute fact. Similarly the cuckoo was favourably regarded as a bringer in of prosperity.

The common Accadian character ( ) *khu*, though, perhaps, not generally pronounced, representing birds as a class, is the ordinary determinative suffix; the names of "eggs," "nests," young brood, &c., will be noticed by-and-by. In Assyrian the general name of a bird is *its-tsu-ru* ( ), which like the Hebrew *tsippôr* (צִפּוֹר) is an imitative word, expressive of the chirping or twittering of many kinds of birds. A nest was called *kénnu* ( ) like the Hebrew *kén* (קֵן) from the root קָנָה "to form or build."

The ornithological character of the fauna of Assyria.

Babylonia, Syria, and Persia is varied. The different species which have been noticed in these lands will be found in Dr. Ainsworth's appendix in Col. Chesney's "Expedition for the Survey of the Rivers Euphrates and Tigris in the years 1835-1837," and published in the first volume of that work; an interesting account also of many of the birds noticed or known to exist in these lands will be found in the same author's article on "The Natural History and Resources of Turkey," published in Colburn's *New Monthly Magazine*, No. LIV, June, 1876, pp. 646-656. I beg to express my best thanks to Dr. Ainsworth for numerous letters with which he has favoured me on certain questions on which I desired information; some notice of the birds observed in Assyria, &c., will be found in the published "Travels" of various authors, such as those of Loftus, Rich, Layard, and others. Much interesting matter on the birds of Palestine will be found in the papers by Canon Tristram, published in various articles in the "Proceedings of the Zoological Society of London," and an excellent review of the Natural History of Palestine will be found in the same author's "Natural History of the Bible," published by the "Society for Promoting Christian Knowledge." For the birds of Persia, Mr. W. T. Blanford's work, "Eastern Persia," vol. ii, *Zoology and Geology*, 1876, must especially be consulted, because all the animals known to inhabit Mesopotamia are included in this beautifully illustrated and valuable work. The territorial limits of the region to which Mr. Blanford's work *especially* refers are those of the present kingdom of Persia, but the inhabitants of Mesopotamia are also included, "because it is scarcely possible that any should be found on the Tigris and Euphrates, which do not exist in the Persian portion of the plains east of these rivers; and similarly the wading and swimming birds of the Caspian are all comprised in the lists, because all of them are believed to be met with at times on the Persian Coast." (See Introduction, p. 3.) From this it will be seen that in Mr. Blanford's work we meet with a great deal of information which closely concerns the subject I have brought before you this evening.

I need now give no more than a general sketch of the

principal groups of birds which occur in the countries with which we are concerned. The number of species of birds known to inhabit Persia is estimated at 384, but further research will doubtless add to the catalogue. Of the *Vulturidæ*, I may mention the griffon (*Gyps fulvus*), and the Egyptian species (*Neophron percnopterus*). The large *Falconidæ* include the Lämmergeier (*Gypaëtus barbatus*), the imperial eagle (*Aquila heliaca*, Sav.), the golden eagle, the white-tailed sea eagle (*Haliaëtus albicilla*, L.); the osprey (*Pandionidæ*) *Pandion haliaëtus* is common about the Caspian. Besides the large kinds of diurnal birds of prey may be mentioned falcons of different species, as the peregrine, now employed by Persian falconers, the Babylonian and others, and kites (*Milvus*). Of the smaller hawks, we have the sparrowhawk and the kestrel; the harriers, both hen and marsh, buzzards, &c. Of the *Strigidæ*, the great eagle owl (*Bubo ascalaphus*), the long and the short-horned owls, the little Scôps, and the *Athene glaux* may be noted.

Of the order *Picariæ* (fam. *Picidæ*), several kinds of woodpeckers; among cuckoos there is the common bird and the great spotted species. The bee-eater, hoopoe, kingfishers of different kinds, night-jars, swifts, are more or less common. Of the order *Passeres* I may mention shrikes, thrushes, nightingales, blackbirds, golden orioles, wagtails, finches, various kinds of sparrows, besides our common domestic species; these smaller incessorial birds were doubtless included in the term of "birds destroyers of crops," *abicta ekili*; larks, starlings, called little shepherd-birds by the Accadians and Assyrians as being so often found with cattle and sheep, and the locust birds (*Pastor roseus*) are found more or less common in many parts. Of the family *Corvidæ* one meets with the common raven (*C. corax*), and the smaller brown-necked (*Corvus umbrinus*) of more gregarious habits, and crows, chiefly the hooded variety. The jackdaw is common in the highlands of Armenia, but rare, if it occurs at all, in Persia; rooks occur in Palestine, but not in Assyria, and have not been observed in Southern Persia.

The order *Columbidæ* is well represented, both in species and individuals; pigeons are common everywhere, and tame

varieties, as tumblers, jacobins, and carriers are known; wood pigeons, rock pigeons, and turtle-doves. Several names occur on the monuments which appear to designate different kinds of doves. Of the order *Gallinæ*, sand-grouse (*Pterocles arenarius*) abound in the large semi-desert plains, cultivated only where water is available for irrigation, in south Persia; this is the most abundant game bird, Dr. Ainsworth tells us, of Arabia, Syria, and Mesopotamia. The birds of this family (*Pteroclidæ*) are very poor and insipid food. Pheasants abound in the Caspian forests, but not in Assyria; rock partridges and francolins are more or less common; sand partridges (*Ammodramus*) are scarce.

Coots, water-hens, land-rails, and water-rails, among the *Rallidæ*, occur; and that beautifully coloured bird, the *Porphyrio veterum*, the purple gallinule, conspicuous with its brilliant blue plumage, and red legs and beak, is said to be abundantly found on the Caspian. Of the *Scolopacidæ* mention must be made of woodcocks, snipes, sand-pipers, stints, dunlins, curlews, stilt-plovers, and avocets. Among the family of *Charadriidæ* lapwings abound in the plains of the Euphrates valley, and are common everywhere. The golden plover (stragglers), the spur-winged *Hoplopterus spinosus*, the collared pratincole, oyster-catcher (very common), and others of the family have also been recorded. The *Otidæ*, three species; *Otis tarda*, "the great bustard"; *O. tetrax*, "the little bustard"; and the *O. McQueenii* (Gray), *i.e.*, the Hobara, or Hubri, or common bustard of Persia. The *Otis tarda* is said by Ainsworth to be generally a solitary bird, or to live in pairs, but sometimes it is found in flocks. It is frequently met with in the stony districts of Syria. The *Gruidæ* are represented by the common crane (*Grus communis*), very plentiful in South Persia, but only on passage, and by the Numidian species (*Anthropoides virgo*). Of the *Ciconidæ* the white stork (*C. alba*) is especially common, and the *C. nigra* also occurs. The *Ibis sacra*, the sacred bird of the Egyptians, is not found in Mesopotamia, nor in any part of Asia; but its allied relative in general form, if not strictly in ornithological characters, *i.e.*, the *Comatibis comata*, Great Bald Ibis, is very common in some parts of the country.

Many kinds of herons (*Ardeidæ*) abound, such as the buff-heron, or "cow-bird" (*Ardea russata*), so-called from its association with cattle and sheep, like our common starling—a habit noticed in the bird lists. The common heron (*A. cinerea*), white heron or egret (*A. alba*), the little egret (*A. garzetta*), bitterns both small and great (*Botaurus stellaris* and *B. minutus*), have been noticed.

Spoonbills (*Plataleidæ*) are found on the shores of the Caspian. The order *Anseres* is represented by numerous families, and the species often occur in amazing numbers on migration. Of the *Phænicoptera*, the Flamingo (*P. antiquorum*) is seen in marshy places, and said to be common on the shores of the Caspian. A curious story of this bird has been recorded which I will notice further on. Of the *Anatidæ*, or duck family, the common wild-duck, teal, pochard (several species), pintail, golden-eye, shell-drake, ruddy shell-drake; wild-geese, as the white-fronted, bernicle, and red-breasted species, have been mentioned as occurring in various localities, but only on passage. Dr. Ainsworth says that ducks and geese are little cared for, and rarely domesticated by the Mahometans.

Swans abound on the Caspian in winter, and, in some localities, thousands are sometimes to be seen, represented by the two species, *viz.*, *Cygnus ferus* and perhaps *C. olor*. The Assyrians ornamented the ends of their bows with the heads of swans, as represented on the monuments. Probably they domesticated these birds, and ate their flesh and their eggs. Of the *Laridæ* several sea-gulls are found, especially on the Caspian and the Persian Gulf. The commonest species are said to be the *Larus canus* and the *L. ridibundus*. Some kinds are quite tame, and fearlessly approach the fishermen's boats on the shore, or even enter villages. The large black-headed gull, sometimes called the Royal Eagle-gull (*L. ichthyaëtus*), the most magnificent of the *Laridæ*, is found throughout the southern coasts of Persia in winter, resorting to the Caspian, where it breeds, in the summer. Dr. Tristram noticed this gull on the Sea of Galilee, where he found it quite tame; whereas Mr. Blanford speaks of it in the Caspian as being difficult of approach. Several species

of Terns (*Sterna*) are recorded. Among the *Procellariadæ* Mr. Blanford mentions *Puffinus obscurus*, one of the Shearwaters, as occurring on the Makrán coast, and as being probably common in the Persian Gulf. Birds of this family are remarkably swift on the wing—can fly to windward in the stormiest weather, or rest on the water with the greatest composure in the most tremendous seas. Some of them might have been observed by the Assyrians. The *Pelicanidæ* are represented by the well-known species *Pelicanus onocrotalus*, common on the Caspian, and by the *P. crispus*, also found on the Caspian. The specific name, *onocrotalus*, of course refers to the ass-like voice of this bird; and it is curious to find that this idea is conveyed by one of the Assyrian names of the Pelican, namely, the “she-ass of the rivers” or waters. Cormorants abound on the lakes and rivers of Southern Persia, as well as on the Caspian. The species are the *Phalacrocorax carbo* (the great black cormorant), and the *P. pygmaeus* (the little cormorant). The *Struthionidæ* are represented by the ostrich (*Struthio camelus*), which however is rarely if ever seen now in Mesopotamia. It formerly reached, as Canon Tristram tells us, as far as the sandy plains of Sindh, in Western India, but is now extinct there. It was evidently known to the ancient inhabitants of Assyria, who have treated us to very grotesque figures of this bird, in some very extraordinary attitudes, on the monuments, and have left on record that it was known to them as the “long-legged beneficent bird.”

After this imperfect sketch of the species of birds now known to occur in the lands with which the subject is connected, I proceed at once to consider the various names which are mentioned in the Records.

(1.) The Vulture (*Vultur gryphus*) was definitely known to the Assyrians by the names of *na-as-ru* and *'e-ru-u*, although these words are also used more generally to denote any large raptorial bird, either of the family of *Vulturidæ* or *Falconidæ*. *Na-as-ru* is identical with the Heb. נֶשֶׁר (*nesher*) Arabic نَسْر (*nasr*) a “vulture” or “eagle,” from a root meaning to “tear in pieces.” The word *'e-ru-u* is to be referred to the Chaldee ܐܪ (*ar*) *gryphus*, a “vulture”; with which may be com-

pared the verb עָרָה “to be naked,” and probably alludes to the naked neck of the griffon vulture. The Accadian equivalent ID KHU, perhaps pronounced *êru* (𒂍 𒄀), signifies “the powerful bird,” and, like the two Assyrian names, is doubtless generic. References to these powerful birds of prey are frequent in the inscriptions, as “the birds of heaven,” in allusion to their lofty soarings in the air, or they are mentioned as building their nests and having their abodes on rocky and inaccessible mountains. Figures of these Raptores are not unfrequent on the monuments. They occur as accompaniments in battle-scenes, feeding on the dead bodies of the slain, tearing out their entrails, and sometimes carrying off aloft the decapitated head of some unfortunate soldier. The figures are rudely drawn, and more closely resemble eagles than vultures, the bare neck of the latter bird being not often definitely represented. The figures of Nisroch, the Eagle Divinity, certainly have the long powerful beak of the griffon vulture, and, I think, have more decided reference to that bird than to any eagle. To the Oriental mind there was nothing in the griffon conveying the idea of a repulsive bird—on the contrary, it was a type, as Tristram well says, of the lordly and the noble. Both eagles and vultures are carrion-feeders as a rule, and prefer food already dead rather than be at the trouble of killing it themselves. I have already mentioned some of the species of eagles which occur in Assyria, and which would be known to the people, and referred to in a general way in their writings.

(2.) The *za-ai-khu* and *la-kha-an-tuv* denote some “screaming bird of prey,” and more than this cannot be said. The word *za-ai-khu* (𒄀 𒄀 𒄀 𒄀) connects itself with the Hebrew צָוֹחַ (*tsávakh*), “to cry out,” or “to scream”; *la-kha-an-tuv* (𒄀 𒄀 𒄀 𒄀) is not less clear. It is identical with the Arabic word لَحِمٌ (*lahim*) “carnivorous,” لَحَمٌ “to kill,” with which the modern Arabic name *lahhām*, “a butcher,” may be compared. Dr. Delitzsch suggests its possible identity with the Arab. رَحِمٌ (*rakham*) (Heb. רָחַם) “to be affectionate,” and compares it with the Hebrew name

for the Egyptian vulture, a bird supposed to be excessively devoted to its young ones; but the Accadian equivalent of CA SU CUD DA, a bird, that is, which “tears with beak and talons,” is against this identification, for the Egyptian vulture has, comparatively speaking, *weak claws* and a *weak bill*, not fitted for tearing its prey in any remarkable degree.¹ All that can be said of these names is that the bird denoted is some rapacious bird which tears its food with violence—in fact, that it was a regular “tooth and nail bird”—more cannot be definitively affirmed.

(3.) I am strongly inclined to believe that the Egyptian vulture (*Neophron percnopterus*), that very common scavenger of the East, is definitely signified by the names *ca-ti-ma-tuv* (𐎠𐎢𐎵 𐎠𐎢𐎵 𐎠𐎢𐎵) and *'e-ru-ul-luv* (𐎠𐎢𐎵 𐎠𐎢𐎵 𐎠𐎢𐎵). The first name very likely points to the verb *ca-ta-mu*, “to cover,” of very common occurrence in Assyrian. The second name *'erûlluv* may certainly be traced to the Hebrew root עֲרַל (*'â rêl*), “to be uncircumcised”; and I think that the idea of this bird, with its neck covered with feathers—in this respect so unlike that of the griffon vulture, whose neck is bare, or covered only with down—and feeding on carrion like it, staining itself with the clotted gore of the carcase it was feeding on, naturally suggested itself, and found expression in the name of the uncircumcised or impure bird.

(4.) The *tas-ba-luv*, or *ur-ba-luv*, *kha-khar ili* or *ca-ri-ib bar-kha-a-ti*, has been referred by Dr. Delitzsch with much probability to the bearded vulture or lämmergeier (*Gypaëtus barbatus*). The first word Dr. Delitzsch reads *ur-ba-luv*, comparing it with the Arabic غَرَبَ *ghariba*, “to be black,” the Assyrian word being a quadriliteral, but the lämmergeier cannot in the slightest sense be said to be black in its adult or mature stage of growth. The young ones it is true are black downy creatures, and the brown hue of the back of immature birds is very dark; but I think it is hardly likely that the name refers to this stage of the bird's life. The adult bird is of a greyish-brown colour, dashed with white

¹ Moreover, though many eagles and hawks scream when they tear their food, the Egyptian vulture never does so.

*Winged human figure
Hayard I pl 36.*

Botta. Vol. I. pl. 74.

on the upper surface. The word may with equal probability be read as *taš-ba-luv*, and be referred to the Hebrew סָבַל *śabal*, "to bear or carry," in allusion to this bird's habit of carrying some of its food, whether in the shape of snakes, or tortoises, or marrow bones, high into the air, and then letting it fall, so as to break it, and be able the more readily to consume it. The *kha-khar-ili*, "raven of the gods," may allude to the lämmergeier, and the third name of *carib barkhâti*, "the antelope attacker," may refer to another habit of this bird in approaching these and other animals with menacing violence and actual assault in knocking them down precipices.¹ There is, however, the name of a bird mentioned which you will see by-and-by, where the *urbaluv* or *tasbaluv* again occurs; it is called *its-tsur šamu*, i.e., bird of a "bluish or slaty-brown colour"; it has also the name of *kha-akh*, an imitative word usually expressive of the *Corvidæ* or crow family. This very possibly stands for the same bird, whatever kind be denoted. The *kha-khar*, or *kha-akh*, is better suited to some of the *Corvidæ* than to the lämmergeier, and the expression of approaching dead antelopes would quite well suit the raven, as would also the notion of blackness conveyed by the name of *urbaluv*. We have, it is true, another name of the raven, viz., *a-ri-bu*, but as there are two well-known species of raven, namely, the *Cornix corax* and the *C. umbrinus*, occurring frequently in Assyria and the adjacent lands, it is not at all improbable that the *urbaluv kha-khar-ili*, or "black raven of the gods," stands for the large well-known common raven, while the latter bird, which is of more gregarious habits, and will explain a disputed passage by-and-bye, is denoted by *urbaluv khâkh samu*, i.e., "the black cawing bird with a brownish neck."

(5.) As to the bird denoted by the *šaradu-sa cipratu*, "terror of heaven (regions)," Sayce, "Syll." 428), as meant by its name of *šar-rad cipri* or *lal-la cip-par* (?)

¹ The modern Greeks tell curious stories of the ravenous nature of the lämmergeier. Not only marrow bones will it swallow, but a small axe's head into the bargain. Whereupon a writer in the "Ibis" humorously remarks that the meeting of the marrow-bones and the cleaver in such a situation must have been most affecting.

lore of many nations : plain facts regarding the appearance or habits of animals, mixed up with fanciful and superstitious notions held concerning them. "Zoological Mythology" is full of such instances. The same animal is at one time a foreteller of prosperity, at another of evil, according to the ideas which have been suggested to the primitive but imaginative mind of man, dependent on certain phenomena which occur in connection with the animal, either in respect of its peculiar form or colour, the noise emitted by it, the time of its emission, be it at early dawn, middle day, at sun-set, or at midnight, or as relates to its periodic appearance or disappearance at certain times of the year ; or, in the case of birds, according to the mode of flight, whether to the right hand or to the left of the observer. A few instances will serve by way of illustration. The swallow, in Aryan mythology, as the joyful herald of spring and fertility, is regarded as a propitious bird ; towards the winter season it is of sinister omen, as foretelling the approach of the cold and inclement season. The same may be said of the stork and the cuckoo and other migratory birds. The turtle dove as emblematic of spring is a bird of good omen ; as being of a sombre hue, it is a funereal bird in the Rigvedas, the grey colour signifying the nocturnal or wintry darkness : see "Zoological Mythology," by Prof. A. de Gubernatis (II, p. 226), to which work the reader is referred for numerous illustrations of the same ideas. Now with respect to this double aspect of the Great Eagle Owl, the *essepū* and *its-tsur li-mut-ti* of the Assyrian records, the same occurs in ancient Aryan mythology, and the idea has persisted, and still exists, in the traditional natural history lore of some of the nations of western Europe. The owl, from its hootings or other cries emitted during the night, is still in Hungary called the "bird of death" ; in the Rigvedas the devotee is ordered to curse death and the angel of death, "to conjure them away," when he hears the painful cry of this monster that wanders in the night ; thus reminding us of the passage already alluded to in the tablet concerning evil spirits, where the *essebu*, or "bird of the god so-and-so," figures as an evil incubus on the inhabitants of cities or villages, as well as to the con-

stantly occurring form of conjuration or anathema in the tablets of Exorcism, "may the spirit of heaven conjure, may the spirit of earth conjure"! But the owl as a night wanderer symbolises the moon in Aryan mythology, and thus aids to dispel the terrors of night by its brightness; hence it is beneficent, and is called by the Sanskrit name of *kākâris*, i.e., "the crow's enemy": this latter bird from its colour representing the dark night. It is curious to note that the idea conveyed by the word *essebu*, "prince," "king," &c., still exists amongst the French people as one of the names of the Great Eagle Owl, viz., *Le Grand Duc*; while the smaller species, the long-horned owl, *Otus vulgaris*, rejoices in the name of *Le Moyen Duc*; and the beautiful little Scops Owl (*Scops Aldrovandi*) is called *Le Petit Duc*. See Littre's "Dict. de la Lang. Franç.," p. 1249, and the "Portraits d'Oyseaux." The Italians also used the same word *Duco* or *Dugo* for this owl.¹ The same ducal eminence appears in the pages of Aldrovandi under the heading "*De Bubone*," where (lib. VIII, cap. 2) in the middle of the page there occurs the word DIGNITAS in grand Roman characters. "What word," asks Broderip ("Zool. Res.," p. 96), "can be more appropriate? What presence among the feathered bipeds is more dignified than that of the Great Horned Owl, *Le Grand Duc*, as he is most appropriately named in the kingdom of Clovis? Who can look at his feathered highness, as he sits solemn and sedate, without inquiring—

"What doth gravity out of his bed at midnight"?

¹ We have evidence to show that this ducal title attached to this owl as early as in the year 1300; for in the articles against Bernard Saget, recorded by Du Cange, we read as follows: "Aves elegerunt Regem quemdam vocatam Duc, et est avis pulchrior et major inter omnes aves, et accidit semel quod Pica conquesta fuerat de Accipitre dicto Domino Regi, et congregatis avibus, dictus Rex nihil dixit nisi quod flavit (flevit?). Vel (veluti) idem de rege nostro dicebat ipse Episcopus, qui ipse est pulchrior homo de mundo, et tamen nihil scit facere, nisi respicere homines." I quote the above from De Gubernatis, II, p. 245, note. The learned writer suggests, instead of the word "flavit" (flevit?). I suspect that "flavit" is the correct reading. In addition to the ordinary hollow tone of this owl's voice, when angry it bristles its feathers, and emits a peculiar sound, difficult to describe, but which partakes of the characters of something between hissing and blowing.

A modern writer thus speaks of the awe-inspiring voice of the "Grand Duke," as he calls this bird: "By the last fortnight in March the eagle owls

(8.) The *mar-ra-tuv* (𐎠𐎵-𐎠𐎶𐎶𐎶𐎶) and *its-tsur tu-ba-ci* (𐎶𐎶𐎶𐎶𐎶𐎶𐎶𐎶𐎶𐎶𐎶) is doubtless another species of owl. The first name may well be referred to the Heb. מֵרַר “to be bitter or sad,” and denote a species of owl which is peculiarly characterised by its mournful wailings; this is the little owl (*Athene glaux*), whose low-wailing note Dr. Tristram speaks of as sure to be heard at sunset, while the little comical fellow himself is “seen bowing and keeping time to his own music”; but the common Scôps owl (*S. giu*), and the little owl, possessed of horns, which the other has not, is, I think, also included in the Assyrian names. Though these little owls are not often met with, there is not a garden of any size in Persia which does not contain a couple, at least, making night “hideous with their melancholy cry.” The words *its-tsur tu-ba-ci* I interpret as the “bird of the dust or ground,” from the Hebrew word אֶבֶק “dust.” Now the first-named species of owl, the little *Athene glaux*, abounds in the great desert plains of the Persian highlands, and is often gregarious, five or six being often seen together; being more diurnal in character than most owls, it was very likely to have often been observed by the Assyrians; moreover, it lives in holes during the day, and sometimes breeds in holes in the ground, so that the owl of the dust is literally exact as a description of this species. I may also mention that Buxtorf, in his Lexicon, under the word *abak* (אֶבֶק), gives the word *abkûth* (אֶבְקִית), which is explained by “luctatio in pulvere”; so that, in any

commence preparations for breeding. At this season may be heard their hollow, muffled cry of ‘Poohoo, poohoo,’ which is distinguishable at a great distance through the woods: and it is not to be wondered that the timid are frightened at it. In the silent dark recesses of the mountain forest, a variety of noises, well calculated to make one’s flesh creep, fall upon the ear: the shrill, mocking laugh, a sound as of snarling hounds; the whoop of the hunter, the snorting of horses: these are all calculated to impress the uneducated and superstitious with the truth of the legend of the wild huntsman. Even to the ear of the better informed these hideous cries, the loud screech of the female, or the ‘poohoo’ of the male, intermingled with the snapping of the beak and curious wailings, sound somewhat weird; and the boldest of mortals can scarcely repress a cold shudder, when a company of these forest spirits favour him with one of their demoniacal nocturnal concerts.” (Brehm’s “Bird Life,” p. 567, &c.)

case, the name of *its-tsur tu-ba-ci* is admirably suited to one or other or both of these two small owls.

(9.) The screech owl, or common barn owl (*Strix flammea*), is very probably represented by the *ka-du-u* (𐎧𐎠𐎫𐎠𐎵) and *ac-cu-u* (𐎠𐎫𐎠𐎵 𐎠𐎫𐎠𐎵) of the bilingual lists. The second name appears to be imitative of the bird's hoot, for though the screech owl does not usually emit the long monotonous hoot of the tawny owl (*Syrnium stridula*), yet it does occasionally do so. The Assyrian *kadû* is identical with the *kadyâ* (כַּדְיָא) of the Targum, which is described as having its eyes, not at the side of the head as in birds generally, but in front like men, and as having a face like that of the cat. This well-known appearance arises from the arrangement of the feathers in front of the head, the facial disk in the white or screech owl being very large and complete. It resembles a cat, too, in respect of its beautifully soft plumage; this character, like the soft scales of the puss-moth, giving to it the name of the "feathered cat," by which it is sometimes known. This species is not known to occur in Persia, but Tristram says it is very common in Palestine; and Ainsworth also mentions it as one of the commonest owls of Turkey.

(10.) There are apparently three or four names which occur in the list as those of woodpeckers. Thus we have *ci-li-luv* (𐎠𐎠𐎠𐎠𐎠𐎠) or *cu-li-li* (𐎠𐎠𐎠𐎠𐎠𐎠), represented by the Accadian GIS-KHU (𐎶𐎶𐎶𐎶), probably "wood-bird," for the word is incomplete; the Assyrian names are evidently onomatopoeic, expressive of the woodpecker's peculiar note. Another name in Assyrian is *an-pa-tuv* (𐎠𐎶𐎶𐎶), evidently allied to the Hebrew *nûph* (נוֹפֵה), "to wave up and down" (compare *nophet*, "a dropping down"), an admirable description of the peculiar waving flight of many, if not all, of these birds.¹ The Accadian name is GIS-SIR (𐎶𐎶𐎶), which is, literally, "bright," and is

¹ A philologist pure and simple would perhaps identify the *anpatuv* with the Heb. אֲנַפְתָּה, which it resembles in sound. There is very little doubt that the *anphah* is the "heron"; but the "bright meteor bird of the wood" of the Accadian column would by no means suit the heron,

well suited to either the green, pied, or other species of bright-winged *Picidæ*.

We are told (W.A.I., V, 11, 37, a. b. c., and elsewhere) that the character is to be read *nuru*, "brightness"; so that the Accadian *GIŠ ŠIR* applied to a bird may denote merely its "bright" colour. We must not, however, forget that the full Accadian word is clearly a combination of the two characters *gis*, "wood," and *sir*, "light," "meteor," &c., so that the idea of "wood" originally held a place, most likely, in the signification of this composite group; the character ( ) for the *cililuv*, W.A.I., II, 37, l. 11, 61, denotes "wood," and suggests "woodpecker"; so that the name *GIŠ ŠIR KHU* may originally have meant the "wood bright" bird.

It is well known that the woodpecker played an important part in ancient mythology, as being the personification of fire and lightning—sharing with other birds in this respect—as the Vedic fire-bhuraṇyus, the Hellenic *Phoroneus*, the Latin *Picus Feronius*, "the *Avis incendiaria*, the picus that carries thunder." The fire, which the bird was supposed to bring from heaven, was kindled in the wood by the boring of its beak into the stem or branch of a tree; and perhaps the bright red top of the male woodpecker's head also suggested "fire" to the primitive man. It is not a very great stretch of the imagination to see in the old Babylonian linear form of the character for a "meteor," viz., or a rude representation of a fiery meteor, so that the translation of this Accadian bird-name, whether we regard it as the bright active denizen of woody glades, or as embodying in some of its characteristics the mythological notion of the fire-bringer, may not inaptly be given as "the meteor bird" of the woods. It is true that, thanks to the genius of Kuhn, Max Müller, De Gubernatis, Steinthal, G. Cox, Kelly, and others, we know of these mythological legends, with their explanations, chiefly as they pertain to the great Aryan race, but when we consider how, in all primitive times, the mind of man is similarly constituted, and

Battle Scene. Layard. II. pl. 46.

Ornaments from Bronze vessel
from Nimroud. Layard II. pl. 62.

likely to be affected by similar natural phenomena,¹ only presenting modified forms of the same ideas, and when we reflect how eagerly, patiently, and religiously the old star-gazing people of Chaldea studied the various aspects of the heavens, and the forms of various animals, we may readily imagine that they too had their mythological systems, which admit of an explanation similar to that of Indo-European legend; indeed, as Mr. Sayce ("Chaldean Genesis," p. 123, ed. 1880) has shown, the story of the god Lugalturda, who was transformed into a *Zu* bird, or "divine storm-bird," for stealing the destiny tablets, is only another edition of the old Hellenic legend of Prometheus, who stole the lightning from heaven. The historical development of mythology among the Hebrews has been treated by Dr. Goldzieher, and though one may hesitate to adopt some of his theories and explanations, he has abundantly shown that the Semitic mind was able, if not always to invent, at least to appropriate with modifications certain pre-existing ideas, and that Hebrew myth enters deeply into many of their stories. But the admission of the mythical element in any account relating to birds or other animals by no means implies the necessary elimination of all natural history matter of fact, or frustrates the attempt to identify the creature. The animal, from some peculiarity in habit, colour, form, or other character, in fact created the myth or the superstition held with regard to it. The large size and fierce aspect of the great owl, for instance, produced in the Accadian mind the idea of majesty; hence it was called "the prince."² Its melancholy voice and nocturnal habits suggested the idea of "bird of evil," or "bird of the deity so-and-so." Owls from time immemorial have been regarded as foreboders of death and disaster. The expressions of Virgil, "*ferali carmine Bubo*," "*feralia Bubo*

¹ Goldzieher (Introd., p. xvi, R. Martineau's Translation, 1877) has well expressed this idea in the following words: "I start from the conviction that the Myth is something universal, that the faculty of forming it cannot *a priori* be denied to any race as such, and that the coincidence of mythical ideas and modes of expression is the result of the uniformity of the psychological process which is the foundation of the creation of myths in all races."

² According to M. Littré, this owl received its names of *Duc* from its being thought to have served as a *guide* to other birds. We have already seen that the Accadian *khushi* means "a pilot," or "steerer."

damna canens," come at once to the memory. The very fact of the occasional appearance of this funereal bird—generally a lover of secluded localities—in the neighbourhood of cities, increased the impending calamity, as Pliny says, "Noctis monstrum nec cantu aliquo vocalis, sed gemitu. Itaque in urbibus aut omnino in luce visus, dirum ostentum est." (*Nat. Hist.* x. 12.) Similarly Shakspeare and other poets allude to the owl as a bird of evil:

"Out on ye, owls, nothing but songs of death."

To the red Indian of America the Virginian horned owl is equally a source of superstitious terror. But notwithstanding all the prevalent superstition concerning owls, these birds had their bright side, as we have seen, and one small species was sacred to Athênê, the goddess of wisdom, and its night-flight was a good sign to the Athenians that the goddess protected their city. We need therefore not be surprised to find in the Assyrian records the same bird designated as "prince" or "pilot" on the one side, and "bird of evil" on the other.¹

Another name, *dulimmassat* (𒌦 𒌦 𒌦 𒌦), represented by the Accadian SIB-TIR-RA, "the jungle shepherd-bird" (𒌦 𒌦 𒌦 𒌦 𒌦 𒌦), is, I think, meant for a woodpecker. The Accadian name, "shepherd-bird of the jungle, or plantation," may, without any stretch of the imagination, allude to woodpeckers, which the shepherd, in his wanderings among the jungles, interspersed with beautiful glades, or grassy pasturages, might often have observed. The *Picus syriacus*, which is the Asiatic representative of our larger pied woodpecker (*P. major*), would well suit this description, though of course other birds of this genus having like habits would doubtless be included in the names given above.

¹ I have purposely dwelt on this marked recognition in zoological mythology of a two-fold phase, implying opposite characters in the same creature, because in the discussion that followed the reading of my paper, it was thought by some of the Members present that where birds or other animals are mentioned in incantations or mythical legends, all attempts at identification are futile: as if all natural history, in the popular sense of the term, whether among the ancients or the moderns, was not mixed up with fact and fiction! The presence of legend does not preclude that of fact; indeed, legend would often not exist without fact. The natural history fact-characteristics of the great owl, for instance, have created the superstitious with regard to the "direful bird of the unmentionable goddess," and help to explain them.

(11.) The Cuckoo (*Cuculus canorus*) was known to the Assyrians by the names of *khu-u-ku* (𐎲𐎠𐎵 𐎲𐎠𐎵 𐎲𐎠𐎵) and *kha-zu-u* (𐎲𐎠𐎵 𐎲𐎠𐎵 𐎲𐎠𐎵); the first name is imitative of the well-known note of the bird; the second name I refer to the Hebrew *khozeh* (חֹזֶה), a "prophet," in allusion to the periodic returns of this bird to the countries which it visits, as being the foreteller or announcer of Spring and refreshing warm showers, as I have already mentioned; so the swallow or swift was also the proclaimer (*nabu*) of returning warmth. The Accadian expression *SU LU* (𐎶𐎶 𐎶𐎶) "hand," and "man," refers to the form, more or less prehensile, of the cuckoo's foot.¹ The cuckoo is a migratory bird in Palestine, Syria, and Mesopotamia, and in the northern parts of Persia, but in southern Persia it is probably resident during the winter months. The great spotted cuckoo (*Coccyzus glandarius*) occurs also, sometimes extremely abundantly, in these countries.

(12.) The *nam-bu-ub-tuv* (𐎲𐎠𐎵 𐎲𐎠𐎵 𐎲𐎠𐎵) or *a-dam-mu-mu* (𐎲𐎠𐎵 𐎲𐎠𐎵 𐎲𐎠𐎵) is referred by Dr. Delitzsch to the lapwing or peewit (*Vanellus cristatus*). The former is probably an imitative word, and may be compared with the Arabic *nābāhā* (نَبَّأَ), "to bark," a root which has given use to sounds produced by various animals, as the lion, dog, and stag. Certainly, the word *nambûb* is not a bad imitation of the noise produced by the lapwing, as it strikes its wings together during the breeding season when disturbed, causing the well-known *thud* or dull hollow sound which every one must have frequently observed. The second name of *a-dam-mu-mu* may be compared with the Hebrew feminine adjective *adūmmāh* (אֲדֻמָּה), "ruddy," root אָדָם "to be red"; compare the *pārāh adūmmāh*, "red heifer" of Numb. xix, 2, or the *sūs ādam*, "bay horse" of Zech. i, 8. Although the lapwing cannot be called a red bird, the Assyrian word may

¹ The cuckoos are zygodactylous birds, with broad and flat toes, which are arranged in pairs, two before and two behind, formed for grasping a branch firmly, though not like the woodpeckers, adapted for climbing; the outer toe is reversible, so as with the first to oppose the rest in grasping: hence from the grasping powers the foot suggested to the Accadians "The Man's Hand Bird."

very likely refer to the tail covers of the lapwing, conspicuous by their rich reddish-chestnut colour, and thus have given name to the bird. Freytag in his Arabic Lexicon, however, gives the word *nobbah* (نَبَّاح) as *upupa gemebunda*, “the hoopoe,” which is of a decided red or buff colour in its whole plumage, and that may be the species indicated. As to the sounds produced by different birds, it must be remembered that the same bird often produces very dissimilar sounds; the “houp, houp” of the hoopoe, whence its name, marked out softly, but rapidly, may remind one of the note of the dove, while a writer in the “Ibis” (vol. iii, p. 255) describes its note as a kind of hissing sound. The Accadian part of the tablet is broken, and gives us no help.

(13.) The swallow, and perhaps also the swift, have several names. This bird—I think the swallow (*Hirundo urbica*) is more especially meant—was called by the Assyrians the *as-ci-ci-tuv* (𐎶 𐎠 𐎶 𐎶), the *es-ci-ni-ni-tuv* or *escilituv*, borrowed from the Accadian (𐎶 𐎠 𐎶 𐎶 𐎶); it was also called *tsi-li-li-tuv* (𐎶 𐎶 𐎶 𐎶 𐎶), the *kha-tsi-ba-ruv* (𐎶 𐎶 𐎶 𐎶), and the *bu-li-li* (𐎶 𐎶 𐎶). *Tsililituv* is evidently imitative of the swallow's note, and is to be referred to the Hebrew צִלְצִל “to tingle,” and *tsēlātsal* (צִלְצָל), “a tinkling instrument,” as a “cymbal.” The same may be said of the word *ascicituv*, with which the Arabic *schacshāka* (شَقَشَقَ) “*pipivit passer*,” is to be compared. *Escininituv* is obscure. With this name is associated another, *bu'li-li*, with which, perhaps, the Arabic *ballal* (بَلَل) “moist wind bringing rain and fertility” (Hebrew בֹּרֵל “rain”), may be compared; or the Assyrian word may be referred to the Hebrew בָּלַל *bālal* (with which, however, the above-named Arabic word is connected) “to mix,” to “compose,” hence “to speak confusedly,” and applied to a bird, “to chatter.” Gesenius gives conj. II of the Arabic *balbal*, “*balbutivit*,” “confuse locutus est psittaci instar,” “he

[illegible]

where else," writes Major St. John, "have I seen birds in such numbers."

(14.) The bulbul, or Asiatic nightingale, so celebrated in Persian story, is perhaps denoted by the Assyrian name of *tsu-la-mu* (𐎶𐎵𐎠𐎶𐎶𐎠𐎶) or *tsa-lam-du* (𐎶𐎵𐎠𐎶𐎶𐎠𐎶), and by that of “the bird of night” (*its-tsur musi*). The first and second names are clearly identical with the Hebrew *tsâlam*, Arabic *zulmat* (ظلمة) “shade,” or “darkness.” *Musi* is the Arabic *masâ* (مساء) “evening.” The bird of the evening and the night may, of course, be intended to denote the nightingale, and I should, without hesitation, have considered this bird to be the *its-tsur musi*, “bird of the night,” of the trilingual tablet, if it was supported by the Accadian. The Accadian name in the column which stood as the equivalent of *tsalamu* and *tsalamdu* is lost, by reason of the fracture of the tablet; but in the next line the *its-tsur musi* is represented by the Accadian word *A* (𐎶) “water.” It is evident, though there is a fracture-gap in this part of the trilingual tablet, that the whole of the Accadian name of this bird remains; and we read, as the synonym of *its-tsur musi*, the name of *A KHU*, “water-bird,” very indefinite indeed. Had the name immediately above this one been entire, and able to give us the Accadian rendering of the Assyrian *tsalamu*, we might perhaps have had some certain clue to identification; for the nightingale can hardly be sufficiently aquatic in its habits of frequenting trees and bushes by the river or pool, to merit the simple name of “water bird,” without some limitation. Therefore, the claims of another night-singing warbler naturally present themselves for recognition here. Such a bird, which will completely fulfil all the necessary conditions is found in the sedge-warbler. The same almost may be said of the reed-warbler, but I have another place for this little songster, in which I think it will rest as comfortably as if it were in its own beautiful nest. The sedge-warbler (*Salicaria phragmitis*) is always found near water. It sings late at night, and early in the morning before it is light. Its notes, though somewhat hurried and confused, are sweet and varied. They are often mistaken by persons,

not familiar with the notes of the nightingale, for those of that bird; and I have frequently been called up at night time in summer to listen to the song of the sedge-warbler, whose notes have been thus mistaken. I cannot help thinking, therefore, that the claims of this little bird to represent "the water songbird of the night," are certainly equal to, if not better, than those of the nightingale; if the sedge-warbler is a native of Mesopotamia.

(15.) The oriole or golden thrush (*Oriolus galbula*) is very probably denoted by the Assyrian words *ma-ac-lat up-la* (𐎠𐎵 𐎠𐎶 𐎠𐎶 𐎠𐎶 𐎠𐎶 𐎠𐎶) and *khu-ra-tsâ-ni-tuv* (𐎠𐎶 𐎠𐎶 𐎠𐎶 𐎠𐎶 𐎠𐎶 𐎠𐎶); *mâclat* is the participle of *a-ca-lu*, "to eat" (Heb. אָכַל), and *up-lu* is a "worm" or vermiform creature, as the larva of an insect; it is to be referred to the Arabic root فلى "pediculos venatus fuit," hence any small worm-like creature found in chinks or holes (פָּלַח "to cleave"). *Mâclat upla* then signifies "a worm-eater." *Khuratsanitiv* is from the Assyrian word *khurats*, "gold" (Heb. חָרוֹץ), and the whole name would be "the golden coloured worm-eater." This answers to the golden oriole, whose food consists of caterpillars, worms, and insects, as well as fruit, of which, like its relative the thrush, it is very fond. The Accadian part left is MU UN DU, which is probably "a worm."

(16.) "The bird of the papyrus," *its-tsur ci-i-si*¹ (𐎠𐎶 𐎠𐎶 𐎠𐎶 𐎠𐎶 𐎠𐎶), is evidently a singing or chirping bird; from its other name, *tsi-tsil-du* (𐎠𐎶 𐎠𐎶 𐎠𐎶 𐎠𐎶 𐎠𐎶), some warbling bird of the reeds is denoted, and no more suitable one can be found, I imagine, than the reed warbler (*Salicaria arundinacea*), whose singularly constructed nest, supported by four or five stems of the large reed (*Arundo phragmitis*), or on those of the papyrus, must have been observed by the Assyrians, who appear to have taken special notice of the various kinds of reeds and tall grasses common to the marshy places of the lowlands of Mesopotamia.² The

¹ The Accadian is *gi-zi* (𐎠𐎶 𐎠𐎶 𐎠𐎶), from which *ci-si* is borrowed. In W.A.I., V, 32, 62, *cišu* is explained as "the reed of Egypt," i.e., the papyrus.

² See the long lists of reeds and grasses in W.A.I., V, 32; II, 24.

nest, formed of the seed-branches of the reeds and long grass, with a little wool and hairs, is so deep that the eggs do not roll out when the reeds are shaken by the wind. The Accadian word is KIP SU, of uncertain meaning. The reed warbler and the sedge warbler are both found in similar situations, but the latter bird builds its nest near the ground, and seldom makes use of reeds as a support; but see Appendix.

(17.) Various kinds of insectorial birds, such as the *Fringillidae*, "finches," and *Emberizidae*, "buntings and sparrows," are included under the head of "birds injurious to the crops," and were used as food, as I have already mentioned. I think, however, that our little impudent friend, the common sparrow, is definitely spoken of under the name of *di-ik-di-ku* (𐎠𐎵𐎠𐎵𐎠𐎵 𐎠𐎵𐎠𐎵𐎠𐎵), or *duc-duc-cu* (𐎠𐎵𐎠𐎵𐎠𐎵 𐎠𐎵𐎠𐎵𐎠𐎵) and *its-tsur ša-me-di*; the first two names are evidently imitative of the bird's chirp, while the last may be rendered "bird of destruction," *ša-me-di* being referred to the Hebrew root *shamad* (שָׁמַד), "to destroy" or "lay waste," notwithstanding the *š* instead of the *ṣ*; or the Assyrian *ša-me-di* may be connected with the Hebrew סֹד *sód*, "an assembly," in allusion to the congregatory habits of sparrows. The opinion of Dr. Delitzsch, however, may be preferable to any of these conjectures; he compares the Arabic *savida* or *asvad*, "to be black," and as in Arabic one name of the sparrow is associated with its colour, *its-tsur savedi* of the list may be rendered "bird of dark colour," and be identified with the sparrow on that account. Still the idea of destruction to crops caused by its devouring properties is certainly implied in the Accadian 𐎠𐎵𐎠𐎵𐎠𐎵, the representative of the Assyrian word.

The sparrow, as an agricultural pest in the destruction which it causes to various crops, figures conspicuously on the Egyptian monuments. The little bird, which stands as a determinative of "evil" in the hieroglyphic system, without doubt denotes a sparrow, as Champollion first showed. This has been called in question by Sir G. Wilkinson ("Anc. Egypt," V, p. 213, 3rd ed.), who believed the bird to be, not a sparrow, but a water-wagtail (*Motacilla*). In connection with the fact of this hieroglyphic bird being regarded "as the type of an

нома і рл. 112.

from Konyunur. Brit Mus.
Place. Vol. III. pl. 57. fig 2.

from Komunjik, in British Museum.
Return from Hunting.
Plac. Vol III pl. 52. bus. fig 2.

from Khorsabad
Hunting scene.
Place. Vol. III. pl. 48. fig 2.

impure or wicked person," Wilkinson states that the wag-tail is still called in Egypt *aboo fussád*, "the father of corruption," as if in memorial of the hieroglyphic character assigned to it by the ancient Egyptians. The delineations of birds and animals generally in the hieroglyphic system of the Egyptians are often excellent, and afford pretty safe guides to identification, and I have not the slightest doubt that the little bird in question is meant for the sparrow, and not a water-wagtail. In reply to some questions I asked Dr. Birch, always ready, out of his abundant stores of deep learning, to give help—he writes that there are two birds very like in form but different in meaning in the hieroglyphic texts, such as the swallow distinguished by its forked tail, called in the texts *mena*, and used for the syllable *ur*, with or without the , as or . The other bird has a more rounded tail, , and is called by Champollion "a sparrow," the name of which appears in the hieratic papyri as *tu tu*, a kind of plague or affliction of the fields, hence used for "evil" in general as a determinative. From this it is seen that the Egyptians and the Assyrians held similar views as to the destructive nature of sparrows.

(18.) The common starling (*Sturnus vulgaris*) there can, I think, be no doubt is denoted by the Assyrian name of *al-lal-luv* (𐎶𐎵 𐎶 𐎶𐎵), which the Accadian SIB TUR (𒊷𒍪 𒊷𒍪) satisfactorily explains. *Al-lal-luv* is imitative, and must be compared with the Hebrew *álal* לָלַל "to cry out," a term which may imply voices of grief or of joy. Compare for this latter idea Isaiah lii, 5 (יָלַל), and the Greek δολούζειν. As applied to the starling, the voice is distinctly one of joy. No one can have walked along roadsides or in the fields in the autumn or early winter, without having witnessed large flocks of starlings assembling on various trees, and immediately setting up their joyful *allalals* in full chorus of exuberant gladness. The Accadian SIB TUR, "little shepherd" bird, is exactly descriptive of the starling, so often seen in meadow lands among sheep and cattle, searching for food on the ground, or frequently perched on the back of some cow or sheep, helping to rid it of unpleasant

parasites. As mention is made of the *little* shepherd bird, so we may expect that a *greater* shepherd bird was also known to the Assyrians, and this is what we actually do find. In the same tablet we meet with a bird which in Accadian is designated as the "shepherd" by the single name of SIB, and this bird is recognized in its pastoral character under the name of *rihû* (𒌦𒍪𒌦 𒌦𒍪𒌦 𒌦𒍪𒌦) by the Assyrians, *rihû* meaning "a shepherd," and answering exactly to the Hebrew word *rōeh* (רֹעֶה), from the root רָעָה "to feed a flock." What is this shepherd bird? If I am right in the identification of the little shepherd bird, I must not refer this one to the beautiful rose-coloured pastor (*Pastor roseus*), because I want a bird larger, more or less, than the starling, the SIB TUR, or "little shepherd," and the rose pastor and the starling are about the same size, *i.e.*, about $8\frac{1}{2}$ inches long. What kind of wild bird in England do we consider to be perhaps the most agricultural? I think we shall say the rook (*Corvus frugilegus*), the bird of pasture and arable land frequently associating with its smaller cousins the starlings in company with sheep and cattle, or following the ploughman for the sake of the worms or other food turned up by his labours. Ainsworth mentions rooks as occurring commonly in Mesopotamia, though they do not seem to be common in Persia, Mr. Blandford and Major St. John not having met with these birds in Southern Persia. Rooks are common in Palestine, and were probably well known to the inhabitants of Syria, Armenia, and the northern parts of Mesopotamia. I think that the rook is the bird intended, as represented on the monuments near inhabited buildings, having its nest and young ones on trees, as I have already suggested. The *Pastor roseus*, or "locust bird," is also eminently an agricultural species, being frequently seen associating like the common starling with cattle and sheep; hence its name of *pastor*, or the "shepherd." It is curious to think that the generic name of *Pastor*, first proposed by the French naturalist M. Temmink for certain birds which exhibit various relations to starlings and crows, for the reason just mentioned, should have been, ages long ago, anticipated by the inhabitants of Chaldea and Assyria.

(19.) This shepherd bird (*Pastor roseus*) is noted also as a devourer of locusts; hence, its name of "locust bird," and it is in this character that its name occurs in the Assyrian records. In Accadian it is called KHU RUB, *i.e.*, "insect" or "locust bird," and its Assyrian equivalent is identical, *viz.*, 'e-ri-bu (𐎶𐎵 𐎶𐎵𐎶𐎵 𐎶𐎵), "a locust." This bird was known to the Arabs by the name of *smurmur*, and is said by Russell, in his "Natural History of Aleppo," to be held sacred by the Turks on account of its destruction of locusts. The *Pastor roseus* "is quite a feature" in Mesopotamia, as Dr. Ainsworth writes to me. It occurs in Palestine, Syria, Asia Minor, and South Eastern Europe, but has not been observed by Major St. John and Mr. Blandford in any part of Persia. It is, however, abundant in Armenia, the Caucasus, and Western Persia, and has occasionally visited this country. Its food, besides locusts and other insects, consists of various kinds of fruits. In Corfu it haunts the orchards early in the month of June, feeding almost entirely on mulberries; hence it is known to the peasantry of that island by the name of *scamnophagus* (σκαμνόφαγος), *i.e.*, "the mulberry eater." The identity of this bird with the KHU RUB and the 'e-ri-bu of the Accadian and Assyrian lists is thus settled beyond dispute.

(20.) Among the *Corvidæ*, or crow family, several kinds are mentioned, though it is not always easy to speak positively as to the names of the species. First comes the world-wide-known bird, the raven (*Corvus corax*). This bird was known by the name of a-ri-bu (𐎶𐎵 𐎶𐎵𐎶𐎵 𐎶𐎵), and *kha-khar* (𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵). The expression of "eye-picker," *budhûr ini* (𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵), is found in the list above the name of the raven, and doubtless refers especially to this bird, and to the common crow as well. *Khakhar* is clearly imitative of the "cawing" family; *Aribu* is the Heb. *oreb* (עֹרֵב) "a raven," and the Arab. *ghoreb* (غَرَبَ); the name is generally referred to a Hebrew root, meaning "to be black," which is quite suitable to the bird, which may have thus obtained its name from the black colour of its plumage. I rather incline, however, to the opinion that the word is

originally onomato-poetic, and expresses the hoarse guttural cry of the raven. Like our word crow, so common in various languages, is the word "raven" itself; the Latin *corvus*, Sanskrit, *kārava*; German, *Rabe*, *pace* Max Müller, who instances the fact of the Sanskrit *kru* or *ru* as embracing many cries, from the harshest to the softest, all of which may be perfectly true, but does not in the least affect the question that the word *originally* designated the caw of the raven; for the word *cru* might subsequently have been used to express soft sounds as well as harsh ones. The bird-name *aribu* must be distinguished from the insect-name 'e-ri-bu (𐎠𐎼𐎷𐎵 𐎠𐎹𐎷𐎵 𐎠𐎽𐎵) just mentioned in connection with the locust bird. 'Eribu is to be referred to the Heb. root *rābāh* (רָבָה), "to be multitudinous," as locusts pre-eminently are; the same idea of multitudes is conveyed by the Accadian word BIR (𒁺𒂊) "hosts," "swarms," &c. Distinction must be made between the Assyrian names of *aribu* a "raven," and 'eribu a "locust," and Dr. Delitzsch has already pointed this out in his explanation of one or two passages in the History of Sennacherib. One passage reads thus: "like an invasion of many *aribi* on the face of the country forcibly they came to make battle." Another passage is similar: "from the midst of the ships *arabis*" (an adverbial form) "like *aribi* they came." Now the word *aribi* has generally been rendered by "locusts"; swarms of these devastating insects seemed so natural, while on the other hand, "swarms of many ravens" seemed to convey, at a first glance, a natural history error; ravens being almost always more or less solitary in their habits, seldom associating in numbers more than two together all the year round. It is true that the common raven does occasionally assemble, but not generally in great multitudes, when food in the shape of carrion presents itself;¹ but Dr. Delitzsch is correct, both philologically and zoologically; for in these pas-

¹ The raven's habit of congregating occasionally in flocks is, perhaps, more frequent than is usually supposed. See Seeborn's "History of British Birds," (Pt. ii, p. 535), now in course of publication. Naturalists will hail with delight the appearance of this admirable work, which breathes freshly of field, forest, hill, moor, lake, river, and sea.

sages special reference is probably made not to the common raven (*Corvus corax*), but to another species of raven, namely, the brown-necked species, the *Corvus umbrinus*; and this bird is like the rook, to a very considerable extent gregarious in its habits. "Of all the birds of Jerusalem," Canon Tristram writes, "the raven tribe are the most characteristic and conspicuous, though the larger species is quite outnumbered by its smaller companion, *Corvus umbrinus*. They are present everywhere to eye and ear, and the odours that float around remind us of their use. The discordant jabber of their evening sittings round the temple area is deafening. The caw of the rook and the chatter of the jackdaw unite in attempting to drown the hoarse croak of the raven; but clear above the tumult rings out the more musical call-note of hundreds of the lesser species. We used to watch their great colony, as every morning at daybreak, they passed in long lines over our tents to the northward; the rooks in solid phalanx leading the way, and the ravens in solid phalanx bringing up the rear."—*Nat. Hist. of Bible*, p. 200-201. Ed. 1867. That this is the species more decidedly alluded to as coming forcibly in multitudes on the field of battle there can be no doubt; but of course such individuals as the larger species as might collect together with them would be also included. That ravens are meant, and not locusts, by the word *a-ri-bi*, besides the reasons I have already given, can be finally settled by a passage in the history of Assurbanipal, where the Elamites overspreading Accad are compared to an invasion of *aribi*; the Cuneiform has the reading of *cima ti-bu-ut* NAM-BIR-KHU, the Accadian name denoting most definitely *birds*, and not insects; and this Accadian word is in other places represented by the Assyrian word *aribi*, that is, "ravens."

(21.) The bird called *pa'hu* ( ) and *ka-ka-nu* ( ) probably denotes the "crow." *Pa-hu* is the Hebrew *pēah* (פֶּהַח) "to cry out," and again is an imitative word. *Kakanu* may well be compared with the Arabic *kāk* (قَاك) or *kīk* (كَيْك) "a crow." The species intended is the hooded crow, sometimes in this country called

the Royston crow (*Corvus cornix*). This is the Asiatic representative of the common black crow, *Corvus corone*, popularly known among the peasantry of this country as the "carrior crow." Though formerly specifically considered distinct, these two birds evidently belong to the *same species*. They breed freely together in such localities where the two varieties meet. They are similar in form and habits, and differ only in respect of colour. The black variety common in various parts of this country does not appear to occur in Palestine or Mesopotamia, where it is replaced by the hooded crow, the variety not so generally known in this country on account of its local habits. This is the common crow of Palestine, Syria, Mesopotamia, and Persia. The grey feathers of the back and under surface of the body of the hooded crow, Major St. John tells us, have in Persia sometimes quite a roseate flush.

(22.) Of the *ur-bal-luv* or *tas-bal-luv*, *kha-akh*, or *its-tsur sâmu*, I cannot speak at all definitely. The name *its-tsur* *ša-mi* points apparently to some bluish-brown cawing bird, and this is all that can be said.

(23.) The jackdaw (*Corvus monedula*) is supposed by Dr. Delitzsch to be the bird spoken of in the Assyrian lists as the "occupier of graves" or "graveyards." It is called *casiḏ cab-ruv* or *casiḏ ca-bar-ti* (𐎠𐎢𐏁𐎧𐎶𐎵𐎫𐎲𐎺𐎤𐎡𐏃𐎶𐎥𐎴𐎩𐎰𐎪𐎣), A somewhat similar name of a bird occurs in the Talmud as the *bath cibrayyā'* (בַּת קִיבְרָיָה), "daughter of sepulchres," which Buxtorf (Lex. p. 1963) explains as "the name of a bird, said to adorn itself with other birds' feathers, like the jackdaw" (*graculus*). Lewysohn (*Zool. des Talmuds*, p. 175) quotes a writer (Sachs) who identifies a bird called *kibrin* with the "screech owl" as a "grave bird." In this country the jackdaw is often seen in the vicinity of churches and churchyards, building its nest in belfries and such like places. Ainsworth says that there is a small owl, "a dignified little fellow," which passes the day on the top of a tombstone in cemeteries, where it finds plenty of food at night, and, being regarded as a sacred bird, is never disturbed in its serenity." It is, therefore, quite possible that this little owl, and not the

jackdaw, may be the *casid cibarti* of the bilingual list. The Accadian equivalent is in this tablet entirely lost, with the exception of about four characters, mere endings of names, and as no other Assyrian word occurs, no other help is afforded us. On the whole, however, I think that the jackdaw is the bird which Buxtorf designates as the "daughter of sepulchres," and has decidedly the best claim.

(24.) There is good reason to identify the *bal-lu-tsi-tu* (𒁕𒌦𒌦𒌦𒌦𒌦𒌦) or *tu-bal-la-ats* (𒁕𒌦𒌦𒌦𒌦𒌦𒌦) with the Arabic word *bilissi* (بِلِيسِي), which is said to be the same as the bird called *sorad* (صِرَد), defined by Freytag to be "a black and white bird, larger than a sparrow, with a thick head, which pursues sparrows." The second word is identical with the first, having merely the noun formative prefix of *t*. The modern Arabic name of the magpie is 'ak-'ak; the "green magpie" is *shakrâk*, and denotes the Roller. In one of the columns, after the word *tuballats*, the words *ci-na-ša*, "its nest," or "its slave," appear.¹ Did the large conspicuous nest of the magpie appear worthy of mention? Perhaps the figures on the monuments of some long-tailed bird are meant for the magpie (*Pica caudata*).

(25.) Some kind of wild pigeon, probably the wood-pigeon" (*Columba palumbus*),² is designated by the names of *ur-ša-nu* (𒌦𒌦𒌦𒌦𒌦𒌦) and *ta-am-si-lu* (𒁕𒌦𒌦𒌦𒌦𒌦𒌦), the first name is by Delitzsch referred to the Arabic *warashân* (وَرَشَان), which is translated *Columba sylvestris*, "wild dove." The second name looks like the Talmudic *tasîl* or *tasîlah* (תָּסִיל), which is explained as "the young of pigeons or doves," or "some kind of dove." Lewysohn (*Die Zoologie des Talmuds*, p. 205) considers that *tasîl* denotes some full grown small dove, and suggests the rock-dove (*Columba livia*) as the species. These birds are called *beni yonah* (בְּנֵי יוֹנָה), "sons of the dove," and Lewysohn thinks that

¹ The *pallutsitu* is explained by *tupallats cinaša*, "the *tupallats* of her nest" or "of her slave," but the explanation is by no means easy.

² *Palumbes* is the ordinary Latin name of a "dove," but Columella and Martial use the form *palumbus*.

some small kind of dove, distinct from the turtle dove, is intended. Both the rock-dove and the wood-pigeon are common in Mesopotamia, and perhaps one or the other is intended by the Assyrian names.

(26.) Nothing at all definite can be said of the species of dove mentioned under the Assyrian name of *ir-ca-bu* (𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵) or the Babylonian form, *ri-ga-bu* (𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵). Dr. Delitzsch compares the Ethiopic (ርገብ: *rēgēbe*) “a dove,” which he thinks is so called from its shyness, comparing the name with the Arabic verb *rajaba* (رَجَبَ), “to be timid.” Some kind of dove is certainly therefore meant.

(27.) Another dove is denoted by the word *šu-um-mu* (𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵), which occurs both in the Accadian and Assyrian columns; the word is doubtless of Semitic origin, and borrowed by the Accadians. The *šummatu* is one of the birds sent out from the ship in the Chaldean story of the Flood; the swallow and the raven, it will be remembered, being the other two birds. Dr. Delitzsch compares the Arabic *sāmmat* or *šammata*, “a bird like a swallow,” and translates the Assyrian word by “sand-martin.” But when we compare this part of the Deluge Tablet with the account of the birds sent out by the Biblical Noah, and remember the position which the dove holds there, there seems more reason to suppose that the *šummu* or *šummatu* is a form of the Arabic *hamāmat* (حَمَامَة), a dove or pigeon—the *s* and *h* being here interchanged—than that a “sand-martin” is meant. In modern Arabic *hamāmat* and *zamāmat* are both names of the “pigeon.” The Accadian name in the Deluge Tablet is TU KHU (𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵);¹ it is not certain why the name of the “descending bird” (for TU=*eribu*, “to descend”) should be given to a pigeon or dove, but I think it is quite probable that the idea refers to the habit of pigeons generally making a momentary suspension or hovering motion a

¹ The Sumerian name is 𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵 *te-khu* (Haupt, “Accad. und Sumer. Keilschr.,” I, p. 43, l. 49).

Botta II. pl. 110.

few feet in the air—which everybody must have noticed—before finally alighting on the ground.¹

(28.) The turtle dove is clearly pointed out. It is the *tar-ru* (𐎶 𐎶𐎶𐎶) or *ca-ca-ba-a-nu* of the Assyrian column; and the IGI MUL of the Accadian. *Tarru* is clearly the Hebrew *tur* (תור), the Latin *turtur*, and our English *turtle* dove. The name of *tur* is also evidently imitative of the soft coo of the turtle dove. The Accadian name of “eye-star” or “eye bright” is expressive of the bright, soft eyes of this lovely little dove; in the Canticles the eyes of the beloved, it will be remembered, are compared with those of the turtle dove, and I dare say that Oriental poetry is full of such expressions. The Assyrian name *caccabānū*, “star-bird,” cf. כוכב “a star,” Arab. كوكب “a star,” “to twinkle like a star,” corresponds with the Accadian. The turtle dove (*Turtur auritus*) is common in Mesopotamia, Persia, and Palestine, and the *T. risorius*, another species, occurs in some of these countries.

(29.) Partridges are common in Mesopotamia and the neighbouring countries. The commonest species in Persia by far is the *Caccabis chukar*. It is a red-legged species, and specifically distinct from the *Caccabis græca* or *saxatilis*; the common partridge, *Perdix cinerea*, is not found in Mesopotamia. In Assyrian the partridge is called the *cu-lu-cu-cu*, the *cilippu*, and the *ku-ku-ul-luv*; this latter name is probably identical with the Arabic *kaukal* (قَوَقَل), which Freytag explains as the male partridge, and also the bird called *katha*, i.e., one of the sand grouse (*Pterocles*), which occur in amazing numbers in certain localities. Another bird belonging to the partridge family, the *Francolinus vulgaris*, or common francolin, is very common in Mesopotamia and Persia, and must have been known to the Assyrians. It is found in great numbers in the tamarisk jungles and reed beds of Mesopotamia, and doubtless would be included among the

¹ Prof. Sayce suggests to me that the “Tumbler” pigeon is meant by the “descending” bird; considering the very early domestication of pigeons, this seems a very natural and probable explanation.

has with other meanings that of "running swiftly," and under this Arabic root we find a bird called *sandal* (سَدَل) mentioned as "nomen avis vorantis napellum," "the name of a bird which devours the herb napellum," whatever that may be. The idea gathered from the whole consideration of the two words seems to be that of "some long-legged pouch bird which runs with great swiftness," and I am strongly disposed to believe that the great bustard (*Otis tarda*) is denoted. This bird runs with great swiftness, using its wings sail-like, after the manner of ostriches, to accelerate its speed. When it flies, it moves its wings slowly like a heron, the flight of which bird we often speak of as "sailing" in the air. They are shy and timid birds, easily scared, expressing strong marks of fear on the appearance of even a small hawk overhead. The male bird is characterised by a peculiar membranous pouch or bag, capable of holding seven wine pints of liquid; the entrance into it is between the under side of the tongue and the lower mandible of the bill. The function of this remarkable anatomical peculiarity is, I believe, not known; female birds are destitute of it, neither is it present in all the males. The great bustard is mentioned by Ainsworth as occurring in Mesopotamia; it is frequently met with in the stony districts of Syria; sometimes as a solitary bird or in pairs, sometimes in large flocks. According to Blanford and Major St. John, the great bustard is found in the Caspian Islands, near Astrabad, in Armenia, and is believed to be an occasional visitant to many parts of Northern Persia. In the Transcaucasian provinces of Russia it is common. Such a bird would certainly have been known to the ancient Assyrians and Accadians. As an article of food the flesh of the bustard is highly esteemed; and, according to the late ornithologist Mr. Gould, this bird is frequently seen on the Continent exposed for sale in the markets.¹ Doubtless the ancient dwellers in the lands where the great bustard was found used to hunt it, and eat its flesh. So remarkable a structure as the gular pouch possessed by the male bird, is a character which the observant Accadians could not fail to

¹ Xenophon (*Anab.*, I, v, 4) says "the flesh of the bustard is very sweet."

have noticed on occasions of its being prepared for cooking, and I think that the presence of this gular bag is intimated by the Accadian word *gil*, the first component part of the bird name *gil-gid-anu*, which stands for the great bustard. Other species of bustards are found in the lands with which we are concerned.

(31.) The common crane (*Grus cinerea*) is mentioned in the bilingual lists as the *ur-ni-gu* (𒌦 𒍪 𒌆𒌦) or *ur-ni-ku* (𒌦 𒍪 𒌆𒌦), and *ca-li-u* (𒌦 𒌦 𒌦). The first name appears to be identical with the Arabic *ghir-nik* (غُرْنَيْق), "a water bird with a long neck," a very indefinite explanation, it is true, when taken by itself; but it is certain that the crane is meant. Under the name of *Ghörnäk*, Forskal mentions a white bird which feeds on gadfly larvæ found on the backs of cattle, "æstris pascitur in tergo bovis nidificantibus," which, as we shall see by-and-by, is the buff-backed heron. As a warning of the necessity of being acquainted with the natural history of the bird, or any animal under consideration, before we make some positive assertion, a matter to which I have already alluded, I will add just this one more. Rosenmüller, the great German orientalist and commentator on the Scriptures, whose name cannot be mentioned without feelings of the greatest admiration, Rosenmüller, in his very valuable notes to Bochart's "Hierozoicon," has this short comment on Forskal's *Ghörnäk*, "Patet hanc avem non esse gruem," "It is evident that this bird is not a crane." True, the bird is not a crane, but a heron; but the improbability of a heron in such situations would appear as great as that of a true crane. *Ghurnuk* and *kir-ki* are modern vernacular for the crane in Arabic.

The word *ca-li-u* or *ca-lu-u* is identical with the Chaldaic (*cēla*) (ܥܠܐ) "to call out," in allusion to the loud, sonorous voices of these birds, which they utter high in air on their periodic migrations. The *Grus cinerea* is not uncommon in many parts of Mesopotamia, and is plentiful in South Persia.

(32.) The stork (*Ciconia alba*) is a common feature in

Turkey, where it is held in esteem as a scavenger and a destroyer of snakes. It is mentioned in the lists under the name of *rak-rakk-u* (𒊕-𒊕-𒀭𒀭) or *la-ka-la-ka* (𒀭𒀭𒀭𒀭), which is evidently identical with the *lak-lak* (لقلق) of the Arabs, at present used in Turkey to denote this bird. Although the white stork is included in the name of *lak-lak*, or *rak-kak*, originally meant in Arabic to be expressive of the sound produced by the bird, it would appear that the black stork is the species which the Accadians had in view when they named the stork. By them it was called the *SI-ZI* bird, i.e., "the green bird"; for *SI-ZI* (𒀭𒀭𒀭𒀭), or ideographically 𒀭𒀭¹, is the equivalent of the Assyrian *arku*, "green," and the *KHU-SI-ZI* bird is, in one of the bilingual lists (W.A.I., II, 26, 56 l.), identified with the *ra-ak-ra-ku* (𒀭𒀭𒀭𒀭𒀭𒀭𒀭𒀭) "a stork." Now there is not a bit of green colour in the plumage of the white stork, neither in its beak nor legs; but in the black stork (*Ciconia nigra*) the whole of the dark plumage is varied with purple and copper-coloured and *green* reflections, so as fully to justify the name which the Accadians gave to this bird. The colour signified by the *SI-ZI* and *arak* is either "green," like grass, hence *urcitu* "verdure," or yellowish-green, or yellow, or golden-yellow, or any colour of varied green. The Hebrew word *yerakrak* (יֶרַקְרַק) is used of the feathers of a dove in Ps. lxi, 14; and the golden colour refers to the beautiful play of metallic lustre observed in the neck of several wild pigeons; compare Tennyson—

"In the Spring a livelier iris changes on the burnished dove."

—("Locksley Hall," l. 19.)

"The common stork is found all over the plateaux of Persia, building its nests on minarets, and oftener on the low towers which flank the mud walls of Persian villages. It is not molested by Persians, who say that it makes a pilgrimage to Mecca during its annual winter absence, whence its name

¹ The pronunciation of 𒀭𒀭 as 𒀭𒀭 *si* or *si(t)* is given in W.A.I., V, 27, l. 6: 𒀭𒀭𒀭𒀭 𒀭𒀭 𒀭𒀭𒀭𒀭 = "some green insect."

of *Hájjí*.”—(Blanford, ii, 297.) It is common also in Mesopotamia, Palestine, and other countries. The black stork, which is a more shy bird than the former, is less common.

(33). Some kind of bird, which I am inclined to think denotes the black ibis, is mentioned under the names of *um-mi mi'i* (𒌦𒍪𒍪𒍪 𒌦𒍪 𒍪𒍪 𒍪𒍪𒍪), “mother of waters,” and *a-ba-ya* (𒍪𒍪 𒍪𒍪𒍪𒍪 𒌦𒍪𒍪). The first name, so far as its meaning is concerned, is clear, but it is not so with the word *a-ba-ya*. Lenormant gives the word as an Accadian form, but without suggesting its signification. Perhaps it is onomatopoetic. Delitzsch compares it with the Talmudic *ibbu*, which is supposed to represent the Biblical *anaphah* (אֲנָפָה) and to signify “a kite” (?) and he suggests the osprey as the probable meaning. But do not the words “mother of waters” imply some more decided aquatic bird than the osprey? Some water-presaging bird appears to be intended; perhaps the bald ibis (*Comatibis comata*), a bird of very similar habits to the Egyptian ibis (*Ibis religiosa*), which was held sacred by that ancient people. This latter bird always appears on the Nile at the times of its periodic rise, just as the waters showed signs of overflow; hence the bird was regarded as a prescient creature, foretelling the longed-for inundation and the consequent fertility of the land. Some such idea, I think, is intended by the expression “mother of waters,” though both the Hebrews and the Arabs frequently employed the words “father” or “mother” to many kinds of animals as being “possessors” of some peculiarity, whether of habitat, form, or periodic appearance. The terms *abu hannes*, “father of John,” and *abu mengal*, “father of the sickle,” are both names of the Egyptian ibis; the former referring to the appearance of the bird about St. John’s day, the latter to the peculiar shape of the bird’s bill. The glossy ibis is found in large numbers on the Murdáb, near the Caspian, where another species, the *Tantalus ibis*, also occurs. The glossy ibis is also at times very common on the Euphrates. The appearance of these birds happening about the same time as the welcome rain, caused them, among other reasons, to be looked upon with more or less

of reverence, and to have thus earned the name of "mothers of waters."

(34.) The name of a bird called A GUS ( ) , "long horn," by the Accadians, and *na-adh-ru* ( ) by the Assyrians, occurs in the fifth volume of W.A.I., 27, 3, ob., l. 46. I have no doubt that the long-horned or long stiff-crested heron is intended. *Nadharu* or *nádhru* is the Heb. *nátar* (, Arab. , "to guard," "keep watch"; these attributes both suit the heron (*Ardea cinerea*), with its long, slender, occipital feathers, which will watch patiently, standing for hours together motionless, watching for any passing fish, mostly with its feet in the water, remaining "still as if carved out of wood."

(35.) The buffed-back heron (*Ardea russata* or *Herodias bubulcus*) has peculiar habits, which were very likely to attract the notice of the observant Accadians and find expression in a name. This heron is known as the "cow bird" in countries where it is found, from its habit of associating with cows and sheep. It is, a writer in the "Ibis" (III, vol. ii, p. 245), speaking of this heron, writes, "always seen among cattle. I have seen a buffalo walking along with three or four of these birds or (*Herodias intermedia*) sitting on its back, reminding one of an itinerant vendor of plaster-of-Paris images." The buff-backed heron is common in Mesopotamia, as are also some other species. The Accadian character is (-|<|) the UA or cattle bird. The Assyrian equivalent is unhappily lost by fracture of the tablet.

(36.) Some magnificent bird is evidently denoted by the Accadian word *dhar-lugal-luv*,¹ borrowed by the Assyrians, and represented in the Accadian column by *dudurranu*. The Assyrian name means literally "the variegated royal bird." I think that the flamingo is here intended. The *Phoenicopterus antiquorum* is a magnificent bird, and is quite a feature in certain marshy places in Mesopotamia. A wood-cut figure of this bird is given in Colonel Chesney's work,

¹ *Un-gal* ( ) to be read *lu-gal*, is one of the Accadian names for a king. (W.A.I., V, 30, l. 12.)

"The Expedition for the Survey of the Rivers Euphrates and Tigris," 1850, Vol. II, p. 44, where it is called the *Tair-el-Raouf*, or the magnificent bird (Arabic *rafî*, رفيع), "noble," "exalted." "These extraordinary birds," it is said, "frequent the rivers Sâjur and Koweik." Dr. Helfer, a German naturalist who joined the expedition, says that these birds "are seen in large flocks, and it is known that they have the surprising habit of forming a kind of artificial embankment across the rivers Saggéoar and Kouweik. Having for this purpose chosen the shallowest spot, they arrange themselves side by side in several close ranks, and sit down with their tails to the current, and their feathers spread out. By this contrivance they in some degree check the course of the water, which in consequence overflows at the chosen spot, and one of the flock, previously placed as a sentinel a little distance from the rest, gives as a signal a cry not unlike that of the stork, but much more shrill; upon which the rest of the flock dart upon the fish, frogs, toads, &c., which are then almost without water, and make a sumptuous repast of all that are thus caught." (Appendix, p. 722.)

It is extremely improbable that this extraordinary and cunning proceeding has been corroborated by other evidence. Can the Accadian name of this "royal bird" be understood as in any way a confirmation, if not of a veritable fact, yet of an idea that at all events is at present held by the natives of these districts?

In a letter which Dr. Ainsworth has kindly favoured me with, in answer to my inquiries, he writes: "I never heard of anyone corroborating the story told of the flamingo, under the name of *Tâir-el-Raouf*, "the splendid bird," by Colonel (late General) Chesney; but I know that he had it from an old resident in Aleppo on his first journey. I met the gentleman, whose name I forget, afterwards at Aleppo, and I have every reason to believe that he was a conscientious man, and in every way to be trusted, although the story has an Oriental savour about it." Now the Accadian name answering to the *dhar lugal-luw* (𒌦𒀭 𒌦𒀭 𒌦𒀭), "the royal bird" of the Assyrian column, is complete. It is wrongly transcribed

from Konyuyik, procession,
with fruit &c. Layard II pl. 9.

feeding scene from Khorsabad. Layard II pl. 32.

ASSYRIAN BIRDS. Plate VIII.

in W.A.I., II, 37, l. 37; but Mr. Pinches, with his usual good nature, has given me the correct reading from the tablet itself: the name of this bird appears as , *dudurranu*; now we find the word given (in W.A.I., II, 33, l. 25) as the equivalent of the word , *ra-kha-tsu sa a-sa-bi*, an "inundation" or "flood of a seat."¹ The ending of the bird-name in the Accadian column looks very like this *dudurru*, with the usual adjective Semitic ending of *ānu*. Is it not therefore possible, or perhaps probable, that the "royal variegated bird" is also the "inundation bird"? and that we thus have a corroboration of a story, which, even though it be doubtless destitute of actual fact, is evidently current to this day among the natives of North Syria? We know how persistently old beliefs maintain their ground, and how traditional stories about animals are handed down from one generation to another; so that this story about the flamingo appears to exist in its old Accadian name of "the inundation bird," while the old Assyrian name of "the royal bird" appears with the very similar title of "the magnificent bird" in the vernacular Arabic of the people of modern Syria.²

(37.) We are indebted to Dr. Delitzsch for the very satisfactory explanation of the Assyrian names of the pelican. It is a great thing to get hold of some particular feature in a bird's form, voice, or habits—something which at once arrests the attention, and stamps some definite idea upon the mind of the observer—some peculiarity which the possessor of a certain attribute and structural formation exhibits different from other creatures of the same class. It is natural to suspect that what strikes us now-a-days as remarkable, also

¹ Cf. also W.A.I., II, 21, l. 53 𐎠𐎡𐎢𐎣 = 𐎠𐎡𐎢𐎣 𐎠𐎡𐎢𐎣 𐎠𐎡𐎢𐎣, "calu-sa-mê, "damming of the water"; 24, l. 45 = ra-kha-tsu sa a-sa-bi, "inundation of the seat."

² Another explanation of this bird-name may, however, be given: *dur* = *marcaśu*, a "diadem," or "girdle" (W.A.I., II, 31, l. 10); and *dur-makh* = *d(h)ur ma-khu* (l. 13), so that the whole bird-name would read as the "royal-banded bird," which I am unable to identify.

appeared remarkable to a greater or less extent to observers of past ages. Now the pelican is a very remarkable bird. The wonderful pouch of its lower mandible marks it at once; and such a peculiarity one would naturally suppose would find especial mention in any account, whether descriptive or verbal, that we may meet with. Yet, strange to say, in the case of the pelican, its very name is a misnomer. Our English word is from the Greek *πελεκάν* or *πελεκίνος*, a name manifestly derived from *πελεκάω*, "to hew with an axe." The name thus derived was first used by the Greeks to denote "a woodpecker." It was the woodpeckers, *πελεκανες*, who acted as the clever carpenters that hewed out the gates of the City of Cloud—Cuckoo-borough, in the birds of Aristophanes, and the name is admirably suited to the woodpecker, which uses its bill in making holes in trees. Aristotle uses the word *πελεκάν* for the large web-footed bird of that name, but nowhere alludes to its extraordinary bill. He says it is migratory, and devours shell-fish. The etymology of the Greek word would show that the name was originally used for the woodpecker. Subsequently, it would appear, the name was applied to denote the web-footed bird, probably on account of its large bill. Ælian also mentions this bird under the name of pelican, but says nothing about its pouch. The pelican, under the name *onocrotalus*, is well described by Pliny, who is the first writer, as far as I can learn, to speak of a pouch under the throat. But the name *pelicanus* never found its way into classical authors. It is used by Jerome in his commentary on the 101st Psalm. The story about the pelican feeding its young with its own blood was originally told of the vulture, and found its way from Egyptian fable into the writings of Patristic theologians. In the devices of a bird tearing its breast and feeding its little ones with its own blood, so frequently seen on monuments, and in old church architecture, you will always find that the bird is not a pelican, but a vulture, or an eagle. The word *onocrotalus*, used by Pliny, and evidently borrowed from the Greeks—but by whom, and when, and where used by that people I know not—is both in its definition and in the account which Pliny gives, admirably suited to the pelican, and to no other bird.

The name takes its origin from the pelican's voice, which was supposed to resemble the cry of the ass, and which, indeed, as a matter of fact, it does resemble. Wishing for information on this point, I wrote to Mr. Bartlett, the well-known naturalist of the Zoological Gardens, and he writes to me as follows: "The pelican utters a loud and single note, after the fashion of a bray or blare, and this is not unlike the voice of an ass." Similarly we have applied the term "Laughing Jackass" to the great kingfisher (*Dacilogigas*) of Australia. We now come to the Assyrian and Accadian names of the pelican.

This bird is mentioned by several names in the lists, and once in the Historical Inscriptions: it is called *tus-mu-u* (𒌷 𒌷 𒌷 𒌷), *ab-bu-un-nu* (𒀭 𒀭 𒀭 𒀭), and *a-ta-an nahari* (𒀭 𒀭 𒀭 𒀭) by the Assyrians. *Tusmu* may, of course, be read *cu-mu*, but in that form the word is not easy of explanation. This *tusmu* is mentioned in the Annals of Sargon (Botta, 129), who relates his campaign with Merodach Baladan, king of Babylon. Being hard pressed, the Babylonian monarch shut himself and his army within the city of Dur Yakin, which had been surrounded by canals turned off from the Euphrates during the overflow of its waters. Of his position here, Sargon writes, "He, together with his auxiliaries and his forces, like a *tusmu* bird, amid the canals placed the ensigns of his royalty." The spectacle of an army placing itself within the water-protected area is compared to that of a flock of pelicans; the king himself, with his royal or state accoutrements, being, perhaps, surrounded by his forces, on the look out for any meditated attack from the enemy. It is possible that reference here may be made to a peculiar habit of the pelicans, recorded by Dr. Ainsworth, in arranging themselves so as to provide against the attack of jackals, or other carnivorous enemies. "These birds congregate in the evening and have a grand soar in the air; after which they alight where the plain is open, and the vegetation low and grassy; disposing themselves carefully in circles, with their heads outwards, so that jackals, or other enemies, ever hunting in the evening for

(38.) I have already alluded to the question whether the Assyrians kept domesticated poultry: I think there is sufficient evidence to show that the answer may be given in the affirmative. There are several names of one and the same bird mentioned in a food list in W.A.I., II, 42, lines 67-70, the most common being those called *cu-ni-pu* and *'e-zi-zu*. All these words demand examination. There can be no reasonable doubt that the domestic cock is the bird denoted. At one time I was inclined to think that the swan was intended, but my friend Mr. Sayce was able to point out one of three occurring names which served as a key to the problem. The *cunipu* and *'ezizu* denote the same bird, and the *'ezizu* in line 19 of the same plate (42) is equated with *dil-bat* as an edible bird. Fortunately *dilbat* is well known: it is "the announcer," "the proclaimer," or "herald"; see W.A.I., II, 7, 37, where *dilbat* = *nabû*, to proclaim, &c., and or is the planet Venus (Istar), the "announcer" of the dawn or of the evening. It follows therefore that all the names which are equated with *'ezizu* must also be equated with *dilbat*. The cock as the "announcer of dawn," as the "trumpet of the morn," is proverbial almost everywhere. As the announcer of news the cock was sacred to Mercury, as the curer of diseases to Æsculapius, as a warrior to Mars, Hercules, &c. Among the Persians the cock not only awakened Aurora and aroused men from sleep, but it also caused the demons of night to depart. In the Avesta the cock is called *Parôdars*, "upon whom evil-speaking men impose the (nick) name of *Kahrkatâs*"; "this bird," it is added, "lifts up his voice at every godly morning dawn, (saying) 'Stand up, ye men, praise the best purity, destroy the *Daêva*.'" (See Vendidad, xviii, 34-37; Bleek's translation, p. 128.) The demon which the cock puts to flight is the *Daêva Bushajançta*, "with long hands," i.e., the demon of long sleep. In extracts from the Avesta, p. 197, the following Jewish prayer is given, "Blessed art Thou, O Lord our God! King of the universe, who grantest to the cock understanding to distinguish between day and night." We are further told that the

Parsees do not eat a cock after it has begun to crow. We know that the ancient Romans took augury from cocks and young fowls: so we may expect to find this bird figuring in the Assyrian records. I do not know, however, of any allusion to these birds as birds of augury; but that they did appear in early times on sacrificial occasions is certain, from the impression of the conical seal obtained by Sir A. H. Layard at Babylon, an engraving of which may be seen in Layard's "*Nin. and Babyl.*" p. 538. The seal is "an agate cone, upon the base of which is engraved a winged priest or deity, standing in an attitude of prayer before a cock on an altar; above the group is the crescent moon."

There is a cylinder in the British Museum in which there is a subject very similar. "A priest, wearing the sacrificial dress, stands at a table before an altar bearing a crescent, and a smaller altar, on which stands a cock." The Hebrew commentators thought that Nergal, the idol of the men of Cuth, had the form of the cock, writes Layard, referring to Selden, "*De Dîs Syris*," p. 251. I may mention that Montfaucon, in his "*Antiquities*," gives a similar sacrificial representation in the plate "*Duodecim Anni Menses*," where Januarius is depicted as a priest burning incense on one altar, and having on his left hand another conical shaped altar, a cock standing at his feet. We know that fowls played an important part as birds of augury. As Pliny ("*Nat. Hist.*," x, 21) says, it is from the feeding of these birds that the omens are derived, "*tripudia solistima*; it is these which regulate day by day the movements of our magistrates, and open or shut to them their own houses; it is these that command battles or forbid them, and furnish auspices for victories to be gained in every part of the world; it is these that hold supreme rule over those who are themselves the rulers of the earth, and whose entrails and fibres are as pleasing to the gods as the first spoils of victory." It is not improbable that the sacrificial rites and consultation by augury, in which cocks figured amongst the Romans, came originally from Babylonia, and that as some of the zodiacal signs had their earliest origin in Babylonia, so the sacred rites connected with the Roman months had some of them a similar origin. I think that

the figure of the cock perched on an altar before a priest making his offerings, leads us to conclude that this bird was to some extent sacred, and that one of the numerous names of the cock, viz., 'e-na-nu 𐎶𐎵 𐎶𐎵 𐎶𐎵 (עֵנָן "to divine," "augurans," "observans somnia" (Vulgate), represents this bird in this capacity as a soothsayer. The following names occur as denoting the cock; all have the determinate prefix of 𐎶𐎵𐎶𐎵, "food," before them.

(a.) 𐎶𐎵 𐎶𐎵 𐎶𐎵, *cu-ni-pu*, or 𐎶𐎵 𐎶𐎵 𐎶𐎵 𐎶𐎵 *cu-ni-ip* (khu). The derivation of this word is uncertain: it may be connected with the Hebrew כַּנָּף, "a wing," and allude to the constant clapping of its wings in the act of crowing (*cf.* Pliny, x. 21, "ipsum verum cantum plausu laterum"), hence called the "wing-bird"; or it may refer to the original meaning of the Hebrew word for a wing, *i.e.*, "to cover," "to hide," in allusion to the hen bird covering and brooding over its chickens. As some other names of the domestic fowl refer to the bird's voice, it is not improbable that *cunipu* may more definitely denote the covering or brooding hen, but was not used exclusively in that sense.¹

(b.) 𐎶𐎵 𐎶𐎵 𐎶𐎵 'e-zi-zu, "the strong bird," Heb. (עֵזִי). This is a suitable name for the bold pugnacious cock, the emblem of Mars, able, according to the Latin tradition, to inspire terror even in the lion. With the Assyrian name we may aptly compare the Aramaic word גַּבֵּר, "the strong bird," occasionally used by Talmudic writers as one of the names of the cock: see Buxtorf, "Lex. Chal.," pp. 384, 385. The fem., גַּבְרִית *gabrîth*, is also given as the name of the hen.

(c.) With 'e-zi-zu is also associated the Accadian name 𐎶𐎵 𐎶𐎵 𐎶𐎵 𐎶𐎵 *gar-mi-kharmes* (?), a word which awaits explanation.

(d.) Another name as an equivalent of 'e-zi-zu is 𐎶𐎵 𐎶𐎵 𐎶𐎵 *a-gus-se*; but as another very similar word, 𐎶𐎵 𐎶𐎵 𐎶𐎵 *a-vu-se*, also occurs as a synonym, the two may be

¹ Our English word "cock" is borrowed from the French *coc*, and is not of Anglo-Saxon origin. The old word for a cock was *Hana*, a masculine word, corresponding to English hen; *cf.* German, *der Hahn*; and see Skeat, "Etym. Dict.," p. 118.

connected, and read as *avusse* and *a-vu-se* respectively. This name is probably to be referred to the Aramaic ܐܘܨܐ *avvêsh*, "personare," perstrepere, "sonum edere," a fit name for the noisy crowing cock.¹ The *avuse* in W.A.I., II, pl. 42, l. 18, comes just before the 'e-zi-zu, and like it is called the *dilbat* (𐎠 𐎡), "the announcer." The name may, however, be of Accado-Sumerian origin; *g* = Sumerian *m* or *v*.

(e.) Another name, 𐎶𐎶𐎶𐎶 𐎶𐎶𐎶𐎶 𐎶𐎶𐎶𐎶 < *sag-gus-u*, perhaps has reference to the cock's comb or crest; 𐎶𐎶𐎶𐎶 𐎶𐎶𐎶𐎶 is "the top of the head," and < is given as having as one of its significations, a "peak"; the idea of elevation seems to be implied in the form of the character when turned up, ^; ^ or < may be explained in one of its most general significations as "lord." The bird's name would read, "top of the head," or "head" + "lord": a suitable name for the proud cock, as he struts about with uplifted head—

"How high his highness holds his haughty head"!

(f.) The *a-vu-se* has also as an equivalent the name 𐎶𐎶𐎶𐎶 𐎶𐎶𐎶𐎶 𐎶𐎶𐎶𐎶 'e-na-nu, to which reference has already been made. The cock is the "diviner" or "soothsayer" (𐎶𐎶𐎶𐎶): as presaging coming events from the appearance of its viscera, or for other reasons. All these names occur in pl. 42, Vol. II, of W.A.I., and all have the D.P. of "food" (𐎶𐎶𐎶𐎶) before them.

(39.) The ostrich is one of the few birds whose figures occur on the monuments to which I have alluded. It was known to the Assyrians by the names of *ša-ka-tuv* (𐎶𐎶𐎶𐎶 𐎶𐎶𐎶𐎶 𐎶𐎶𐎶𐎶) *se-ip a-rik* (𐎶𐎶𐎶𐎶 𐎶𐎶𐎶𐎶 𐎶𐎶𐎶𐎶) and *gam-gam-mu* (𐎶𐎶𐎶𐎶 𐎶𐎶𐎶𐎶 𐎶𐎶𐎶𐎶), this latter name being borrowed from the Accadian *GAM GAM* (𐎶𐎶𐎶𐎶 𐎶𐎶𐎶𐎶). Another

¹ It is to be noted that we have, at present, no onomato-poetic name for a "cock," like our *cock-a-doodle-doo*, of which "cock" is simply an abbreviation; cf. "Soph. Frag." 900, κοκκοβόας ὄρνις, ὁ αλεκτρών, "the cock, the bird that cries coc"; but the *idea*, if not the actual *voice*, of the bird, is manifest in the word *a-vu-se*, just as the old English word *Hana* (= "Cock"), is to be compared

with the Latin *canerē*, the Sanskrit कण, *kvaṇ*, "to sound." The Sanskrit *kukkuta* (कुक्कुट), "a cock," is clearly onomato-poetic.

Accadian name is GIR GID DA ( ) "the long-legged bird. *Sakatuv* may be compared with the Arabic صَقَعَ (*saka'*) "abiit, declivavit, deflexit a viâ recta," and may allude to the well-known habit of these birds always running in circles when hunted. GAM GAM is in the syllabaries (W.A.I., III, pl. 70, l. 48-49) compared with *gi-mil-lu* ( ) "to recompense,") and *sikru*, "a reward ( )". It is not easy to see the exact meaning of this expression as applied to the ostrich. Delitzsch thinks it to be synonymous with what is said of the stork ( ) "the pious bird." The Hebrews, it is known, regarded the ostrich as a cruel bird in neglecting its young, as they supposed, and the Arabs considered this bird as the emblem of stupidity. Still the Arabs used the word *na'am* ( ) as the name of the ostrich, although the verb from whence the name is derived always refers to what is pleasant and good. Whatever reasons there may be for these names, implying "benefit" or "good disposition," whether the benefit refers to that derived from man by the birds' capture, or to the supposed good the birds showed to each other, it is certain that they are names by which the ostrich was known; and with this knowledge I suppose we must be content.

(40.) W.A.I., II, pl. 37, No. 1, obv., l. 8, *si-li-in-gu*, *bu-ri-du*, compared with line 48, No. 2, obv., *az-ci-ku*, and *si-lik-ku* = Accad. NAM BIR NAM KHU.

The Accadian name clearly points to some bird of omen or destiny, and the *silingu* of the Assyrian column is, I think, also to be referred to an Accadian origin, viz., to the word *silik*, "propitious," beneficial. The name of *bu-ri-du* is explained in the Talmud as "a bird of a speckled colour," ( ) ( ) "Vogel von gesprenkter Farbe," Arab. برد (see "Aruch Completum," Dr. Alex. Kohut, p. 172). Lewysohn ("Die Zool. des Talm.," p. 187) quotes Landau, who identifies this *barda'* with the "Snow Finch." The word *buridu* seems to point to some bird which is found in cold

Persian highlands. It is about the size of a turtle-dove, and in its winter plumage the adult bird has a patch of white with ash-brown markings on the chin. Other grebes, such as the crested species, *P. cristatus*, *P. nigricollis*, *P. auritus*, occur on the Caspian, on the Balúchistán coast, and on the Kázrún Lake, and the smaller species, as *P. auritus* and *P. nigricollis*, were probably included under the names of the *dhabiu* and *cacis na'ari*, i.e., "the small diving bird of the rivers or water." The English name of *dabchick* or *didapper* = dive + diver or dapper, i.e., "the double diver or dipper," from the perpetual diving habits of the bird, expresses the same idea as the Assyrian name of *dhabbiu*. Dr. Delitzsch suggests a "sea-gull" (eine Mövenart); but no sea-gull is known to dive, whilst the little grebe or dabchick fulfils all the requirements.

(42.) Obv., No. 1, l. 15, *su-ur-du-u*, *ca-su-su*. There can be no doubt that these two bird-names are to be referred to that of the *sur-du*, which occurs in the Accadian column of W.A.I.; V, pl. 27, l. 48. Unfortunately, in this tablet the whole of the Assyrian portion is broken, and not a vestige of the Assyrian equivalents remain, whilst in the tablet in which the two Assyrian names of *šúrdû* and *cašúšu*, are preserved, only a fragment of the corresponding Accadian name is left. This remaining bit is which is evidently the remains of the complete Accadian word in Vol. V, *loc. cit.* The , and , are therefore the names of the same bird. The Accadian name which may be read either *sur-du*, "might-making," or *cuš-du*, "rest-making," has been inadvertently read by the late Mr. G. Smith and by M. Lenormant as *ra-pa-kak khu*, "the rapakak bird," the parts of the name having been wrongly separated, as Dr. Delitzsch ("Assyrische Lesestücke," p. 31, 171) has already pointed out. The name of *šúrdû*, which occurs in the Assyrian column in pl. 37, No. 1, l. 15, is therefore evidently a loan word, and borrowed from the Accadian, and shows us, more-

over, that we must read the Accadian word as *šurdu*, and not as *cuš-du*. Prof. Delitzsch thinks that the Assyrian name *cašusu* is a reduplicated form of the Hebrew כּוֹס (*cūs*), which he identifies with the screech-owl, the Hebrew name being explained in the Talmud by the Aramaic word כְּרִיטָא, which, as we have seen, is probably that species of owl. Mr. Pinches, to whom I am indebted for valuable suggestions, and for copies from the tablets not yet published, tells me that he thinks he has found a tablet which seems to show that the Assyrians practised falconry, and that the bird used for that purpose is none other than the *šurdu* in question; so that the idea conveyed by the name of the bird, "which makes might," is very fitting for some of the larger falcons, which the Assyrians very probably employed as helping agents in their capture of winged, or possibly even running, game. This use of the *šurdu* would, of course, exclude all the owls, and point to some falcon, as, perhaps, the *Peregrine*, or one or other of allied species or varieties. The Assyrian *cašusu* may be referred to the Heb. כָּסַף (allied to קָצַץ), "to divide," "distribute," or the Aramaic כָּסַף, "to eat," "masticate." From the idea of dividing by cutting came that of reckoning up or assigning a certain portion, hence the Aramaic כָּסַף, "a fixed or reckoned portion," "a share." The ancient art of hawking was practised for the sake of securing the prey, and little account was taken of the sport itself, as in later times of the noble art of falconry. It was the custom of ancient people, who employed kites or falcons to aid them in the capture of their game, to encourage the birds by always dividing a portion of the prey with them. In India, as we learn from Ctesias, foxes and hares were hunted by the use of birds of prey. It is probable that the Greeks derived from India and Thrace their first information concerning falconry. Aristotle expressly mentions certain parts of Thrace in which the people made use of rapacious birds in their fowling expeditions, and Aelian ("Nat. Hist.," ii, 42) tells us that when the Thracians catch any birds "they divide them with the hawks, by which means they render them faithful partners in fowling; if they did not give them a share of the booty they

would be deprived of their assistance." This custom of giving the falcon a portion of the prey killed seems to have been in general use, and the falconers of more modern days similarly used to share their booty with the birds. It would be hazardous, in the absence of positive proof, to assert that this custom of allowing the bird to share is implied in the name of *cašašu*; but the ancient custom seems worthy of being mentioned. I think that some falcon is designated by the names which have passed under our consideration, and that it is probable that it was employed by the ancient inhabitants of Assyrian lands to aid them in the capture of winged or other game. In col. No. 2 the name of *su-vur-du*—another Semitised form of the Accadian word—occurs as the equivalent of *cašušu*.

(43.) Pl. 37, rev., l. 7, , *khar-ba-ka-nu*, or , *khar-bac-ca-a-nu*. These two forms of the same bird-name should be compared with some names which occur on pl. 40, 4, rev., ll. 24–26, where we meet with *tas-bal-luv*, or *khar-ba-ka-nu*, and *ta-kha-tsa-se-nu*, all of which seem to relate to the same bird, or to birds of prey of different allied species or similar habits. The word *tasballuv*, another form of *tasbaluv*, has been already considered. The *kharbacānu*, or the full form *kharbaccānu*, has an Accadian origin, and appears in the Assyrian column with the usual adjectival Semitic ending of *ānu*. Etymologically, the name is composed of (*khar*) "entrails" + (*pak* or *bak*), "a bird in flight," and (*ca*), "a mouth," and, I suppose, designates some eagle or other rapacious bird which accompanies battle-scenes, and feeds on the carcasses of the slain. Figures of eagles carrying off the entrails of the dead occur on the monuments (see plate). The *takhatsasenu* designates the same bird of "the battle" fields. The names in the Accadian column are, unfortunately, lost, only fragments remaining. The character of ( ) opposite *kharbacānu*, probably denotes "a dead body" (*pagru*, Assyrian, *bat*, Accadian), and refers to the habit above mentioned. Opposite the name of *kharbacānu* in pl. 40, 4, rev., l. 25, occur the

(49.) In line 32 occur the words $\Xi \nabla \text{𐎶𐎵} \Xi \text{𐎶𐎵} \text{𐎶}$ *bur-ru-um-tav*, and $\text{𐎶𐎵} \text{𐎶}$ *dhar-ru*, on the Assyrian columns, and $[-|<|] \text{𐎶} \text{𐎶} \text{𐎶𐎵} \text{𐎶} [-|<|]$ [NAM] BIR DHAR KHU in the Accadian. These words admit of easy explanation; but the result is too indefinite for identification. The Assyrian *bu-rûm-tav* is the Hebrew בָּרָם, Arab. بَرَمَ, "to twist two or more threads together"; hence בְּרוֹמִים *berômîm*, Arab. بَرِيمَ *barîm*, "variegated garments," as composed of two or more coloured threads. The Assyrian *dharru* is from the Accadian *dhar*, "variegated." We see therefore that some "bird of varied plumage," but whether of two or more colours, or of what colours, we are not informed, so that nothing more definite can be determined; but as we have the Accadian P. NAM BIR, denoting "multitude," I think it probable that the sand-grouse (*Pterocles*) is meant.

(50.) In line 33 we next meet with $\text{𐎶} \text{𐎶} \text{𐎶} \text{𐎶} \text{𐎶}$ *bu-tsu*, and $\text{𐎶} \text{𐎶} \text{𐎶} \text{𐎶} \text{𐎶} \text{𐎶} \text{𐎶}$ *its-isur khar-ri*; the latter means "the bird of the ravine" (חור, "to hollow out"). I can give no explanation of *butsu*. Delitzsch compares it with the Arabic بَازٍ *bāz*, "a falcon." The Accadian name $[-|<|] \text{𐎶} \text{𐎶} \text{𐎶} \text{𐎶} \text{𐎶} \text{𐎶} \text{𐎶}$ NAM BIR UŠ KHU, awaits explanation, as the meaning of the character UŠ is unknown.

(51.) We arrive at something more definite and interesting in the next bird-name. In the names of $\text{𐎶} \text{𐎶} \text{𐎶} \text{𐎶}$ *du-du* and $\text{𐎶} \text{𐎶} \text{𐎶} \text{𐎶} \text{𐎶} \text{𐎶}$ *ib-bil-tuv*, represented by the Accadian $\text{𐎶} \text{𐎶} \text{𐎶} \text{𐎶} \text{𐎶} \text{𐎶}$ NAM KHU, "destiny bird," we recognize the love-bird, or dove of Istar, the Assyrian Venus. The Assyrian *dudu* is the Hebrew דֹּד דֹּד *dôd* or דֹּד דֹּד *dûd*, "love," "to love," and *ibbil-tuv* is clearly the cooing or "mourning" bird, from אָבַל "to mourn," in allusion to the plaintive yet soothing notes of the turtle-dove and others of the same family of birds. The bird of destiny alludes probably to the migratory habits of the turtle-dove, and to its being sacred to Astarte. Other names of the dove which occur have been already considered.

(52.) Line 38. Immediately after the royal bird of variegated plumage occurs the name *cu-pi-tu*, having as its only other representative the Accadian *ku-sa-nu-khu*. The meaning of this latter word is unknown. The Assyrian may possibly mean the "bending" bird, from "to bend" or "bow down." This may be another name for the flamingo, whose curved bill is such that the bird is obliged to curve down its whole neck and to reverse the position of its bill in the water, in order to be able to feed; but this is mere conjecture, and further evidence is required for identification. The bending—even if the name has this meaning—would also suit the avocet (*Recurvirostra*), the curlew, etc.¹

(53.) In line 41 we meet with *its-tsur a-sa-gi*, which has as its equivalent the name already considered, viz., the *di-ic-di-ic*, which two Assyrian names are equated with the Accadian *nam bir gis u gir khu*. The *dicdic*, as we have seen, is "the sparrow"; *its-tsur asagi* means "the bird of the thorn-bush"; the word *asagu*, I think, must be referred to the Amharic *e-so-ke*, the Æth. *so-ke*, "spina"; v. Ludolf, "Lex. Amhar.," p. 58. I may here mention in passing that the Amharic name of the *Hyrax Syriacus* (the *Shâphan* of the Heb. Bible, "Coney" of our A.V.), is, according to Bruce, *Ashkoko*, so called in allusion "to the long herinaceous hairs which like small *thorns* grow upon its back." The Accadian name is made up of the following elements: GIS = "wood," = "food, and GIR = "thorn," the whole denoting "a thorny tree which affords food." The bird, therefore, is the sparrow (*Passer salicarius*), which is known to frequent in large flocks hawthorn bushes and other berry-producing trees, and breeds always in *thorny* bushes. In W.A.L., V, 18, 6, the *dicdic* has *khu-ti-zu-ga* (?) *khu* as its equivalent in the Accadian column. I can give no explanation.

(54.) In the 43rd line one of the Assyrian columns is

¹ Cf. the Sanskrit *krauncha*, "a curlew," from *kruñch*, "to curve."

Weight Layard, I pl. 95^a

Ends of Bows, Botta I pl. 159.

*Ends of Bows.
Botta I pl. 73.*

*Ends of Bows
Botta I pl. 105.*

*Panier, Botta. pl. 162 enlarged
from Pl. 28.*

shaded, and the reading of the word uncertain; we find here *da-lu-u* and *bal-lu-du*. The Accadian column has *KHU* *SI* *RUM* *U* *KHU*. The word *dalū* means "long" in Assyrian, and is to be compared with the Hebrew "to be long," or we may read *dhalu*, and refer the name to the root , "to be spotted," or "variegated with black and white." It is not improbable that the full word in the shaded column was *bal-lu-tsi-tuv*, a name which, as has been already shown, perhaps denotes "the magpie." The idea of "the long" bird would have quite well suited the long-tailed *Pica caudata*, while the other reading is equally suitable. *KHU* *SI* in the Accadian column has been shown to signify "a prince," "governor," or "pilot." I know not the meaning of the remaining part of the word, but I think that a magpie is the long bird intended.¹

(55.) As to the *za-ai-ku*, and *a-ra-bu* [u] of the 44th line, represented by the Accadian *GIR* *GI* *LUM* *KHU*, nothing more can be said than that the names together point to some "long-legged, black, screaming bird," *zaiḫhu* being apparently onomato-poetic; but I am unable to identify the bird.

(56.) In W.A.I., V, 27, 3, obv., l. 36, there occurs the single Accadian name of a bird called *lal-la-ri* ( ); the tablet is fractured at this part, and there does not appear to have been an Assyrian equivalent expressed in that column. In W.A.I., II, 40, 34, the name *lal-la-ar-tuv* ( ) is equated with *sar-rad kip-ri*, "terror of the regions" ("Sen.," p. 20). In W.A.I., II, 25, 71, *lal-la-ri* is identified with *i-lu-a-li*, "high" (?); similarly in pl. 32, l. 18. In II, 5, 29, the same word, *la-la-ar-tuv* , occurs alone, the Accadian portion being broken, as the name of an insect, and again in the same plate, l. 16, where it equals (*KHU* *RUB* *KHA* *MUNU*), i.e., "the bee."

¹ The magpie, as it flies athwart the observer, is eminently suggestive of length: "Such a length of tail behind"!

Again in V, 27, l. 8, where it is written 𐎶 𐎶𐎵 𐎶𐎵 𐎶𐎵, as the same insect. In Dr. Delitzsch's very valuable work, "Wo lag das Paradies"? p. 103, one of the peaks of Mount Amanus is mentioned as occurring in Salm. ob., 31 (Layard's "Inscriptions"), as Mount *Lal-la-ar*, which the Professor interprets "Honigberg (?)," *lallaru* being synonymous with *par nûbtu*, "Erzeugniss der Biene" = Assy. *dišpu* and *matku*, "honey," "sweet." Thus it would seem that we have to deal with honey in the matter of the Accadian word *lallari*, and the investigation of the bird-name would lead us to some honey-eating or honey-insect-eating species. But what is our *lallari* or honey bird? Can it denote the bee-eater, *Merops apiaster*, which Blanford speaks of as abounding during the summer time in the Persian highlands, and which Dr. Ainsworth tells me is quite a feature in Mesopotamia? This bird, as its name imports, feeds on bees and other hymenopterous insects. In the "Annals and Magazine of Natural History," 1839, a traveller in Asia Minor, speaking of the habits of the bee-eater, says: "They utter a rich, warbling chirp when on the wing; they are often observed among the turpentine trees, from which bees collect much honey; and are sometimes attracted to the valleys by the numerous aviaries of the peasantry." At the Cape of Good Hope, according to Montague, it serves as a guide to the Hottentots by directing them to the honey which the bees store in the clefts of the rocks." Like some other birds, notably the Indicators amongst the *Cuculidæ*, the bee-eaters serve as guides to the natural honey stores in the rocks or trees; hence it would well merit the name of the honey-bird, and when we consider how precious a commodity honey was esteemed before the introduction of sugar, we can well understand that great attention would be given to those agents which served as a guide to its discovery. But this bird will not fulfil all the necessary conditions, because, as was seen above, the *lallari* is also called "Terror" of heaven, which probably implies some bird of prey. I would therefore suggest the honey buzzard (*Pernis apivorous*), one of the *Buteonidæ* represented in Mesopotamia and Elam. This is one of the Raptores, and, like the rest of the family, is far less majestic in appearance and less courageous in habits than

most of the Falconidæ; but it might merit the name of terror of heaven, perhaps, because it feeds on the combs of the bee and the contained larvæ, as well as on the bees and other hymenopterous insects.

(57.) Pea-fowl were probably known to the ancient Assyrians, and the word (expressed ideographically by) *urinnu*, has been translated a "peacock," and the plural, *urinni*, "pea-fowl." M. Lenormant has shown that *urinnu* is the name of the character ; but that some living creatures are also intended is shown by a passage in the inscription of Tiglath Pileser, W.A.I., I, 15, l. 57. This monarch speaks of himself as the descendant of Adar-pal-esir *sa nu-ba-lu-šu ci-ma u-ri-in-ni eli mâ-ti-su su-par-ru-ru*," "who destroyed his enemies (?) like *urinni* over the country." The passage is a difficult one, but in the absence of the D.P. or D.S. for "birds, it is not certain that any kind of birds are meant. Norris, p. 297, for *varini* or *varinni*, translates "Peacocks," and compares the Heb. רִנְנִים, "screaming birds." I should state that pea-fowl, though they may have been known to the Assyrians, and kept in their aviaries or ornamental gardens, are very unlikely birds to occur in a wild state—a condition required by the Assyrian monarch's words—in any part of the countries known to them. The genus *Pavo* is found from the Himalayas to Ceylon, in Siam, south-west China and Java, but not so far north and west as Mesopotamia and the adjacent countries.

It now only remains for me to notice the different names of birds' nests, eggs, and young, which we find in the texts or records: but before I do this I have a few remarks to make on the determinative prefixes or affixes which occur. The character , which has the phonetic values of *khu* and *pak*—the former signifying "bird" in a general sense, the latter referring to something which pertains to birds, as *e.g.*, their flight,¹—is in the Accadian lists of birds always present as a determinative affix; see W.A.I., II, 27; V, 27. In the

¹ See W.A.I., V, 29, 63, *'e-ši-ru sa itstsûr*, "the direct flight of birds"; Haupt, "Accad. and Sumer. Keilschrif.," IV, p. 172.

Assyrian lists this determinative does not occur. In the Accadian texts the determinative *khu* is always present. In the Assyrian texts, historical or other, the Accadian monogram 𐎶𐎵 is of far more frequent occurrence than the Assyrian full phonetic form of 𐎶𐎵𐎶𐎵 : Norris says "one in a thousand" (Assyr. Dict., p. 370). Where an Accadian bird-name is mentioned in the Assyrian annals the determinative monogram of 𐎶𐎵 is generally postfixed; occasionally it is prefixed, as in Botta, III, 8; W.A.I., III, 15, col. i, l. 15; sometimes it is omitted, as in Taylor Cylinder, V, l. 43. The presence of this determinative is sometimes of great use in aiding us to determine whether birds or insects are intended by a name; thus the word for locusts, *'eribi*, is very like that for ravens (*Corvus umbrinus*), *aribi*. In Taylor Cylinder, *loc. cit.* (Smith's "Sennacherib," p. 119), we have *cimā tibūt aribi*, "like an invasion of aribi." Mr. Smith translates "locusts"; but in Assurbanipal (Smith's "History," p. 103) the *aribi* are expressed ideographically, 𐎶𐎵𐎶𐎵𐎶𐎵 with the determinative affix, which even by itself is sufficient to show that birds and not insects are meant.¹ The ideogrammatic character just mentioned requires a short notice.

This character 𐎶𐎵𐎶𐎵𐎶𐎵 NAM BIR, is placed as a determinative before some of the names of birds in the Accadian lists, but by no means before all. Sometimes this character is used in the Assyrian records, as above, for some definite well-known birds, as ravens. The distinction between the above D.P. for some birds and that used to denote insects, viz., 𐎶𐎵𐎶𐎵𐎶𐎵 KHU BIR,² is always maintained.³ There are two apparent exceptions to this rule, but I agree with Dr.

¹ It has been noticed above that *a-ri-bu* 𐎶𐎵𐎶𐎵𐎶𐎵 denotes "a raven"; *'e-ri-bu* 𐎶𐎵𐎶𐎵𐎶𐎵 "a locust"; and this distinction, which Delitzsch has pointed out, I believe holds good in all cases where the scribe has not made a mistake.

² The proper phonetic reading of this character appears to be KHU RUB.

³ This character sometimes enters into the composition of a name, as in *Khurub-ba-cu-gusurra khu*, the "insect (eating) bird, which settles on beams." In this country the spotted fly catcher, from its often building on the wood of out-buildings, is sometimes provincially called "The Beam bird."

Delitzsch that the scribe is in error. These exceptions occur in W.A.I., II, 24, 14, 15, in a list which contains the names of dog, deer, serpents, &c.; the names of two insects are given, one, 'e-ri-bu, "a locust," the other "zir-zir-bu," which the Accadian tells us is a "very little insect," i.e., "the ant." Instead of the usual D.P., 𐎶𐎵𐎶 𐎶𐎵 KHU BIR, of an insect, the scribe has written 𐎶𐎵𐎶𐎵 𐎶𐎵 NAM BIR, the D.P. of a bird. What is the real import of these two determinatives? Before what kinds is the bird-D.P. placed, and why is it placed before these and not before others? Unfortunately, in two of the tablets on plate 37, W.A.I., Vol. II, the Accadian word is in every single instance lost, with the exception of a few fragments of character, though the usual bird affix 𐎶𐎵𐎶 is in almost every instance preserved. In the larger tablet, No. 2 (same plate), out of about forty-five words, not more than twenty-two are complete. In W.A.I., V, 27, we meet with nineteen birds' names with the Accadian preserved. In this tablet the D.P. NAM BIR does not once occur. Of the twenty-two complete Accadian names on plate 37, only four have the D.P. complete; these are the *itstsur cîsi*, "bird of the papyrus"; *itstsur asagi* = *diddîc*, the *buridu* or *silikku*, and the *atân na'ri* or *abbûnnu*; but from remains of characters in two other places (lines 32, 33), it is clear that both the *burrûmtu* or *dharru* have, and the *butsu* or *itstsur kharri* had, this prefix NAM BIR in the corresponding Accadian columns. The compound ideograph 𐎶𐎵𐎶𐎵 𐎶𐎵 resolves itself into the two elements of 𐎶𐎵𐎶𐎵 and 𐎶𐎵 ; the first character denotes abstract nouns in Accadian, as well as "destiny"; the second "hosts," "multitudes," &c. Sometimes the first character stands alone for some bird, as for the swallow (*sinun tuw*) in the Deluge Tablet. It is clear that the composite character is not synonymous with its first element, because sometimes the full compound character occurs with its latter element in the same bird-name. Thus we have NAM BIR NAM KHU (l. 48) for the *silikku*. I think that the composite prefix denotes, and originally had special, if not exclusive, reference to, birds which associate, either habitually, or at certain times, as in their migrations, in large numbers, though this distinction is

by no means always observed. We have, therefore, the idea of abstraction in some sense and degree preserved in NAM as a "flock," bird-ship, if I may coin a word, and that of multitudes in the other component part, viz., BIR. If we apply this test to the instances given above, we find—supposing that the identifications are correct—that the idea of birds congregating suits those kinds which those names seem to point out, but is more applicable to some kinds than to others. The sparrow is a familiar instance; the pelicans at times associate in enormous numbers, covering pieces of water nearly a mile square; the sand-grouse, perhaps denoted by the congregating bird of chequered plumage (*burrûmtu*) are noted for their numbers. And to a considerable extent this is true of the mountain finch and the nut-cracker (*buridu*), and fairly suits the habits of the warbling birds of the reeds. In Sennacherib (Smith's Tr., p. 119) we have *cima tibût a-ri-bi ma-ha-di*, "like an invasion of many ravens"; the name of the bird being written phonetically, the numbers are expressed by a definite adjective. In Assurbanipal (Smith's Tr., p. 103), we have *cima tibût* (NAM BIR) 𐎶𐎵𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵, "like an invasion of ravens"; but the idea of multitudes is here expressed by the meaning of the *ideograph*, and requires not a separate expletive adjective. I by no means mean to assert that this is an invariable rule; but I think that where there is this D.P. attached to any bird-name, there is reasonable probability that the identification should be sought in some species of bird of congregating habits. It is true that in W.A.I., V, 27, 3 obv., this D.P. is absent in two instances where we should have expected it to occur, viz., in the starling ("little shepherd bird") and in the locust bird (KHU RUB KHU), which sometimes darkens the air by its multitudes; but the absence of this D.P. in certain instances does not affect the general rule. Its presence may denote birds that associate, but its absence from a bird-name does not thereby of necessity imply a negative.

The character 𐎶𐎵𐎶𐎵𐎶𐎵 NAM, which sometimes, irrespective of the D.P. NAM BIR, enters into the composition of a name, implies the idea of "destiny," either as relates to the destined periodical returns of the migratory birds, or to some notion

of an augural or sacred nature held with regard to certain kinds. The swallow is a NAM KHU, "destiny bird," by reason of its migrations; the turtle-dove is a NAM KHU, as being sacred to Astarte. But this idea is not always expressed, for in many migratory birds, the indicating character is not expressed, nor should its absence be understood of necessity to imply a negative. I may mention that the periodic migration of birds is sometimes referred to in the historical records: thus Esarhaddon (W.A.I., I, 46, col. v, l. 8) speaks of the land of Patusarra as a district whence the birds $\rightarrow$ $\rightarrow$ return, "in the country of Media, afar off."

To what extent, in what manner, and on what occasion the Assyrians and Accadians practised augury, I believe we have no means of determining. Notions of good or ill luck seem to be implied in some of the cuneiform characters, thus $\rightarrow$ $\rightarrow$ *pacac*, Accad.; *sumelu*, Assy.; "the left hand," "the left," is a compound of "bird" + "making." The character $\rightarrow$ $\rightarrow$ *ša* = *nabū*, "to proclaim," is made up of "bird" + "to settle," $\rightarrow$ $\rightarrow$ *gab* = *sumelu*, "left hand," seems to consist of "bird" + "foot," or "bird" + "good fortune" (= = *gimillu*). The idea of augury seems to be implied in the flight of birds to the left hand, or other modes of "settling down," as amongst the Romans.¹

The name of a bird's nest is in Assyrian *kinnu*, frequent in the inscriptions; in Accadian it is written *u-ci-ši-ga* ($\rightarrow$ $\rightarrow$ $\rightarrow$ $\rightarrow$), an instance of the happy mode of writing words so as to harmonise with their meaning so frequent among the Accadians: for $\rightarrow$ $\rightarrow$ = "food," "place," and $\rightarrow$ $\rightarrow$ = "giving," i.e., "the place where food is given." Another Accadian word for a "nest," or rather a "pigeon hole," is $\rightarrow$ $\rightarrow$ ^{es} *ab-lal*, with which the Assyrian $\rightarrow$ $\rightarrow$ *a-pa-tu* is identical; *apatu* is to be referred to the Heb. פֶּתַח or פֶּתַח, "to open." All these

¹ Cf. Cicero, "Div.," I, 39, "Quid Augur, cur a dextrâ corvus, a sinistrâ cornix faciat ratum"?

four names for “a nest” or “a pigeon hole” may be seen together in W.A.I., IV, 27, l. 14–18. Among other dreadful things caused by evil demons, they drove pigeons from the dove-cot, and swallows from their nests. In Accadian —

𐎶𐎵 𐎶𐎵 𐎶𐎵 𐎶𐎵 𐎶𐎵 𐎶𐎵 𐎶𐎵 𐎶𐎵 𐎶𐎵 𐎶𐎵
Tû khu ab-lal-bi-ta ba-da-an-dib-dib-bi-ne
The pigeon from within its hole they cause to seize.

𐎶𐎵𐎶𐎵 𐎶𐎵 𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵
Nam-bir id-pur-bi-ta ba-ra-dul-du-ne
The bird on its wings they cause to ascend.

𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵
nam-khu u-ci-si-ga-bi-ta ba-ra-an-ri-
The swallow from its nest they cause to mount

𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵
ri-e-ne
aloft.

The Assyrian version is very similar; the word for pigeon is *šummatu*, and from the mention of the holes of the dove-cot, it is evident that this bird was early domesticated among the Semites, contrary to the opinion of Victor Heyn, who maintain a comparatively recent culture (see “Kulturpflanzen und Haustiere,” pp. 296, 297). The *šummatu*, or *tû* (Te Sumerian) of the Deluge Tablet, is evidently the same bird, and doubtless a domesticated pigeon. The Accadian name of {^{ab}_{es-lal}, “house” + “filling,” is ideographically expressed by , which is a picture of the young (𐎶𐎵' a = son + 𐎶𐎵_l = “to fill”) inside the enclosure or nest ; but as the hole of the dove-cote is the nest where it rears its young as well as its general home, the same word and the same monogram express both; so that I think the *ucišiga* is the general name for any bird's nest, while the *eslal* is the pigeon's nest or home. A difference between the *ucišiga* of the swallow and the *es-lal* of the pigeon is, at all events, maintained in

from ornament, Layard. I. pl. 47.

from ornament, Layard I. pl. 43.

*Cylinder, Cabinet Royal de la Havre.
Gazette Archeologique 1880 p. 250.*

*Cylinder, Biblioth. Nat. Paris.
Gazette Arch. 1880. p. 255.*

the interlinear Assyrian version, the former Accadian word being represented by *kinnu*, and the latter by *apatu*, "an opening."

A bird's egg is *bi-e-tsu* (𐎶 𐎶𐎵 𐎶𐎶) in Assyrian, with which the Heb. בִּיצָה, Arab. بَيْضَة, is to be compared; it is generally referred to Heb. בָּרִץ, Arab. بَاضَ, "to be white." The Assyrian word is equated with the Accadian words *sag-giš-ra* (𐎶𐎶𐎶𐎶 𐎶𐎶 𐎶𐎶𐎶); see W.A.I., V, 18, 19; and with another word, *tur* (𐎶𐎶𐎶𐎶𐎶 = *tarbitsu*, "rest" or "eclipse"), in line 10. But the true Accadian word for an egg is 𐎶𐎶 𐎶𐎶 𐎶𐎶 𐎶𐎶𐎶𐎶 (SU KUR SU NE TU?) and is definitely defined by the corresponding Assyrian fully expressed, as *bîtsu sa itstsurî*, "the egg of a bird" (l. 11). Perhaps the Assyrian word ought to be referred to the Heb. בָּצַע, "to break" (forth), as it is compared to an Accadian word denoting "an eclipse." I can throw no light on the meaning of the long Accadian ideograph for an egg. *Saggišra* is equated with some other Assyrian words, and its meaning is obscure.

The young of birds are mentioned under the names of *na-akh-tu* (𐎶𐎶 𐎶𐎶𐎶𐎶 𐎶𐎶), *ni-ip-tsu* (𐎶𐎶 𐎶𐎶𐎶 𐎶𐎶𐎶), *'abal itstsurî* (𐎶𐎶𐎶 𐎶𐎶) W.A.I., II, 37, rev. l. 11. The first word is, perhaps, to be compared with the Heb. אַחָוָה *akhavah*, "brotherhood" or a "brood"; *nîptsu* may be referred to בָּצַע, "to break" (forth); cf. *bîtsu*, "egg," above; *'abal*, expressed by the Accadian word 𐎶𐎶, is the ordinary Assyrian for "a son." The following also occur as the names of young birds, viz., *admu* (𐎶𐎶 𐎶𐎶), and *lidānu* (𐎶𐎶𐎶𐎶 𐎶𐎶𐎶 𐎶𐎶). For *admu* compare אָדָם, "a man" = *maru*, "young." The Accadian name for a "brood" is 𐎶𐎶𐎶 𐎶𐎶 LU GIL, for which 𐎶𐎶 𐎶𐎶 𐎶𐎶 *is-khap-pu* is the equivalent (II, W.A.I., 2, Syll. 329). *Iskhappu* is aptly compared by Delitzsch with the Arabic سَخَفَ, "small," "weak"; cf. also سَخَفَ, "fissus," "ruptus fuit (uter)." Esarhaddon calls Samas-ibni, king of

Bit-Dakkurri, *iskhappu khabbilu* (W.A.I., I, 45, col. 2, l. 45), "a wicked young fool,¹ who did not reverence the memory of the gods." He seems to have been a sort of lean and hungry Cassius of his day.

Of the following names of birds I can give no opinion as to their meaning:—

Khu ši-ši-in-ni (*šisinni*) 𒀭𒈾𒄣𒁺𒂊𒌷𒍪𒅗𒉡 {W.A.I., III, 15,
 col. 1, l. 65.

Khu sú-sú-di (śúśudi) 𐎧𐎫𐎲𐎠𐎺𐎠𐎧𐎫𐎲𐎠𐎺𐎠𐎧𐎫𐎲𐎠𐎺𐎠 Sen., p. 126.

its-tsu-ri šu-šu-di „ „ „ Sen., p. 132.

In the former case some bold rapacious bird is denoted, in the latter some timid kind.

The following occur in W.A.I., V, 27 :—

 Accadian = Assyrian.

[illegible]

𐎶𐎵𐎶𐎵 (𐎶𐎵𐎶𐎵𐎶𐎵𐎶𐎵) 𐎶𐎵𐎶𐎵 , , [Tablet broken.]

三 聖 王 子 一 人 ”

You see how much of uncertainty attaches to the real meaning of several of the names of the Assyrian birds, whether as shown on the monuments or as they occur in the records. Possibly further materials and a more close study may result in more satisfactory results. I shall be only too glad for any suggestions that may be made at any time that may tend to throw more light on a confessedly difficult subject. In these and kindred studies, *one only desire* should animate the student, and that is to get at the truth, at simple facts, if possible; and every step made in this direction, or any knowledge acquired, however small, is of *some* value; and the step made is one in the right direction. I cannot conclude without expressing my best thanks to my friend Mr. Rylands, to whom you, as well as myself, are indebted for the bird-life diagrams which have helped me to

¹ "Weak of intellect" is one of the chief meanings of the Arabic word (see Freitag, s. v.).

illustrate this paper. I also express my gratitude to Mr. Sayce, who, as always, has helped me much, and to Mr. Pinches. We wait only for more, and more variable material from Mesopotamia, for further progress in Assyrian studies. Thanks to the genius of Sayce, Pinches, Lenormant, Schrader, Delitzsch, Haupt, Lotz, Hommel, and others, whose critical skill, combined with the most praiseworthy and cautious system, is conspicuous, real lasting difficulties can hardly be expected to occur which their efforts will not be able to surmount. May ever-increasing success long inspire future researches and achieve noble results!

ADDITIONAL REMARKS.

Note on the character , and on the Bird .

Since writing on the bird denoted in the Accadian Column by the sign , I have discovered that Mr. Boscauwen ("Trans. Soc. Bib. Arch.," Vol. VI, Part 1, page 276) insists strongly on the original meaning of the character as denoting not the ordinary solar light, but the lightning or thunderbolt, as shown by the hieroglyphic picture of this sign as it appears in Chaldean signet-rings. This idea of fire being produced by boring into wood, is, as Mr. Boscauwen has admirably shown, expressed by the ideographs of this element, , , and ; the first part of the compound character intimates that "wood" has something to do with the fire, the second sign exhibits pictorially in its oldest form the actual operation of the fire-stick, as I have pointed out in a previous paper ("Trans. Soc. Bib. Arch.," Vol. VI, p. 466), and also intimates the same idea in one of the meanings of the sign *cararu*, "to revolve"; while the fifth month of the Accadian calendar, *ne-ne-gar*, "fire makes fire," was under the patronage of the deity *Nin-gis-zida*, "Lord of the wood of life." The woodpecker by boring was supposed to

be a producer of fire. The birds to which the lightning-cloud is compared in ancient folk-lore may be an eagle or other rapacious bird, a woodpecker or a red-breast, according as some peculiarity in the bird's habits, form or colour, suggested some similarity to the lightning-cloud. Thus the high-soaring and swift rapacious eagle represents the terrific and destructive thunder-cloud, the boring woodpecker the fire which the cloud contains and which it was supposed to create, while the mere red breast of the harmless robin suggested by its colour the idea of fire. In the historical accounts of the wars of the Assyrian kings, it was very natural and in accord with their martial spirit, for them to relate how their warriors darted upon the enemy "like a divine *Zu* bird." The eagle is doubtless the *Zu* bird here; but I do not think that the *Zu* bird is to be restricted to the eagle. The *Zu*-god of the Chaldean legend, who dwelt in the lower part of the forest, and who for stealing the tablets of destiny was changed into the divine storm bird, may perhaps be the woodpecker, the antetype of the Hellenic *Phoroneus*, the Latin *Picus feronius*. Thus we seem to have the main features of the Promethian story in the Chaldean legend. So far as the Chaldean and Hellenic myth run parallel, *Lugalturda* ("powerful king") represents Prometheus, the destiny tablets are the fire (divine knowledge) from heaven, and the bird into which the fire-stealing god is changed is the wood-boring, fire-producing woodpecker, or the *Avis incendaria*, to which the lightning-cloud is compared.

NOTE ON AUGURY BY THE ASSYRIANS.

It is very probable that the early inhabitants of Mesopotamia and Elam practised augury to a considerable extent. In W.A.I., III, 52, there is a catalogue naming various subjects which were possessed by the royal libraries of Babylonia; among other matters there is mention of one relating to omens to be derived from the appearance, flight, and cries of birds. The passage is obscure. On my referring to my friend Mr. Sayce, he gives me such an explanation of certain words, as to induce me to suggest what appears to me to be near the meaning, and what may prove to be the clue to the more

complete understanding of the whole passage, which runs as follows:—

W.A.I. III, Plate 52.

28. itstsur same a - khu - u sa ci - i simta

D.P. mu - lu sapta zak - na - at

29. ca - bu - un - na - at eli sepi - su zak - ap

izu - zu ip - tu - u - va

30. i - na ali u na - me - e - su innamar pi - su

iptu - va pani - su a - tsa - a - ni

31. nun tsutsi a - khu - u sa ci - i itstsur same

ditto sepi - su lu ka - an dup - pi

32. lu cap - pi itstsur imna u sumeli za - bi - ib

pi - su iptu - va lisan - su

33. ina . . mu - ru - da - a sa - kal

“Bird of heaven screaming, which, according to the destiny of man in lip is old, the *cabûnnat* (?) over its feet, the stake (which) one has fixed it has opened; and in the city and its canals is seen, its mouth it has opened, and its face comes forth (is an omen).

Fish of the marsh (frog) crying, which like "bird of heaven screaming, &c., over its feet," whether on his reed of the tablet (papyrus), or in the claw of the bird (it be seen); whether on the right hand or on the left it croak, its mouth it opens, and its tongue in a balance (?) is weighed" (is an omen).

"The screaming bird of heaven, which, according to the destiny of man, in its beak grows old," may possibly denote the eagle; and I think there is an allusion to the old fable mentioned by Aristotle ("Hist. Anim.," IX, 22, 4), that when eagles grow old, the beaks become crooked, so that they die of famine; "that this bird, as the story goes (ἐπιλέγεται δέ τις καὶ μῦθος), was once a man, and that it suffered this calamity from its inhospitality to a guest." One or other, or both, of the mandibles of some birds occasionally grow as to cross one another, and render them unable to feed. This is also alluded to by Pliny and other writers: the metamorphosis of men into eagles was a current myth. The general meaning may be this: if an old eagle with its abnormally twisted beak escape from its perch, or from its cage, by removing one of the stakes where it was confined, and appear in the city and its canals, uttering shrieks: this is an omen. Or the passage may be better translated thus: "Bird of heaven which like mankind has a beard on (its) chin, (and) is bound over its feet, &c"; *zaknât* and *cabûnnat* being regarded as permansive forms (זקן and כבן). Reference is, I think, made to the "bearded vulture" (*Gypaëtus barbatus*), conspicuous for its black beard and bright red eyes, whose aspect when irritated, said to be "perfectly diabolical," is likely to have made it a bird of omen. The expression, "bound over its feet," may well refer to the feathered tarsi, also conspicuous in this bird.

If a frog,¹ similarly with the old crooked-beaked screaming eagle, &c., were heard to croak among the papyrus reeds, or seen in the claw of a bird, whether it croaked on the right hand or the left of the observer: this is also an omen.

The "crying" (*akhû*) (אָחֻ) of the frog may be literally illustrated by a remark made by Pliny ("Nat. Hist.," XI, 65),

¹ This is Mr. Sayce's happy interpretation of the *nun tsutsi*, "fish of the marsh."

who says that the male frogs, at the season when they croaked, were called *ololygones*. (See also Aristot., "Hist. Anim.," IV, 9, 6, τὴν ὀλολυγόνα ποιεῖ.) The passage about "vibrating its tongue" is not clear; but it may refer to a belief in the *modus operandi* in croaking. Pliny says that the frog sinks the lower lip to the surface of the water, takes a small quantity into the mouth ("libramentum modicæ aquæ"), and then by quavering with the tongue ("palpitante linguâ"), produces the croaking sound.

There seems to be much similarity in these two passages between the Assyrian tablets and some Greek and Latin authors. Now, Pliny specially mentions the Magi as having discoursed about frogs ("Nat. Hist.," XXXII, 18), and we know that Pliny borrowed considerably from Democritus, who himself visited Babylonia. It is probable that a good deal of the popular beliefs among the Greeks and Romans on matters relating to animals and plants or other subjects, found its way to Greece and Rome from this source. Democritus had been a great traveller, and occupied himself much in natural history and philosophical speculations; nay, according to Diogenes Laertius, he had been a pupil of some of the Magi and Chaldeans, from whom he learned the principles of astronomy and theology. It is a great pity that his works have not been preserved to us.

POSTSCRIPT.

The chief difficulty which still makes me hesitate in not accepting the explanation so well advocated by Dr. Lotz (*Die Inschriften Tiglathpileser's I*, Leipzig, 1880), that the animal denoted by the Accadian name of *amši* is none other than the elephant, lies in the fact that the skins (𒍪 *šu*) of the *amši* are sometimes mentioned, together with the teeth, as articles of value, even as tribute offerings among such things as precious stones, gold, silver, &c. See Senacherib, Smith's "History," p. 64, where we read of "*šu* (skins) of *amši*, *ca* (teeth or horns) of *amši*," as forming

part of a great treasure; also in Esarhaddon's records (W.A.I., I, pl. 45, l. 20), where the skins are mentioned among the treasures of the palace of Abdimilcutti, king of Sidon. The skins of the *amši* were taken home from his hunting expeditions by Tiglathpileser I, and appear to have held a high place in the estimation of the Assyrian monarchs. One naturally inquired on what account elephants' hides were so much prized. Again, the scribe who, in his records on the Broken Obelisk (W.A.I., I, pl. 28), gives an account of one of Tiglathpileser's hunting excursions, states that the *amši* were killed by the king's bow; no mention is made of any other destructive weapon; and as some auxiliary methods of capture must have been employed in the destruction of a thick-skinned elephant, one naturally looks for some hint of the same; still, I do not consider that this point contains any real difficulty, because some auxiliary weapon might have been employed, though not definitely mentioned, the king or the scribe caring merely to record the destruction of the animals, in which the strong bows of the Assyrians formed the chief implement.¹

¹ Strabo ("Geogr.," XIV, 4, 10), Diodorus (III, cap. 27), and Pliny ("Nat. Hist.," VIII, 8) are careful to mention the various modes of capturing wild elephants as practised by the Elephantophagi or "elephant eaters" of the Arabian Gulf. Stealthily the hunters would approach the animals, and, unperceived, hamstring them (*νευροκοποῦσι*) by a sharp sword-stroke; or the arrows were dipped in the poison of serpents. According to Diodorus, the hunters hide near a tree, and as the elephant passes, he seizes it by the tail, and with his own feet he clasps the animal's thighs; then with a small sharp axe, which is fixed on his shoulder, he hacks away at the animal's leg with wonderfuladroitness and activity. The elephant thus wounded either falls down or runs away as fast as he is able, the pursuer following and still hacking away at the poor creature's leg; at length completely disabled, he falls, and the Ethiopian hunters run in crowds, and horrible to narrate, "cutting off collops of the flesh while the animal is still alive (*καὶ ζῶντος ἔτι τέμνοντες τὰς σαρκας ἐκ τῶν ὀπισθεν μερῶν*), they feast merrily." (III, 26; ed. Dindorf.) The bows, according to Strabo (*loc. cit.*) and Pliny ("Nat. Hist.," *loc. cit.*), the elephant hunters used were of enormous strength; were fixed in the ground at intervals in places frequented by the animals; the bows were kept steady by young men remarkable for their strength; while others, exerting themselves to the utmost, would bend them and shoot and wound the elephants as they passed. In the battles of the Romans against Pyrrhus, it was found an easy thing to cut off the trunks of the elephants with a sharp sword, and they would soon bleed to death (Pliny, "Nat. Hist.," viii, 7). It is interesting to note that this was the method employed in time of the Egyptian king Men-kheper-ra, or Thothmes III, "the Alexander the Great of Egyptian history."

ASSYRIAN BIRDS, Plate XII.

from Khorsabad: Place Ninive &c pl. 30.
from decoration of Wall.

What use did the Assyrians make of the hides of the elephants? Could they have been made into vessels for holding water, or for the covering of tents or houses? The natives of South Africa to this day use the inner and thin skin of the elephant for holding water. Were they ever used in the making of their ships, and be sometimes the *masaci gabrie*, "the hardened skins" (Hommel conjectures **נבש**, "a sheep"), used for transport? Were they made into bucklers as Pliny states was done with elephant hides, which were valued as being quite impenetrable? Hecataeus, an early distinguished Greek historian (*circa* B.C. 520), says ("Hecataei Milesii Fragmenta," ed. Klausen, p. 249) that the people of Cerne (an island off the West Coast of Africa, and the great emporium of the Carthaginian trade with Western Africa) trafficked with the Ethiopians, and got from them in exchange for their commodities "the skins of stags, lions and leopards, together with the hides and tusks of elephants ($\pi\omega\lambda\omicron\upsilon\sigma\iota$ δε $\pi\rho\acute{o}\varsigma$ δέρματα ἐλεφάντων μετ' ὀδόντων). Here we have literally in juxtaposition the *šu* and *ca amši* of the Assyrian records; the hides of the elephants were probably prized by the Assyrians, who employed them for some useful purpose or other.

Although the *ca amši* are frequently mentioned in the records as the tusks of the elephant, either as ivory obtained by them as prize booty from conquered peoples, or (once) as chase-spoil in Tiglathpileser's expedition;¹ the animals themselves are rarely alluded to. The only Assyrian monarch who, so far as we know, has left it on record that he hunted the *amši*, is Tiglathpileser I (*circa* B.C. 1120-1100). He states that he killed ten fine *amši* in the neighbourhood of Kharran

The account is given by the captain Amenemhib, who served in the monarch's campaigns; he says: "Again [I admired] another extraordinary deed which the lord of the country performed in the neighbourhood of Ni. He hunted one hundred and twenty elephants for the sake of their tusks on [his chariot (?)]. I encountered the greatest among them, which attacked his holiness. I cut through his trunk. Being still alive [he pursued me]; then I went into the water between two rocks." (Brugsch's "Egypt under the Pharaohs," I, p. 306; Murray, 1881.) The word rendered "trunk" is in the original *tet*, "a hand."

¹ Dr. Lotz has omitted to notice this fact. He says that the *ka amši* are never alluded to at all as chase-booty (pp. 160, 161).

and by the banks of the Chabur, *i.e.*, somewhere between the Tigris and Euphrates, a district which was doubtless well wooded and watered, suitable for the abode of elephants.

Perhaps Dr. Lotz is correct in referring both *ka* and *ca amši* to the product of the elephant, and ivory is intended, but that the horns of the *rimu*, or wild bull, were also used and prized by the Assyrians can admit of no doubt. Horn is a substance which is now, and always has been, valued; it is capable, like ivory, of being wrought into various useful articles, such as drinking cups, trumpets, lanterns, &c., or for inlaying wood and other materials. Both the skins and horns of the *am* or *rimu*, which animals the Assyrians killed, and depicted on the monuments, are frequently mentioned as being of sufficient value to carry home to Nineveh. Pliny ("Nat. Hist.," XVI, 43) tells us in his chapter on veneering ("De Lignis Sectilibus"), that the horns of animals were often stained with various colours, and cut into sections for decorating wood, as well as ivory, and that, "later mankind sought materials from the sea, and tortoise-shell" (*testudo*) "was used." Homer ("Odys.," xix, 563) speaks of doors (*πύλαι*) made of polished horn (*ξεστῶν κεράων*), through which true dreams came, while the dreams which came through the sawn ivory (*διὰ πριστοῦ ἐλέφαντος*) proved false. This is a sufficient reply to Dr. Oppert ("Rec. Past." p. 34, note), who says that the *ka amši* cannot possibly be bull's horn, because such a material "could never occupy a prominent place in the construction of palaces." When we read of "ivory palaces," which ancient monarchs erected, whether in Assyria or in Judæa, one can only understand by the expression that ivory was extensively used for decorating purposes. Ivory, being a hard and enduring substance, has survived to tell the story of its value in the articles that have been brought to light from the excavations at Koyunjik; horn, whether in the substance of bull's horn, tortoise-shell, claws, nails, whalebone, &c., having a composition intermediate between albumen and gelatine, and containing very small quantities of earthy matter, is perishable, and cannot exist as a long-buried material to tell the story of its uses, which, as I have said, are known to be manifold and various.

The Accadian ideograph , which, as we have seen, must represent the "teeth" or "tusks" of the elephant, denotes the "horns" of the *rîmu* or wild ox. In connection with the animal called *nakhiru* which Tiglathpileser killed in the Mediterranean Sea, the *ka* must signify "teeth," probably those of a grampus or other cetacean. It was a question discussed amongst the ancients whether it was correct to call the tusks of the elephant by the name of horns or teeth. "Juba," says Pliny (VIII, 8), "called them horns, but by Herodotus, a much older writer, as well as more appropriately, by general usage they were called teeth"; and these latter he remarks are the only part of an elephant which men are anxious to procure. See on the question whether tusks should be called horns or teeth, Ælian ("Nat. Anim.," iv, 31; Pausanias, v, 12; Juba ap. Philostr., "Vit. App. ii," 13, p. 92; Oppian, Cyneg., ii, 491, and a much later writer, Philes of Ephesus (A.D. 14th century), "Carm. Gr.," viii, 87; Camus "Notes on Aristot. Hist. Anim.," p. 298, note. The linear Babylonian forms of the Accadian ideograph would seem to show that the original picture was "a mouth with teeth," and most of the meanings of this sign imply a reference to the mouth. The character (*ši*) appears to have been a picture of the "horn of an ox"; but in time this picture origin was lost, and *ca* and *ši* were used indiscriminately for horns or teeth; the former sign being employed to denote almost any projecting body, like the Greek *κερας*.

With respect to the meaning of the word *šu-u-šu*, which occurs in one of the epigraphs of the Black Obelisk of Shalmaneser, I desire to make a few remarks. Dr. Lotz believes that this word is the name of the elephant, being the Assyrian representative of the Accadian *amši*. I confess I fail to be convinced by his arguments. It is a curious fact that the only instance of occurrence of the word *šûšû* in the Assyrian record is to be found in the epigraph of the Black Obelisk. The employment of this word by Assyriologists to represent the Accadian ideograph ( ) for "a horse" is purely conventional, and

there is not the slightest authority for it, as Delitzsch and Hommel have remarked; and we now know that *sisu* was the ordinary Assyrian name of the horse. Dr. Lotz thinks that the Assyrians called the elephant by the name of *šúšu*, and that the Hebrews in later times applied the same name *šúš* (סוּשׁ) to the horse: and he very appositely instances the Gothic *albandus*, the H. G. *olbanta*, and the M. G. *olbente*, which originally applied to an elephant, afterwards signified a camel. "Dwelling in a land which produced no elephant, the Canaanitish people forgot the appearance of the beast which their forefathers had known under the name of *šúš*, and when they employed the word they associated it merely with some indefinite form, perhaps of some large and strong beast, which was used as a riding animal in peace or war, as well as for draught purposes." This is quite probable, and I will further illustrate Dr. Lotz's instance of the employment of the name of *one* animal to designate *another*, by the old Cornish word *caurmarch*, a camel; literally = "the mighty horse," from *caur*, "a giant" and *march*, "a horse." The camel being employed as a beast of burden like the horse, "a beast without equals" (*Origo Mundi*, 124), came to be called by the same name.

Does the word *šúšu* denote the elephant? Some of the names of the animals on the Black Obelisk still remain to exercise the ingenuity of philological interpreters. I admit with Dr. Lotz that the names of the figured animals follow the order of the animals themselves; but I entirely fail to see "that each name is placed directly under its corresponding representative." The animals occur in the following order on the obelisk:—(1) two Bactrian camels; (2) a horned bovine animal; (3) a rhinoceros; (4) a large antelope with lyrate horns; (5) elephant and monkeys; (6) apes. The *names* occur in the following order:—(1) "Camels of which double are their backs; (2) "ox of the River Sacêya; (3) *šúšu*; (4) *Pirâti*; (5) *Bazîâti*; (6) *Udumi*. Hence it will be seen that there are six kinds of animals figured, and six names given. The problem is to attach these names severally to their individual figured representatives. Now, as the animal and name agree for the camels, and occupy the first place in point of order, of which there is no doubt; and as the name

and figures which stand for the monkeys or apes occupy the sixth place, it is probable, though not positively certain, that the four intervening names also correspond in point of order of arrangement. Consequently we have the name of "ox of the River Sacêya" to stand for the bovine animal, (No. 2); the *šûšu*, for the rhinoceros, (No. 3); the *Pirâti*, for the antelope, (No. 4); and the *Bazîâti*, for the elephant, (No. 5).

It is true that the word *šûšu* occurs in the epigraph nearly over the elephant; but that this position of animal and name is not in its proper place is evident from the fact that the whole arrangement—so far as relates to the names of the epigraph corresponding with the space occupied by the animals—has been thrown out of such order and correspondence at the very beginning by the words, "Tribute of the land of Muzri" being placed over the two Bactrian camels. Accordingly we have the words, "whose humps are double," over the space occupied by the bovine animal, the rhinoceros and the antelope. This want of correspondence between the animals and their names, locally considered, has been already pointed out by Hommel. But in order to make the desired arrangement of the word *šûšu* harmonise with the position occupied by the elephant, Dr. Lotz is obliged to comprise the three animals, "ox, rhinoceros and antelope," under one general name, "ox of the River Sacêya." Dr. Lotz objects to a plural number (*Bazîati*) representing a single figure of the elephant; and yet he considers that a singular number may stand for three animals so diverse in form and character as an ox, a rhinoceros, and an antelope. Of course a singular noun can be used collectively to denote many individuals of the *same kind*; but I cannot suppose that the Assyrians could have "lumped together" three such dissimilar animals as the above, and employed a collective noun to denote them. Such a designation as "ox of the River Sacêya" standing for an antelope, which is an animal of the deserts or plains, is most inappropriate.

With respect to the names of the Black Obelisk animals, I am strongly inclined to think that they are to be assigned to the respective animals as follows:—

- (1). Camels with two humps;
- (2) "ox of the River

Sacêya" = the bovine animal; (3) *śûśu* = the rhinoceros; (4) *Pirâti* = the lyrate-horned antelope; (5) *Baziâti* = elephants; (6) *Udumi* = the different monkeys or apes.¹

(2). As to the ox of the River Sacêya"; it may denote the yak (*Bos grunniens*); but I rather incline to the opinion that the arnee or wild buffalo of India is intended, considering the figure of the head which shows the curved horns of a *Bubalus*.

(3). I regard the word *śûśu* as Accadian, meaning "double skinned" (𐎶𐎶𐎶𐎶), a very suitable name for the Indian rhinoceros, the double folds of whose hide are so conspicuous in this great pachyderm.

(4). *Pirâti*. I regard this word as being connected with the root פָּרָא or פָּרַה, "to run swiftly," nouns from which root being used to designate several active animals, as "young bullocks," "wild asses," and "mules." The antelope of the obelisk may be intended for the Chikara (*Tragops Bennetii*), the GOAT-ANTELOPE of Europeans in the Deccan.²

(5). *Baziâti*. Hommel and Lotz say that this word is most likely an adjective, because it lacks the usual plural sign of 𐎶<<<<. But surely the omission of this plural sign is not at all unfrequent in Assyrian. Have we not the forms 𐎶𐎶 𐎶𐎶𐎶𐎶 𐎶𐎶𐎶𐎶𐎶 (a-ga-li), 𐎶𐎶 𐎶𐎶 𐎶𐎶𐎶𐎶 (i-bi-li), "calves" and "oxen," (?) occurring with no definite plural signs? The Assyrians did not always deem it necessary to emphasise a plural number (in the case of a word already grammatically in the plural) by the additional plural sign 𐎶<<<<. There is no occasion to quote instances where the cases are so numerous. Neither do I see the slightest objection to the name *Baziâti* in the plural being taken to signify elephants because only *one* is represented on the monument; two or more of these

¹ Since I have come to this conclusion, I have found that I have been anticipated by Lenormant ("Trans. Soc. Bib. Arch.," Vol. VI, Part 2, page 408), who has given the same names to the same animals. I can congratulate myself on having thus independently arrived at the same conclusion with so excellent an authority. Alas! that we have to lament his recent death!

² Cf. Mr. Pinches on the "Progress of Cuneiform Research," Philol. Soc., 11th Report, May, 1882; and sign-list in his "Texts in the Babylonian Wedge-Writing," where he explains the word *pirati* by elephants.—W.H.R.

FROM CYLINDERS AND CONES IN THE BRITISH MUSEUM.

FROM
BABYLONIAN
BOUNDARY
STONES IN THE
BRITISH MUSEUM

ASSYRIAN AND BABYLONIAN BIRDS.

ASSYRIAN BIRDS.

EXPLANATION OF THE PLATES.

- PLATE I. A workman felling timber in a mountainous country. Birds with two nests and four young ones in each, in a fir tree; the bird standing up between the two nests looks like a pigeon, but the depth of the nests, and the number of the young, preclude this idea; the proximity of buildings would seem to point to some semi-domesticated bird.
- PLATE II. Figures of eagles or vultures as depicted in battle-scenes; the bird shown in the top drawing represents the *kharbaccānu*, "entrail-eating bird," and the *takhatšasenu*, "battle-bird" of the lists. (See p. 105.)
- PLATE III. Fig. 1, an eagle; 2. Raven feeding on the dead body of a soldier; 3. Large figure of an eagle, probably carried with the Assyrian armies as a standard; the Persian royal standard was an eagle of gold, with spread-out wings, on the top of a spear. 4. Man slaying eagles. 5. Vulture-headed deity. 6. Raven. 7. Notwithstanding the parrot-like form of this figure, it is probably meant for a bird of prey; it occurs on a very conventional representation of a lion hunt.
- PLATE IV. Winged human figures with heads of the griffon-vulture.
- PLATE V. The upper drawing represents a battle-scene, with birds of prey feeding on the slain; the bird depicted in the act of picking out a man's eye is a raven; compare the expression, *budhūr ini*, "eye-picker," p. 79. The figures on the bronze dish are those of two bare-necked griffon-vultures about to feast on the dead body of a kid or fawn.
- PLATE VI. Represents various birds in the act of flying, descending from trees, or falling after having been shot with bow and arrow. The long-tailed bird (top centre) is probably meant for a magpie; compare the name *dalû*, "the long bird," of the lists (p. 109). The men with hare, living birds in the hands, and birds' nests with young ones, are returning from a hunting or fowling expedition; it is quite impossible to say what birds are intended.
- PLATE VII. Return from hunting with hares and birds; the birds in the men's hands and the one in flight are probably meant for partridges or francolins; the bird ascending the trunk of a fir tree may be intended for a woodpecker, or other scansorial kind, but the beak is too much curved for a woodpecker, and the artist has not represented the downward affixed position of the tail to the tree, as generally exhibited in a climbing woodpecker.
- PLATE VIII. Living birds in flight, about to perch, or captured; francolins seem to be intended.

PLATE IX. The three birds on the ground amongst the trees are evidently pigeons; the artist here has been more successful than usual in bird delineation; the attitudes of the pigeons are well expressed and true to nature, while the middle figure shows the characteristic fleshy skin of the upper mandible. The building is probably a dove-house; the drawing may be compared with that given by Professor Rawlinson of "pigeon towers near Isfahan," in his *Ancient Monarchies*, II, p. 297. The long-tailed birds may be meant for magpies, the others for francolins which, with partridges, are readily captured.

PLATE X. The drawing on the left hand represents a "duck-weight" formed of greenstone; the bird is shown with its head bent upon its back, in its attitude of sleeping or resting. There are many of these duck-weights in the British Museum, varying from 40 lbs. to about a pennyweight, and made of agate, marble, baked clay, &c. The attitude of the duck with its head on its back would seem to indicate that this bird in a domesticated or semi-domesticated state was known to the Assyrians. The ends of bows have the figure-head of a swan or duck. The bird-figures on the panier or basket frequently represented on the Assyrian sculptures, appear to be those of a dove; but they may be almost anything else in bird form.

PLATE XI. Figures of the ostrich from ornaments and cylinders. The central drawings, as well as those on the left, at the bottom of the plate exhibit the bisulcous form of the ostrich's foot; this would show that all the figures are intended for this bird, and not for the bustard, the only other bird of somewhat similar form with which the Assyrians would be acquainted. The ostrich is occasionally depicted on the monuments with outspread wings in rapid flight on foot, which may illustrate the remark of Xenophon: "it uses its feet for running as well as its wings, which it raises like a sail" (ὡσπερ ἱστὶν ἡρωμένη). *Anab.*, I, v, 3.

PLATE XII. A very conventional drawing of some bird of prey, as shown by the claws; the general form reminds one of the raven; but considering the character of the claws, possibly the Egyptian vulture may be intended; but the whole figure is ideal, and perhaps therefore not intended for any special bird.

NAMES OF BIRDS FROM

ASSYRIAN.

Families.—Vulturidæ, Falconidæ.

1.	'e-ru-u		na-as-ru
2.	za-ai-khu		la-kha-an-tuv
3.	ca-ti-ma-tuv		'e-ru-ul-luv
4.	tas-ba-luv		ka-ri-ib bar-
OR	kha-khar-ili		khâ-ti
5.	sar-rad cip-ri		lal-la cip-par
6.	zi-i-bu		{khar} {mur}-ru-kha-ai

Strigidæ.

7.	es-se-bu		khu-si-i
8.	mar-ra-tuv		its-tsur tu-ba-ci
9.	ka-du-u		ac-cu-u

Picidæ.

10.	ci-li-luv		cu-li-li
11.	an-pa-tuv		
12.	du-lim-mas-sat		

Cuculidæ.

13.	kha-zu-u		khu-u-ku
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Upupidæ.

14.	nam-bu-ub-tuv		a-dam-mu-mu
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THE LISTS AND MONUMENTS.

ACCADIAN.	BIRDS KNOWN, OR PROBABLY INDICATED.
Families.—Vulturidæ, Falconidæ.	
ID KHU, ERU (?)	Griffon Vulture (<i>Gyps fulvus</i>), Eagles included.
CA-SU-CUD-DA	Some Screaming Bird of Prey.
.. ..	Egyptian V. (<i>Neophron percnopterus</i>).
.....	Lämmergeier (<i>Gypætus barbatus</i>).
.....	" "
A-DIM-MA	Honey Buzzard (<i>Pernis apivorus</i>) (?).
NU-UM-MA	Some Screaming Bird of Prey.
Strigidæ.	
.. ..	Eagle Owl (<i>Bubo ascalaphus</i>).
.....	Scops Owl (<i>Scops giu</i>) or Little Owl (<i>Athene glaux</i>).
.. ..	Screech Owl (<i>Strix flammea</i>).
Picidæ.	
.. ..	Great Spotted Woodpecker (<i>Picus Syriacus</i>), or Green Woodpecker (<i>P. viridis</i>).
.. ..	
SIB TIR-RA	<i>Picus Syriacus</i> .
Cuculidæ.	
SU LU	Common Cuckoo (<i>Cuculus canorus</i>); or Great Spotted (<i>Oxylophus glandarius</i>)(?).
Upupidæ.	
.....	Hoopoe (<i>Upupa epops</i>), or perhaps Peewit (<i>Vanellus cristatus</i>).

NAMES OF BIRDS FROM

ASSYRIAN.

Hirundinidæ.

15.	{	𐎶𐎵 𐎶𐎵 𐎶𐎵 𐎶	or	as-ci-ci-tuv	{	𐎶𐎵 𐎶𐎵 𐎶𐎵 𐎶𐎵	tsi-li-li-tuv
		𐎶𐎵 𐎶𐎵 𐎶𐎵 𐎶𐎵		ab-ci-ni-ni-tuv			
		𐎶𐎵 𐎶𐎵 𐎶		tša-pi-tav		.....	
		𐎶𐎵 𐎶𐎵 𐎶𐎵 𐎶𐎵		kha-tsi-ba-ruv		𐎶𐎵 𐎶𐎵 𐎶𐎵	bu-li-li

Sylviadæ.

16.	{	𐎶𐎵 𐎶𐎵 𐎶𐎵	tsu-la-mu	{	𐎶𐎵 𐎶𐎵 𐎶𐎵	tša-lam-du
		𐎶𐎵 𐎶𐎵 𐎶𐎵 𐎶𐎵	its-tsur mu-si		.....	
17.	{	𐎶𐎵 𐎶𐎵	kip-su	{	𐎶𐎵 𐎶𐎵 𐎶𐎵	tsi-tsil-du
		𐎶𐎵 𐎶𐎵 𐎶𐎵 𐎶𐎵	its-tsur ki-i-ši		.....	
18.		𐎶𐎵 𐎶𐎵 𐎶𐎵 𐎶𐎵	ma-ac-lat ub-la		𐎶𐎵 𐎶𐎵 𐎶𐎵 𐎶𐎵	khu-ra-tša-ni-tuv

Fringillidæ, Emberizidæ, &c.

19.	{	𐎶𐎵 𐎶𐎵 𐎶𐎵	(D.P. food) abicta	{	.....	
		𐎶𐎵 𐎶𐎵	sa ecil			
20.	{	𐎶𐎵 𐎶𐎵 𐎶𐎵 𐎶𐎵	di-ik-di-ku	{	𐎶𐎵 𐎶𐎵 𐎶𐎵 𐎶𐎵	its-tsur ša-me-di
		𐎶𐎵 𐎶𐎵 𐎶𐎵	duc-duc-cu			

Sturnidæ.

21.	𐎶𐎵 𐎶𐎵 𐎶𐎵	al-lal-luv	.....
22.	𐎶𐎵 𐎶𐎵 𐎶𐎵	ri-hu	.....
23.	𐎶𐎵 𐎶𐎵 (𐎶𐎵)	'e-ri-bu	.....

NAMES OF BIRDS FROM

ASSYRIAN.

Corvidæ.

24.		or	a-ri-bu or		a-ri-bu
			kha-khar	.....	
25.			ka-ku-u		tar-ma-zi-lu
26.			pa-hu		ka-ka-nu
27.			casid cab-ruv		casid ca-bar-ti
28.		or	tas-bal-luv or		its-tsur
			kha-akh-khu		its-tsur
29.			bal-lu-tsi-tuv		tu-bal-la-ats
					ci-na-sa 'its nest

Columbidæ.

30.		ur-sa-nu		ta-am-si-lu
31.		tar-ru		ca-ca-ba-a-nu
32.		ir-ca-bu		ri-ga-bu
33.		su-um (ma-tu?)	.....	

Emberizidæ.

34.		si-li-in-gu		bu-ri-du
-----	--	-------------	---	----------

Perdiciidæ.

35.		ka-ku-ul-luv		cu-lu-ku-ku
			ci-lip-pu

Otididæ.

36.		su-din-nu		gi-il-gi-da-nu
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THE LISTS AND MONUMENTS.

ACCADIAN.

BIRDS KNOWN, OR PROBABLY INDICATED.

Corvidæ.

.....	Raven (<i>Corvus corax</i>), and Brown-necked
.....	Raven (<i>C. umbrinus</i>).
.....	Some Cawing Bird.
.....	Hooded Crow (<i>C. cornix</i>).
.....	Jackdaw (<i>C. monedula</i>).
.....	Some bluish - brown Cawing Bird
.....	(Roller) (?)
.....	Magpie (<i>Pica caudata</i>).

Columbidæ.

	SAK	Wood Pigeon (<i>Columba palumbus</i>).
	IGI MUL	Turtle Dove (<i>Turtur auritus</i>).
.....		Rock Pigeon (<i>C. æneas</i>) (?).
	ŠU UM MU	Domestic Pigeon.

Emberizidæ.

IL LUM BI	Snow Finch (<i>Montifringilla alpicola</i>).
--	-----------	--

Perdiciidæ.

.....	Persian Red-legged Partridge (<i>Caccabis</i>
.....	<i>chukar</i> var.), and Common Partridge
	(<i>Perdix cinerea</i>) (?) Francoline (<i>Fran-</i>
	<i>colinus vulgaris</i>) (?).

Otidiidæ.

.....	Great Bustard (<i>Otis tarda</i> , and
	<i>O. McQueenii</i> , "Houbara").

NAMES OF BIRDS FROM

ASSYRIAN.

Gruidæ.

37. ur-ni-gu ca-li-u

Ciconidæ.

38. rak-rak-ku | la-ka-la-ka

Tantalidæ.

39. um-mi mi'i | a-ba-ya

Ardeidæ.

40. |

41. na-adh-ru |

Phœnicopteræ.

42. dhar lugal-luv |
(borrowed from Accadian)

Pelicanidæ.

43. { tus
{ cu-mu-u | a-ta-an nâri
ab-bu-un-nu |

Gallinæ.

44. { cu-ni-pu
{ 'e-zi-zu |
 (And apparently several other names.) |
 dil-bat

Struthionidæ.

45. { áa-ka-tuv
{ gam-gam-mu | se-ip a-ric

THE LISTS AND MONUMENTS.

ACCADIAN.

BIRDS KNOWN, OR PROBABLY INDICATED.

Gruidæ.

𒂍 𒂍 𒂍 𒂍

KESDA

Common Crane (*Grus communis*).

Ciconidæ.

..... White Stork (*Ciconia alba* and *C. nigra*).

Tantalidæ.

𒂍 𒂍 𒂍 𒂍

AMA-A

Ibis (*Tantalus ibis*) (?) ; (*Comatibis comata*).

Ardeidæ.

𒂍 𒂍 𒂍 𒂍

U-A

Buff-backed Heron, or "Cow-bird" (*Ardea russata*).

𒂍 𒂍 𒂍 𒂍

A-GUS

Heron (*Ardea cinerea*, or *A. alba*).

Phœnicopteraæ.

𒂍 𒂍 𒂍 𒂍

DU DUR RA NU

Flamingo (*Phœnicopterus antiquorum*).

Pelicanidæ.

𒂍 𒂍 𒂍 𒂍

NAM BIR MUKH
DIL LUV

𒂍 𒂍 𒂍 𒂍

RAG GUS ÉA

Pelican (*Pelicanus onocrotalus*).

Gallinæ.

𒂍 𒂍 𒂍

A GUS SE

Domestic Cock.

𒂍 𒂍 𒂍

SAG GUS U

Struthionidæ.

𒂍 𒂍 𒂍 𒂍

GIRI-GID-DA

Ostrich (*Struthio camelus*).

𒂍 𒂍 𒂍 𒂍

GAM GAM (KHU)

Dr. Tristram* has kindly read over the proof sheets of this paper, and has favoured me with a few remarks, which I here insert.

Referring to domesticated ducks and geese by the Assyrians (p. 51), he says: "Our goose could hardly be domesticated thus; the Indian goose does not reach so far west. Assyria is too hot for the goose, and I suspect for any duck either."

On page 52 he refers to the very interesting and wonderfully perfect fresco-painting of ducks and geese in the Boulac Museum, the oldest painting in the world.

Page 54. Dr. Tristram confirms Mr. Blanford's remark on the birds of Mesopotamia by his own observations in that country in 1881.

Page 71. "I found *Hoplopterus spinosus* common in Mesopotamia; it breeds where the lapwing does not. The text would equally apply to either bird."

Page 72. "The hoopoe would be one of the most conspicuous and striking birds to the Assyrians; it is very plentiful."

Page 74. Sedge and reed warblers. "I do not agree with you as to the species of warblers. Those you mention are very rare. Cetti's warbler, for instance, is much more common."

Page 75. "The actual papyrus bird is *Acrocephalus stentorius*, a noisy fellow; it builds nests like those of the reed warbler." This species therefore may fairly be considered to be the bird of the reeds; it does not differ much in structure or dimensions from the European reed warbler.

Page 78. As to rooks in Assyria, Dr. Tristram says that Ainsworth has mistaken his birds when he mentions rooks as occurring there. Dr. Tristram thinks jackdaws are the birds meant, as represented on the monuments with their nests and young (see p. 43). "Jackdaws are to rooks as 100 to 1."

Page 104. "The falcon of Mesopotamia used by falconers is the *Falco sacer*, which is as large as the gyr falcon."

Page 110. Dr. Tristram says: "You ought to find places for the bee eater and the roller; so common, beautiful, and striking birds must have been known to the Assyrians." If we read *sarrat kipri*, "queen of the regions," instead of *sarrad kipri*, "terror of the regions," for the "honey bird," then the bee eater of heavenly beauty may be the *lallari* of the Accadian column.

* See the author's interesting "Ornithological Notes of a Journey through Syria, Mesopotamia, and Southern Armenia in 1881," in the *Ibis*.

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