coast of Kamtschatka, where this bird is rather common and whence it accidentally visits the said island. It is the *Picus major* of Kittlitz (Denkwürd. Reise, I, p. 321).

The greater purity of the white of the lower surface and the greater extent of the same color on the lateral tail-feathers distinguishes this species easily from its allies. In the description of *T. cissa* Pallas expressly says that the lateral rectrices are white "nigro transversim variegatae" and "pectore sordescente." Specimens of *D. major* from Central Europe, the only ones at present accessible to me, have the lateral tail feathers strongly barred, and lack the white spot near the tips of the outer web of the longest primaries. These markings are, however, also found in *Dryocopos japonicus* (Seeb.), but the Japanese bird has a very dark lower surface, and transverse markings in all the lateral tail-feathers; besides, the Kamtschatkan form has a stouter and longer bill.

Dryocopos purus is especially conspicuous for the uniform white color on the lateral tail-feathers. In two of the specimens are seen some traces of transverse bars on one or both of the two external feathers, but no traces of similar bars or spot; are found on the two following pairs.

There is a possibility that the different forms of *D. major* may be found to intergrate so as to become only races. If that can be proved, the names would stand as *Dryocopos major*, *D. major cissa* (Pall.), *D. major japonicus* (Seeb.) and *D. major purus*. But until this question is satisfactorily settled the above binomial appellation will stand.

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THE COUES LEXICON OF NORTH AMERICAN BIRDS.

BY AUGUSTUS C. MERRIAM.

THE "Coues Check List and Lexicon of N. A. Birds" (1882) deserves in one of its features some further consideration than appears yet to have been given it. This feature is its philological treatment of the nomenclature of ornithology. Dr. Coues has here entered upon a field which has long demanded attention. Scientific nomenclature is becoming so vast and so important, and the haphazard way in which much of it has been coined and applied is so provoking, that it imperatively commands from its votaries intelligent and scientific review. Living vernaculars

usually grow with numerous inconsistencies and incongruities, which must be accepted as they stand by the student of language; but in a vocabulary which is constructed by scientific men for scientific uses, there ought to be scientific precision and analogical correctness, at least in the formation of the words. is agreed that the Greek and Latin languages shall be the mine from which this nomenclature is to be drawn, the several structures should be built strictly upon the analogies of those languages. In order to secure this end, the framers of words must be possessed of a competent knowledge of those languages, to give them secure and accurate results. Not only is this true of word-framers, but in a less though essential degree of word-users, - in short, of all the votaries of modern science, of which ornithologists have become an important part. If all ornithologists cannot become proficient Greek and Latin scholars, they can and ought to acquire such an acquaintance with their terms that they may be able to handle them with ease and assured exactitude; for there is scarcely an ornithologist who has not already been confronted by the problem of making known his discoveries in print, or hopes to do so at no distant day. That is the moment beyond all others when his desire mounts to a positive passion to know how to express his thoughts in a manner worthy of himself, of his discovery, and of the beautiful'science which he loves. Hence, if he has never made the matter a study before, he will wish to do so then, and desire just such a production as Dr. Coues has set out to place at his disposal. He will wish to know not only what the terms are, but why they are so and so, or else he possesses no true scientific spirit, none of that divine seeking which longs to be right and know why it is right - that divine seeking which absorbs and masters every true devotee of nature and its countless marvels. How necessary is it then that he should be rightly taught, that the information laid before him should be as accurate, and conceived in as scientific a spirit, as the knowledge of the day will permit.

When we turn to the philological portion of Dr. Coues's work and examine it with these principles in view, we find it open to criticism in numerous particulars. The plan is excellent, and the great majority of the derivations are correct; but the treatment of some of the most essential points which should form the initial training of the word-constructor and word-expounder is erroneous

and misleading. To show this with as much clearness and detail as a limited space will permit is the purpose of this article.

Since a very large part of the ornithological vocabulary is composed of compound words, it is indispensably necessary that the student and teacher should have a clear idea of the processes which the genius of each of the two languages employed in welding words together. Of this the work before us often betrays but vague and indefinite notions. For instance, in No. 56 we read, "Auriparus. Lat. aureus, golden, from aurum, gold; and parus, a titmouse. . . . A more strict method of compounding aure-us with parus would give aureiparus; but it may be taken direct from aurum, making auriparus admissible; as we should say 'gold-tit,' like 'bush-tit,' 'coal-tit.'" But it is a mistake at the outset to sav that auriparus is derived from aureus; it has nothing to do with this adjective, but is made direct from the noun aurum. Some one hereafter, relying on Dr. Coues's statement, might propose to write aureiparus, thinking that to be the only strictly correct form. In like manner, in No. 84, we have a similar treatment of the corresponding Greek for gold:—"Chrysolaema. Gr. χρύσιο, golden, from χρυσόs, gold." Again, this would make chryseolaema, not chrysolaema, which is made from your immediately. The error here seems to arise from the supposition that the first element of the compound ought to be an attributive form—adjective or genitive in order to obtain the adjective meaning. But when a noun precedes a noun in composition it regularly assumes the sense of an attributive by the law of composition, as Dr. Coues himself shows in his "bush-tit," etc. An adjective or genitive form is therefore superfluous, a principle which will also apply to the correction of Sayornis (377) to Sayiornis. The word is not improved by the change.

On the other hand, we have a general principle for the orthography of a certain class of words evolved somewhat in this way (42,311):— In Latin words, the terminal vowel of the first component before a consonant should be i, unless the second component is a participial form; then it should be o, because it is the ablative, and we are to say albocaudatus, albolarvatus, atrocristatus, fuscocaudata, rufovirgata; but flaviviridis, etc.

A question of this kind can be properly settled only by examining the usage of the Latin language in this particular. Taking

Harpers' 'Latin Dictionary' (1879) as fair authority for the form of all words of the classic period, and in some cases embracing authors as late as 600 and 700 A.D., we find the following compounds in which the o is used: - Unomammia, merobibus and sociofraudus in Plautus, viocurus in Varro, primopilus (for the usual primipilus), sacrosanctus in Cicero, Ahenobarbus in Livy, Forojuliensis in Tacitus, Forocorneliensis and primogenitus (?) in Pliny, rumpotinus and rumpotinetum in Columella. These belong to good writers; the remainder occur from 150 A. D. to 650. They are, albogalerus, hamotrahones, primogenitalis, albogilvus, tunicopallium, primocreatus, liniocinetus, Murocincta (?), mulomedicina, mulomedicus, mulocisarius, obliquologuus, tertiocerius, quartocerius, Vergiliocento, homocidalis, oleomella, ceroferarius, martiobarbulus. thorough examination would not increase this list materially, among genuine Latin words, and the smallness of the number as compared with the thousands of words which employ i instead of o, shows how foreign to the real genius of the language the o is. In hybrid compounds there is a tendency to the use of o, whether the first or second component is Greek, and of course in genuine Greek words o is the prevailing letter, so that, if not a survival, it may be through the influence of Greek literature that the o crept into this very small corner of the Latin field. At all events, an examination of the words given above shows that the idea of an ablative is quite inadmissible in the large majority of them, and consequently that the Romans had no consciousness of it in the others; besides, if they had, they would have written aurofluus, "flowing with gold," instead of aurifluus, and countless others of similar import and form. Furthermore, if the o represents the termination of the ablative case, it should be long; on the contrary, it is short, according to Kühner (and Dr. Coues virtually abandons his position by marking his short), in the only places where its quantity can be determined; and consequently, the best German authorities regard the letter as the short final stem-vowel of the second declension, to which the second component is directly added, as so frequently in Greek. All these considerations render such a rule as that of our author quite untenable, and if any changes at all are to be made in words already compounded, it would be far better to conform to the real genius of the Latin language and write i throughout. Dr. Coues has not followed his own rule to its limit,

since he retains pallidicincta and unicincta. In these the second component is a participle, and he could have supported pallidocincta and unocincta by limocinctus quoted above, if not by Plautus's unomammia. In all cases where a genuine compound is formed it is well to keep in mind the principle thus laid down by Roby (Latin Grammar, 979):— One of "the distinctive features of two words being compounded is the possession of but one set of inflections," and that, of course, at the end of the word, not at the point of junction.

Notwithstanding the small number of ancient Latin compounds with o, it is a familiar fact to any one conversant with modern scientific nomenclature that this peculiarity has been adopted and fostered to an extent that would have made a Roman stare. But it is mainly within the present century that this growth has taken place. In names, Linuæus writes the o a few times only, and scarcely at all among bird-names, unless the compound is a hy-Occasionally he will employ it when he attaches two adjectives together by a hyphen, which indicates that he does not regard them as a genuine compound. The same sparing use is apparent in the editions of Gmelin and Turton, but during the next half century the crop that springs up is large and thrifty.* The index of Gray's 'Genera of Birds' (1849) contains more than a hundred names with o, and considerable additions must have since been made. Little if anything can be said in favor of this o in ornithology; but in chemistry, where the slight but important distinctions in different compounds is to be marked, the o has been utilised to some advantage, so that ferrocyanide and ferricyanide stand side by side to indicate the distinction of a single atom of metal. This is both legitimate and ingenious, which cannot always be said of its usage.

^{*} The real genesis may be this. The Latin language was poor in words of color, and lacked definiteness and distinctness in such as it did possess. Naturalists have accordingly found it necessary to eke out the scanty stock by uniting two or more epithets, and in order to stamp such as mere agglutinatives, not regular compounds, they joined the elements by a hyphen, with o as the final vowel before the hyphen. Such or similar forms were gradually transferred from the language of description to the list of names, where the hyphen was sometimes retained, sometimes dropped, especially within more recent days. In ornithology it has disappeared almost entirely, but Paxton's 'Botanical Dictionary' (1868) shows it to be still employed in Botany in a large proportion of the compounds which are written with the o, and we see it occasionally elsewhere.

It is a pretty comprehensive rule in both Greek and Latin that the final stem-vowel, or so-called connecting vowel, disappears by elision before an initial vowel of the second element, except in Greek before words which originally began with the digamma or some sibilant, as είδος, έχω, etc. This exception in the ornithological vocabulary is chiefly confined to the ending -ides. But in No. 305 we read as follows: - "Megal'onyx. The word is commonly accented on a long penult; a practice perhaps defensible on the ground that megalo-onyx=megalonyx." This implies the contraction of the two short concurrent vowels into one long; but nothing of the kind takes place here; or if it did, Greek rules would require the resultant form to be peralourut, which should be transliterated megalunyx. If, however, it is desirable to make the penult long, it might be done upon a different principle; for several of the compounds of over, all in fact in Homer, have ω instead of o, as κρατερώνυξ, a peculiarity which is due not to contraction but to metrical needs, and the w forms are often found in prose. Still, the short penult is common enough, and the Roman poets employed it in sardonyx.

Again, (453):— "Melanerpes. Gr. $\mu \ell \lambda \alpha s$, genitive $\mu \ell \lambda \alpha v s$, black, and $\ell \rho \pi \eta s$, a creeper. The full form would be *melanoherpes*." Not so. In a word formed like this upon Greek models the o disappears before the vowel, and the aspirate vanishes also. In composition, it is only when the aspirate comes in contact with a preceding p, t, or k, that k is to be used to represent it, as in Catherpes. Dr. Coues's principle might lead to the coining of other monstrosities like *Philohela*, which should have been *Philola*, or better, *Helophila*.

In No. 799 we read: "Macrura. The word is often written macroura, and defensibly so, the full form being macro-oura. But it is permissible to shorten oou into long \bar{u} , as we habitually do in leucurus for leucoourus." The "full form" can have no existence. The "ou" as "often written," is the transliteration of the Greek diphthong ou by two corresponding letters, as many classicists now insist that we shall write Mousaios instead of Musæus; but according to Dr. Coues's system, p. 14, ou becomes u.

No. 531. "Thrasyaē'tus. Gr. θρασύς and ἀητός. Generally written *Thrasaëtus*, as originally by Gray; but the above is preferable; compare *Thrasyas*, *Thrasybuīus*, *Thrasymachus*, etc., all

retaining the y(v)." "Thrasybulus, Thrasymachus" have nothing to do with the question, which turns upon the retention of the y before the vowel of the second component. It is a fact that v is usually an exception to the rule propounded above for elision, and for this reason it is likely that the first component is not $\theta \rho \alpha \sigma v \beta$ but $\theta \rho \alpha \sigma v \beta$, as we find in Thrasokudoimos, Thrasippos, $\theta \rho \alpha \sigma u v \gamma v$. Hence, the correction from Thrasaëtus is open to objection.

It is to be remembered that if the second component begins with a vowel, that vowel remains, while a preceding one vanishes. Hence the division "muia-rchus" (377, cf. 819), for mui[a]-archus is wrong from that point of view. The inventor of Muiadestes seems to have been ignorant or neglectful of this principle, if the composition is pura ibertis, as is probable. The form should have been Muiedestes.

If the stem of the first element ends in a consonant, a connecting vowel is regularly needed, unless the second has an initial vowel. In No. 384 we find *Empidonax* derived from the stem μμπδ-(gnat) and "ὧναξ or ἄναξ, king." If it could be made from ὧναξ, *Empidōnax* would be correct. But ὧναξ is a contracted vocative of ὧ ἄνεξ. "O king," which would be the strangest possible form to compound with. If from ἄναξ, o would naturally disappear, and *Empidanax* should be written (cf. Hydr-anassa, Dichromanassa), unless modeled upon archaic forms. If we are left by the inventor to guess, a more reasonable derivation would be from the stem ναγ· of νάσσω, "to squeeze," and we arrive at the meaning "gnat-squeezer," instead of "gnat-O-king."

The so-called connecting vowel i in Latin is regularly short, and it is pretty well agreed among scholars that vowels naturally short were pronounced short in prose, even before two consonants, except before ns, nf, where Cicero explicitly states that they were pronounced long. Certainly the short vowel retains its quantity before a mute followed by the liquids l or r. Though these principles are laid down in part, p. 16, and recognized with some hesitation under No. 126, and again alluded to in 150, the writer is, notwithstanding, induced to mark the penult of rubrifrons, long, and accordingly to place the accent upon it, being led astray by the false analogy of rubrico. This, however, is derived from rubrīca, which has the i long under the general rule that nouns ending in -ca lengthen the penult. Hence the quantity of the i in rubrico has nothing to do with that of rubrifrons, which is short, as Dr. Coues marks in lunifrons, etc.

In the next number (151), we are told that "the connecting vowel o (of Setophaga) need not lengthen before ph." Change "need not" to must not. Neither the Greek aspirate nor the corresponding Latin h has any effect on the quantity of the preceding vowel, according to Greek and Latin rules, and Dr. Coues's quantities are regularly marked by such rules. "Need not" leaves open the possibility of the long vowel. Is it in obedience to this possibility that we have Pētrōchelidon in 162, Zonōtrīchia in 275, leucō'phrys in 276, &c., or are they typographical errors, which are plainly quite frequent?

The c of *Tephrocotis* (203) is declared to be a "connective consonant." Unless the originator of the word asserts that he resorted to this daring expedient, it would be best to seek some easier solution of the problem. κοτίς, "head," suggests itself as the probable form for the second element.

A frequently recurring example of what in these days of comparative philology is regarded as vicious teaching consists in declaring that Latin words which are only cognate to the Greek are derived from it, as -ceps from κεφαλή (56), Hirundo from χελιδών (159), nebulosa from νεφέλη (476), etc. That these are kindred forms is true, but for their origin we must look to some common Aryan stock from which each developed its special form after the separation of the Italic and Hellenic tribes. Some Latin words, of course, have been imported from the Greek in historic times, and such may be properly said to be derived.

The notion that the Greek is older than the Latin appears to have led to the introduction of some useless lumber. So long as the Greek contains a word cognate to the Latin and used in ornithology, it is well to have it cited for the information of the learner. Indeed, I should go further, and adduce the derivative or cognate word in English wherever we chance to have one. But such summer-day saunterings as appear in No. 306 might have been omitted to advantage. Within the same language, too, we find unnecessary material. To be more explicit, it may be asked what is the service, when deriving familiaris from familia (62), of adding, "or older familias?" Such a piece of information does not assist the learner; or rather, would not do so, even if it were a fact. Familias, however, is not an older form of the nominative familia, but an archaic form of the genitive for familiae. Again, in No. 166:— "Ampelis. Gr. ἀμπελίε or ἄμπελος." There is no

alternative here. Ampelis must be direct from ἀμπελίς, and ἄμπελος is best omitted altogether.

The lack of clear logic, incisive statement, and proper arrangement in the process of derivation confronts one continually. Helminthophaga (98) is derived from έλμις. This, however, does not have the stem έλμιθ-, but έλμι-. Galeata (684) is deduced from galea, and that from galeo. The order should be, galeata, galeo, galea. "Cyanocephalus (332). Gr. κύανος, or Lat. cyaneus, blue." Omit "Lat. cyaneus," and this would be correct. "Cyaneus (489). Gr. κύανος, Lat. cyaneus." Read Lat. cyaneus, Gr. κυάνος, from κύανος. "ήμι (586), a contraction of ήμιστις." The former is the root-word, of which the latter is an extension. "Gr. νήττιον (715); contracted from νηττάριον, a diminutive of νήττα." The two first are separate diminutive forms of the last.

The etymologist and lexicographer must keep in mind that a large and important factor in his work is the proper historical treatment of his words. Derivations and meanings must be traced back through all their phases, and a proper sequence in time or usage must not be violated. Dr. Coues is sometimes not very successful here. Aurum in 326 is, by inference, derived from Gr. αὖρον, which chances to be a mere transliteration from the Latin, and not found till towards the downfall of the Roman "Falco (498). Gr. φάλκων, Lat. falco, from falx." Falco is cited as in use at least as early as the second century A. D. in Latin, but φάλκων does not occur till some 800 years after, and it must be simply a late Greek transliteration of the Our word Harpy is referred (17, 531) to ἄρπη, "a Latin word. sickle,"—from the crooked beak. In reality, Harpy comes from άρπνια, a quasi-participial form from the root of άρπάζω, "to snatch," and in Homer, where the word first occurs, it is a dim personification of the storm-wind or hurricane, with no element of the bird-form about it, and at all times it was habitually represented with the human head. αρπη, on the other hand, in Homer is some bird of prey, named from its raptorial habits.

Motacilla (86) is explained as a hybrid from mota-κίλω. We have hybrids enough, certainly, without increasing the list unnecessarily. Motacilla is a word used by Varro who wrote in the last century before the Christian Era, and it is cited by him as undoubtedly an old and common word of the people. We cannot suppose, then, that the Italian people, who knew no Greek,

compounded a hybrid word, the Greek part of which is not even a current Greek verb. However, there is a Latin verb cillo, "to move," by the use of which we might escape the hybridism. But it is more natural to suppose that -cilla is simply the diminutive termination added to the stem of mota-re, as novacula from novare, with a termination like that of oricilla for auricula. Varro's employment of the word in the midst of several birdnames with diminutive terminations points also to this conclusion, and a gloss of Cyrillus's explains σασοπυγίς by moticella, motacella, where the diminutive cannot be mistaken. Still, there seems little doubt that some of the ornithologists have formed their words upon the supposition that cilla meant tail, and some philologists array a Sanscrit cognate in its favor.

However this may be, *motacilla* is a genuine Latin word, and we pass on to something of a curiosity in logic, by which it is sought to go back of the derivation given by the inventor of a word and find something better for it. Andubon is said (594) to have invented *Aphriza* and to have derived it from ἀφρός and ζάω. Our author inclines to follow Wharton (who, we will hope, did not know Audubon's paternity) and derive from ἀφρίζω.

Dissatisfaction is expressed with the reference of Numenius (643) to the Greek vountuos, "the narrow arcuate bill being likened to the new crescent moon," and it is suggested that the word may come from the Latin numen, although the "ornithologists of the heroic age" knew very well that vountuos was a common Hellenic bird-name in the time of the old Greek Diogenes Laertius. But suppose we grant that the derivation from numen is possible (?), and assume that Numenius, which is not a classic Latin word, means the "nodder," the following does not seem very clear:— "Whichever of these derivations we approve, they amount practically to the same thing; for numenius certainly refers to the shape of the bill."

In the next case it will be necessary to transcribe a rather long note in full.

"313. Mō-lō'-thrūs ā'ter. *Unde derivatur?* The orthography and etymology of *molothrus* are alike in dispute. Swainson himself says 'μολοθρος, *qui non vocatus alienas aedes intrat*'; that is, an uninvited guest. There being no such Greek word as μολοθρός, but there being a good Greek word μολοβρός, meaning one who roams in quest of food, a vagabond, a beggar, a parasite, a

'tramp' (as we should say now), and therefore exactly answering to Swainson's explanation of his molothrus, it has been supposed by Cabanis that Swainson meant to say molobrus, and the word has consequently been changed. Though this is very true, it is also to be observed that Swainson wrote molothrus more than once, showing it not to be a misprint or other mistake, and that, further, it is quite possible to construct the word molothrus from μώλος and θρώσκω (θορεῦν, θόρω, θύω), and answer all the conditions of Swainson's definition; molothrus being, in this case, a bird which takes uninvited possession of other birds' nests, and there leaves an alien egg in mockery of the rightful owners. We therefore see no necessity to replace molothrus by molobrus. The first o is marked long as being Gr. ω, the second as lengthened by position."

If any one will take the trouble to consult the Greek 'Thesaurus' of Stephanus, edition of 1822, he will find there in its proper place the following:—"μολοθρός, qui non vocatus alienas aedes intrat." The word is introduced into the 'Thesaurus' on the authority of Suidas who gives it without explanation, and of Apollonius who cites the feminine μολοθρή in his Homeric Lexicon as an explanation of the Homeric βλωθρή. Editors of Suidas now incline to read μολόθουρος, a plant, for μολοθρός, and in the later edition of the 'Thesaurus' Dindorf conceives μολοθρή, to be an invention of the Grammarians. Swainson, however, had the authority of the great lexicon of the day for his word and its meaning, whatever may have been its real status in the language, and was quite justified in his use of it. The fault, if anywhere, rests with the lexicographers, and Swainson's word should stand as he gave it.

Aix (719) has been written as a dissyllable, notwithstanding some misgivings on the part of the author. Though the earliest application of the word may be in doubt, it certainly has been regarded both by tradition and by the commentators on Aristotle as a monosyllable. There is no hint of any other view in the MSS. of that writer, and Gaza translates by capella, "the little goat." Gaza, it will be remembered, was a learned Greek who fled from Constantinople upon its capture by the Turks, and took up his abode in Italy, where he devoted himself to the diffusion of a more accurate knowledge of his native tongue, and especially to the translation of Aristotle into Latin. Bringing with him the traditions of the schools as they had been handed down from an-

tiquity, his version is of great importance, and it settles the question raised about *iliacus* (4), for that is the word which he used to translate this (literally "of ilium") which is found in the text of Aristotle as the name of a Thrush, and later authors followed him. Some commentators have preferred to change this reading of Aristotle to thhis "gregarious," as found in Athenæus, in order to secure the more obvious application of the term. The Aristotelian τριχάς (141) is rendered *pilare*, by Gaza, and *pilosa* by Thomas, thus showing that they derived it from θρίξ. In like manner, his version gives a satisfactory account of *hiaticula* (589). When translating Aristotle's χαραδριός, he says, *quasi hiaticula dixeris*. He was coining a word to suit the radical sense of the Greek.

Some cases have already been mentioned in which the "longer" or "fuller" form was referred to, where the learner should beware of being misled. A few others must not be omitted. Of megarhynca (285) it is said, "more exactly to be written megalorhynca." Not "more exactly"; for megarhynca is made from one stem, megalorhynca from another, of the same adjective, both equally legitimate, though the latter is more common. dell and Scott give nearly twenty compounds into which μέγα enters. Again, Spermophila (296) "is contracted; the full form is spermatophila." But the 'Lexicon' cites more than twice as many compounds from the stem σπερμ- as from σπερματ-. "We believe either mitrephorus (392) or mitrophorus to be admissible; the former has currency though the latter may be preferable." Both forms are found in good Greek writers, the former in early Greek, the latter later. Possession of the field should be more than nine points in its favor under such circumstances. des (449) is referred to ευρεοειδής, and the fuller form is said to be Thyreoides, which would be right if the first step were correct; whoever introduced the word, however, is more likely to have taken it from θυροειδής, "door-shaped," at once, if he has not expressly declared to the contrary. The two words were confused early. Of Dendræca (III) the full form is said to be Den-Yet there are more Greek models for Dendræca than for the other form. The ancient compounds of olketús or olkntris are very few. And here we may add that of the two, ολκητής is more likely to be the proper form in ornithological compounds, since this means an "inhabitant," the other almost

always a "slave"; so that the penult of such forms should be long and accented.

This leads us to the correction of the accent of several words. It may be premised that all such corrections are based upon the principles of Greek and Latin quantity, which Dr. Coues habitually follows. If any one choses to say Lophophā'nes (40) for ease of pronunciation, or to emphasize a stem syllable, he starts upon a different basis entirely. He certainly must not suppose that "the a in -phanes represents two vowels, ai or a, as in phanomenon, phanogamous." Both these words are made from the present stem of the verb, which regularly adds an i(e) to the root of the word, thus presenting the form phan-. Usually, however, in composition the genuine root phan- is employed which is naturally short, the i being confined to the present system. In fact, it is very largely the rule in Greek compounds that the short root of the verb is employed, and not the lengthened present stem, as in Troglodytes, Carpodacus, etc. Thryotho'rus (68) and Cistothō'rus (81) ought not to be from boûpos, but from the root bop-, giving Thryothorus, Cistothorus, as βουθόρος (Æschylus, 'Supplices'). Coupos would transliterate -thurus, not-thorus. Pyr'ruhla (191) should be $Pyrrh\bar{u}'la$ as taken directly from Aristotle's πυβρούλας. (See Gesner, 'Aves,' sub voc.). Oregonus is accented on both penult (303) and antepenult (263). The word is Latinised, and words in -onus in Latin have the penult long. Molothrus, Scandiaca, Cantiaca, Satrapa should have a short penult, Coccygus, Aegialites a long one. Haliaetus and the other words containing the same final component are marked with a long penult, although Dr. Coues assumes the prosaic form as the proper one to determine the spelling of the first syllable of that component. In prose all the forms appear with a short penult, and antos is a very rare form indeed, even in poetry; so that it seems hardly consistent to accent the penult on account of this poetic form.

Lastly, we must speak of some of the changes which are noticed by Dr. Coues as having been made in long-standing words. It would seem reasonable to lay down the rule that the inventor of a word has a right to the maintenance of his form, unless some sound objection can be urged against it. If genuine analogy can be shown to support the form, it should not be altered to correspond with something that may be of more frequent occurrence, simply because it is unusual. Uniqueness may be a strong recommendation to some. If the word is from the Greek or Latin the analogue must be adducible from those languages. Something has already been said upon such cases. To proceed.

Rafinesque is said (96) to have written *Helmitherus*, which is asserted to be inadmissible since it must come from the stem έλμινθ- from the nom. έλμινς. Accordingly, *Helmintherus* has been written, with a longing for still further change, to *Helmintheras*. But there is another stem, έλμι-, used by Aristotle, which, with the addition of *-therus* from θήρ, would give the word of Rafinesque exactly and legitimately. For the form of the second component we have a large number of models, as λεξθηρος.

Pelasgia of Linuæus is objected to (405), and Pelasgica substituted in its place. The former is as good a form for the feminine of the adjective in Greek as the latter, and occurs in Æschylus.

Before accepting *plagata* for *plagiata* (527) it would be well to weigh the fact that *plagiare* was used in mediæval Latin in the same sense as *plagare*.

In closing, it may not be amiss to offer the suggestion that a rule be established that hereafter whenever an ornithological name may be coined the inventor shall publish, along with the description of the bird, the derivation of the name and the model upon which it has been constructed, somewhat in this form:—

Castanogastris (κάστανα, γάστρις, "chestnut-bellied"); model, ζωνόγαστρις (Hesychius).

This would serve a four-fold purpose. It would preclude all criticism if properly done, secure more accurate and legitimate words, insure to the inventor the exact form which he has preferred, and save future lexicographers a deal of trouble and vexation of spirit.

ORNITHOPHILOLOGICALITIES.

BY PROFESSOR ELLIOTT COUES.

Professor Merriam may imagine with what mixed amusement and consternation we find ourselves sent down to the foot of the class for missing our lesson and kept in after school to learn it. Twenty-five years ago, when Latin grammars and Greek dictionaries looked bigger to us than they do now, the Professor's attitude would have seemed to us