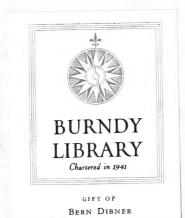


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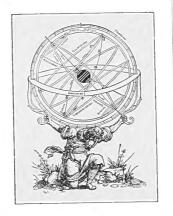
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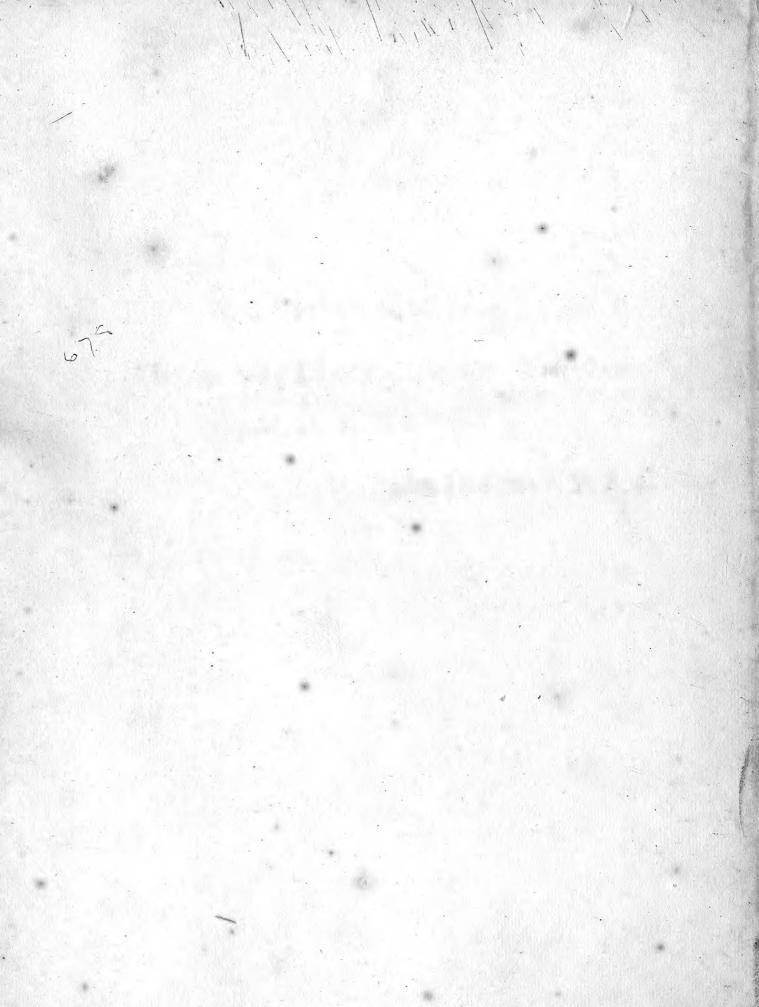


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John Hoskins N. P. R. S.

17° Die Maij, 1699.

Imprimatur Liber cui Titulus, Orang-Outang, sive Homo Sylvestris, &c. Authore Edvardo Tyson M. D. R. S. S.

John Hoskins V. P. R. S.

Orang-Outang, sive Homo Sylvestris:

ANATOMY

OF A

PYGMIE

Compared with that of a

Monkey, an Ape, and a Man.

To which is added, A

PHILOLOGICAL ESSAY

Concerning the

Pygmies, the Cynocephali, the Satyrs, and Sphinges of the ANCIENTS.

Wherein it will appear that they are all either APES or MONKEYS, and not MEN, as formerly pretended.

By EDWARD TYSON M. D. Fellow of the Colledge of Physicians, and the Royal Society: Physician to the Hospital of Bethlem, and Reader of Anatomy at Chirurgeons-Hall.

LONDON:

Printed for Thomas Bennet at the Half-Moon in St. Paul's Church-yard; and Daniel Brown at the Black Swan and Bible without Temple-Bar and are to be had of Mr. Hunt at the Repository in Gresham-Colledge. M DC XCIX.

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TO THE RIGHT HONOURABLE J O H N Lord Sommers,

Baron of EVESHAM,

Lord High Chancellor o F ENGLAND,

One of the Lords of his MAJESTIES most Honourable PRIVY COUNCIL,

And President of the ROYAL SOCIETY.

SIR,

Affairs, in which your Lordship is engaged; one would think, did so entirely engross your Time, that you could not have a Minute left to bestow on the Muses. Your unwearied and successful Application to the

The Epistle Dedicatory.

the Business of the State, in the nicest Conjunctions, that perhaps England ever saw; as well as your in-expressible Labours in distributing fustice, in your High Station; have been attended with Universal Applause: and have convinced all the World, how much the Honour of his Majesty's Government, and the Happiness of his People, depend on the Capacity and Integrity of his Ministers. You have not suffered, even necessary Refreshments to interrupt your Constant Cares for the Publick. To serve your Country, you have defrauded your self both of Meat, and Rest; which, my Lord, is the only Act of Injustice, that was ever charged upon you. Your immoderate Labours make daily Encroachments upon your Health; or at least 'tis the fear of every good Man, that they should. And yet your Lordship, notwithstanding all Disswasions, perseveres inflexible; as if, animated by the Noble Spirit of an Old Roman, you were resolved to Sacrifice your Life, for the Good of your Country.

And yet, my Lord, amidst such a multiplicity of the greatest Affairs, to which you pay a constant Attendance; you have not only found Time, to apply your Thoughts to all kinds of Literature, so as to become a great Master in all; But you have likewise extended your Care to the Interests of Learning, and to the Encouraging of those, who study the Advancement of it. Among many other Instances, your Lordship has lately condescended, to Preside over the Royal Society; that

USI

The Epistle Dedicatory.

that was instituted, for the Improvement of Natural Experimental Philosophy; and you have taken care, to Express your great Zeal and Readiness, to contribute every thing in your Power, to Protest their Interests, and Promote their Reputation. And under your Lordship's enlivening Influence, there is all the Reason in the World to expect, that Learning will again flourish there, as well as among other Orders of Men.

This, my Lord, has so embolden'd me, humbly to present this Performance to your Lordship. For since so
Great a Patron of Letters is risen in the midst of us;
we think we have a sort of Right to his Countenance
and Protection. I wish the Present I presume to make
you, was more worthy of your Lordship: All that I can
say to recommend it, is, that the Subject is Novel, and
that Care has been taken to give it a just Description;
which, I may say, without vanity, never yet appeared in
Publick.

'Tis a true Remark, which we cannot make without Admiration; That from Minerals, to Plants; from Plants, to Animals; and from Animals, to Men; the Transition is so gradual, that there appears a very great Similitude, as well between the meanest Plant, and some Minerals; as between the lowest Rank of Men, and the highest kind of Animals. The Animal of which I have given the Anatomy, coming nearest to Mankind; seems the Nexus of the Animal and Rational, as your Lord-ship, and those of your High Rank and Order for Know-ledge

The Epistle Dedicatory.

ledge and Wisdom, approaching nearest to that kind of Beings which is next above us; Connect the Visible, and Invisible World.

If this Performance shall Promote the Design of the Society, of which I have the Honour to be a Member, and which your Lordship is pleased to Preside over; by improving the Natural History of Animals, and affording the Reader any Delightful and Useful Instructions; I shall look on my Time and Pains, well rewarded. I am

My Lord,

Your Lordship's most humble

and most obedient Servant

EDWARD TYSON.

THE

PREFACE

EAST this Discourse should be rejected meerly for the Title's fake, as if 'twere intended only to divert the Reader, with the Recital of the Fabulous and Romantick Stories, which have been related on the Subjects I have proposed to treat of: I think it necessary to premise, that as my chief Design in this Undertaking is the Improvement of the Natural History of Animals; fo I have made it my Business more, to find out the Truth, than to enlarge in the Mythology; to inform the Judgment, than to please the Phancy. And the Orang-Outang (whose Anatomy I here give) being a Creature so very remarkable, and rare; and not only in its External Shape, but much more in the Conformation of a great many of the inward Viscera, fo much resembling a Man; I thought I could not be too particular, in my Description of it; though to some, who have not a Tast of these Matters, I may seem prolix and tedious.

To render this Disquisition more useful, I have made a Comparative Survey of this Animal, with a Monkey, an Ape, and a Man. By viewing the same Parts of all these together, we may the better observe Nature's Gradation in the Formation of Animal Bodies, and the Transitions made from one to another; than which, nothing can more conduce to the

The PREFACE.

Attainment of the true Knowledge, both of the Fabrick, and Uses of the Parts. By following Nature's Clew in this wonderful Labyrinth of the Creation, we may be more easily admitted into her Secret Recesses, which Thread if we mis, we must needs err and be bewilder'd.

In drawing up this Comparison, I have made use of the Anatomy which is given of Apes and Monkeys by other Authors; and very frequently have quoted their own words, which has render'd my Discourse much longer: For not having these Animals by me to dissea and compare, I thought it but just to let the Reader see, upon what Authorities I went. And though a short Reference might be esteemed sufficient, without this tedious and unfashionable way of inserting the whole Text; yet if any one will give himself the trouble of Examining the Evidences I have produced, I think I have dealt more kindly by him, in making him a Judge himself; than in leaving him barely to trust to my Report. For there are none, who have been conversant with Books, but must acknowledge, that they have been often imposed upon, for want of this fair dealing, as I have my self Experienced in this present Enquiry. To avoid therefore this Error, my Caution it may be has lead me into another, which I hope the Reader will pardon, if he judges it fuch.

Galen formerly dissected Apes and Monkeys, and recommended to his Scholars the frequent Anatomizing them, as useful for the attaining the Knowledge of the Structure of the Parts in Humane Bodies. Had he met with our Animal, it had served his turn much better: Nor had he been liable to some Mistakes, which Vesaling charges him with, since in so many Parts, the Orang-Outang imitates a Man, more than Apes and Monkeys do. Not only Galen, but the greatest Anatomists we have had in this last Age, have exercised their Pens about them; as plainly appears in the ensuing Discourse, which sufficiently justisfies me for engaging in this Argument: I wish I had so good an Apology for my Performance.

This

The PREFACE.

This great Agreement, which I observed between the Orang-Outang, and a Man, put me upon considering, whether it might not afford the Occasion to the Ancients, of inventing the many Relations, which they have given us of several forts of Men, which are no where to be met with but in their Writings. For I could not but think, there might be some Real Foundation for their Mythology; which made me more strictly enquire into their Records; and examining them, I always sound something new, that insensibly lead me on far beyond what at first I intended: and if I do not deceive my self, I have at last gained a clearer Light in these Matters, than any that has hitherto appeared.

For what created the greatest difficulty, was their calling them Men, but yet with an Epithet for distinction sake; as the "Aνδρες "Αγειοι, Μικερί, Πυσμαϊοι, Μέλανες; so the "Ανθρωποι Κυνοπεόσωποι, &c. i. e. the Wild Men, the Little Men, the Pygmæan Men, the Black Men, the Men with Dogs Faces, &c. yet at the same time I find that they made them Suela, Wild Beasts; and if so, no doubt but they were of the Quadru-manus kind; i. e. either Apes or Monkeys. And such were likewise the Satyrs, the Fauni, Pan, Ægipan, Sylvanus, Silenus, and the Nymphæ, as also the Sphinges of the Ancients.

But so many Romances have been made about them, that not only Strabo formerly, but the most noted Men of Learning of late, have looked upon them as meer Fistions of the Poets, and have utterly denied them any real Being. Homer's Geranomachia therefore, or Fight of the Cranes and Pygmies, I have rendered a probable Story. Aristotle's affertion of the being of Pygmies, I have vindicated from the false Glosses of others. The Conjectures of other Learned Men about them, I have examined: And by what I have said in the following Philological Essay, I think I have fully proved, that there were such Animals as the Ancients called Pygmies, Cynocephali, Satyrs, and Sphinges; and that they were only Apes and Monkeys.

The PREFACE.

Had my Leisure been greater, I had contracted the whole, and taken more care both in the Method, and Expression. But most of the vacant Hours from the necessary Attendance on the Business of my Profession, being taken up in Collecting Materials; to gratiste the Importunity of my Friends, who constantly urged the Publication, I sent my Papers Sheet by Sheet to the Press, as I had time to transcribe them; so that I had not a view of them together, till they were printed. If I have discovered the Truth, 'twas what I aimed at, which always appears best, when least disguised; and it has been my chief Care in this Undertaking to pull off those Vails and Masks, wherewith the Poets and Poetical Historians have hitherto obscured it.

Orang-Outang sive Homo Sylvestris:

OR, THE

ANATOMY

OF A

PYGMIE.

HAT the Pygmies of the Antients were a fort of Apes, and not of Humane Race, I shall endeavour to prove in the following Essay. And if the Pygmies were only Apes, then in all probability our Ape may be a Pygmie; a fort of Animal so much resembling Man, that both the Antients and the Moderns have reputed it to be a Puny Race of Mankind, call'd to this day, Homo Sylvestris, The Wild Man; Orang-Outang, or a Man of the Woods; by the Africans Quoias Morrou; by others Baris, or Barris, and by the Por tugese, the Salvage. But observing that under these Names, they describe different Animals; for Distinction-sake, and to avoid Equivocation, I shall call the Subject, of which I am about to give the Anatomy, a Pygmie, from its Stature; which I find to be just the same with the Stature of the Pygmies of the Antients. Tulpius 'tis true, and Bontius, and Dapper do call it, Satyrus. And tho' I am of Opinion, that the Satyrs of the Antients were of the Ape, or rather Monkey-kind; yet for the Reasons alledged in the following Essay, I cannot think our Animal a Satyr. The Baris or Barris, which they describe to be much taller than our Animal, probably may be what we call a Drill. But I must confess, there is so great Confusion in the Description of this sort of Creature, which I find is a very large Family (there being numerous Species of them) that in Transcribing the Authors that have wrote about them, 'tis almost impossible but to make mistakes; from the want of their well distinguishing them. I shall endeavour therefore in my Account of this, so to discridiscriminate it, that it may be easily known again, where-ever 'tis met with. Not that I think in a single Observation I can be so exact, but that I may be liable to make Errors my self, how careful soever I have been.

I will not urge any thing more here, why I call it a Pygmie: 'Tis necessary to give it a Name; and if what I offer in the ensuing Essay, does not sufficiently Account for the Denomination, I leave it to others to give it one more proper. What I shall most of all aim at in the following Discourse, will be to give as particular an Account as I can, of the formation and structure of all the Parts of this wonderful Animal; and to make a Comparative Survey of them, with the same Parts in a Humane Body, as likewise in the Ape and Monkey-kind. For the I own it to be of the Ape kind, yet, as we shall observe, in the Organization of abundance of its Parts, it more approaches to the Structure of the same in Men: But where it differs from a Man, there it resembles plainly

the Common Ape, more than any other Animal.

And tho' I may feem too tedious in discoursing so long upon a single subject, yet I have this to offer, that if we had an accurate and particular History of any one Species of Animal, it might in a great measure ferve for the whole kind. Wherein they differ, might easily be taken notice of, and there would be no need of repeating any thing, wherein they all agreed. So formerly diffecting a Young Lion and a Cat at the fame time, I wondred to find fo very great Resemblance of all the Parts, both in the one and the other; that the Anatomy of the one might serve for the other, allowing for the Magnitude of the Parts, with very little other alteration: And not only for this, but for feveral other Animals, that belong to the same Family. I could have wished I had had the like Opportunity, when I was diffecting our *Pygmie*, of comparing the same Parts with those of an Ape and a Monkey: For want of it, I have referred all along to the Accounts given us of the Anatomy of these Creatures by other Authors; which, tho' it renders my Discourse more prolix, yet I thought it would not be unacceptable to the Curious. But I shall take care to draw up in a shorter view, wherein our Pygmie more resembled a Man, than an Ape and Monkey, and wherein it disser'd.

Now notwithstanding our Pygmie does so much resemble a Man in many of its Parts, more than any of the Ape-kind, or any other Animal in the World that I know of: Yet by no means do I look upon it as the Product of a mixt Generation; 'tis a Brute-Animal sui generis, and a particular Species of Ape. For when I was dissecting it, some Sea-Captains and Merchants who came to my House to see it, assured me, that they had seen a great many of them in Borneo, Sumatra, and other Parts, tho' this was brought from Angola in Africa; but was first taken a great deal higher up in the Country, and in Company with it there was a Female

of the same kind.

I shall have hereafter occasion to make my Remarks on several Particulars, relating to it's way of Living, it's Sagacity, Actions, and the like.

like. I shall now therefore first of all describe its outward shape and figure; then look within, and observe the Mechanism there. But meeting with a Text in Ariftotle, wherein he gives a general Description of the Ape-kind, I think it not amiss to Transcribe it; and by Commenting upon it, to shew wherein our present Subject agrees with or differs from it; and what I have besides to Remark, I shall afterwards take notice of and then proceed to the Anatomy of the Inward Parts.

Aristotle's (1) Text is this, which I shall give with Jul. Cass. Scaliger's Latin Translation: And as you may observe by the Letters of Reference, I have rendred each Paragraph into English, adding my Observa-

tions thereon.

(a) Νια ή την ζώων ἐπαμφοτερίζει την φύσιν, τως τε ανθρώσω η τοίς τετράποσιν, οίον πίθημοι ης κήδοι, η πυνοπέραλοι. (b) Έςi δ' δ μέν κῆδος, πίθηκος έχων έραν. (c) Kal οι κυνοκέ. φαλοι ή την αὐτην έχεσι μορφίω τοῖς πιθήμοις, πλην μείζονες τ' είσι, κζι ίχυροπερςι, η πα πρόσωπα έχοντες πυνοειδέσερα. Επ ή άγριωπερά τε πὰ ήθη, n) मर्डेड वेठिएम्बड हैं प्रहण मध्यवहार्रेड्डिव्यड में ίους οπερους. (d) 'Οι δε πίθηκοι, δασείς μέν εἰπ τὰ περίνη, ώς οντες τετερίποδες. κ) τὰ ὖπτια 🖰 ώσαὐτως, ώς ὄντες ἀνθςωποειδείς. Τέτο ρο 6πι τω ανθεώπων बंगवारी कड़ है पूरा में ठिया है जिंगे हैं कि सहर विकार के किए , καθάπερ έλέγθη πεότεεον. Πλω ή τε अट्टोर्ड मक्र्रहांव, में विकार हेके वेमक्रिंहिल् σφοδεα είπν οι πίθηκοι. (e) Το ή πεόσωπον, έχει πολλάς διιοιότητας τω 78 ανθεώπε. Και γδ μυκτήρας, η ώτα παραπλήσα έχει Καὶ όδοντας, ώσερ δ άνθεωπος, η τες πεοθους ή τες γομφίους. (f) Έπ ζ βλεραείδας, τω άλλων τετραπόδων έκ έω άμφότερα. έχονταν, όδιτ έχει μέν, λεπας ζορόdea, in marror rais natur, in muneais πάμπαν τὰ χο άλλα τετεάποδα ταύτας έκ έχει. (g) Έχει ή εν τω ςήθει δύο Απλάς μαςῶν μικρῶν. (b) Εχει δε η βεσεχίονας, ώσσερ άνθεωπος πλίω δασείς મે મુનું μπે દા મે τέπυς મે πα σκέλη ωωτερ ανθεωπος, τας περιφερείας πρός

(a) Nter hominem, quadrupedum-I que genus natura quædam media, atque utrique communis est: Quales, simia, cebus, caniceps. (b) Est autem cebus simia caudata. (c) Caniceps communem cum simia formam habet: nisi quod & major & robustior est: faciémque habet caninæ propiorem. Tum moribus existunt efferatioribus. Dentes quoque caniniores, atque firmiores. (d) Simiæ partes qua cœlum spectant, ut pilosæ sunt: Proptereà quòd quadrupedum generi ascribuntur: Ita quæ ad terranz devergunt quoque: quia hominis speciem referent. Nam in homine, o quadrupedibus hoc contrario se habere modó supra dictum est. Cæterum simiis crassus pilus, ac prædensus utraque in parte est. (e) Ejus verò facies multis modis humanæ similis. Quippe tum nares, tum auricula: Item dentes tam primores, quam maxillares Junt propemodum tales, quales & homini. (f) Quinetiam quadrupedes cæteræ cum in utraque gena neutiquam palpebras habeant : ipsa habet, sed tenues admodum: tenuiores verò inferiores, atque perpusillos: quibus carent quadrupedes aliæ. (g) Ei sunt in pectore papillæ duæ parvarum mammarum. (h) Ad hac,

⁽¹⁾ Aristot. Hist. de Animal. lib. 2. cap. 13. Ex Edit. Scaliger. cum sus Com. p. 197, &c.

αλλήλας αμφοτίεων τω κώλων. (i)Πεος 🕽 τέτοις, χείζας ѝ δακτύλες ѝ δνυγας διιοίως το άνθεώπω πλίω πάντα ταῦτα 6πί το Δηριωδές ερον. (k) रिशिव्याद की मध्द मविद्याद होने पूर्व विवास χείζες μεγάλαι. Καὶ οι δάκτυλοι, ωσεροί τω χειζών ο μέσος, μανεό-τατος η το κάτω τε ποδός, χειεί ομοιον πλω 6πι το μπαος της χειεός 6πι πα έγατα τεινον, καθάπερ θέναρ. (1) Têto de ê π anes on the otteon, κακώς, ης άμωδρώς μιμεμενον περνίω. Κέχρητου δε τοῖς σοοδιν εσ άμφω, η ώς χεερί, i, ώς σοπ, i, συγκάμπει ώσοερ χείζας. (m) Εχει δε τον άγμωνα καί τον μπε ον βεαχείς, ωστερ πεός τον Beaxiovanal This numples. (n) Oppaλον δι εξέχοντα μεν έκ έχει, σκληρόν, र्शि मुख्ये मुख्ये वे प्रेण पर्व प्राच्या प्रस्थित प्रेस है। एक φαλέ. (0) Τα δ' άνω τω κάτω πολύ μείζουα έχει, ωσερ τὰ τετεάwoda, Σχεθον 30, ώσσερ πέντε πρός मर्बाद हिने, में ठीव मह मक्यीद, मुक्री ठीवे το τες πόδας έχειν δμοίες χεροί, και ώσερανεί συγκειμένους όπ χειε ός καί ποδός οπ μεν ποδός, καθά το π πέρνης έγατον οκ δε χειρός, πάλλα μέρη. Και 3δ οι δάκτυλοι έχεσι το καλέμενον θέναρ. (p) Διατέλει δε τ πλείω χε όνον τετεάποιω ον μάλλον η ορθόν. (9) Και έτε ίχια έχει ώς τετράπουυ ον, έτε κέρκον ώς δίποιου, πλίω μίκορίν το όλον, δσον σημείε χάριν. (r) Έχει δε και το αιδοίον ή θήλεια δμοιον γιωσικός δ δι άββίω, πυνωθέσερον η ανθεωπε. (ε) Οι δε κηδοι,καθάπερ είρηται πρότερου, έχεσι κέρκου. τα δι εντός διαγρεθέντα, δρεοια έχεσην αιθρώπω πάντα τὰ τοιαῦτα.

hominis brachia, nisi hirta essent. Qua. etiam sicut & crura hominis modo inflectat. Nam & borum, & illorum curvaturas inter se habet contrarias. (1) Tum manus, digitos, ungues, quasi humanos. Verum bæc omnia ferinam ad naturam potius vergunt. (k) Suns quidam modus pedibus, ac peculiaris. Etenim quasi manus quædam magnæ sunt. Quippe & digiti in iis, veluti manuum, medio longissimo. Et planta manui similis, quanquam porrection ad extremum usque, sicuti-vola. (1) Cujus postremum callosius est: inepta, atque inexplanata calcanei similitudine. Pedum usus, & pro manibus, & pro pedibus: flectit enim eos manuum modo. (m) Superior brachij pars, & coxa, breves: si ad ulna, & tibia magnitudinem referantur. (n) Umbilicus non prominet: sed durum quiddam ibi invenias. (0) Superæ partes inferis majores: quasi si quinarium cum ternario conferas. Hoc autem tum ex quadrupedum natura: tum proptered quod pedes & manibus similes habet, & quasi ex pedum, manuumque constitutione compositos. Nam calcanei postrema pedem, cateræ partes manun repræsentant. Habent enim digiti id, quod volam appellamus. (p) Quadrupedis habitu frequentiore est. (q) Proque eo nates non habet: neque caudam, quoniam bipes. Sed perpusillam omnino illam, O nota tantúm gratia. (r) Famina genitale muliebri specie est: maribus canina potius, quam humana. (s) Cebi, sicuti diximus, caudati sunt. Universo generi viscera similia humanis.

(a) Arist. Some Animals are of an intermediate Nature, between a Man and Quadrupeds, as Apes, the Cebi, and Cynocephali.

Ἐπαμροτερίζει των φύσιν. Theodorus Gaza thus renders this Passage: Sunt que natura ancipite, partim hominem, partim Quadrupedem imitentur. ficut simia, &c. Not that an Ape is part a Man, and part a Quadruped: inter Hominem & non Hominem non datur medium; The Terms being contradictory, one must be false. The Philosopher's meaning must therefore be, that in the formation of the Parts of the Body, the Ape, the Cebus, and Cynocephalus, are intermediate Species between a Man and other Quadrupeds, having several Parts of the Body formed like Brutes; others more resembling those of Men. (2) Scaliger, a little after, hath this Remark; "Ad eum namque modum summus Opifex Rerum seriem " concatenavit a Planta ad Hominem; ut quasi sine ullo cohæreant in-" tervallo, sic ζωόρυτα cum Plantis Bruta conjungunt; sic cum homine " simia Quadrupedes. Itaque in hominis quoque specie inveniamus "Divinos, Humanos, feros. This Climax or Gradation can't but be taken notice of, by any that are curious in observing the Wonders of the Creation; and the more he observes it, the more venerable Idea's 'twill give him of the great Creator; and it would be the Perfection of Natural History, could it be attained, to enumerate and remark all the different Species, and their Gradual Perfections from one to another. Thus in the Ape and Monkey-kind, Aristotle's Cebus I look upon to be a degree above his Cynocephalus; and his Pithecus or Ape above his Cebus, and our Pygmie a higher degree above any of them, we yet know, and more resembling a Man: But at the same-time I take him to be wholly a Brute, tho' in the formation of the Body, and in the Sensitive or Brutal Soul, it may be, more resembling a Man, than any other Animal; so that in this Chain of the Creation, as an intermediate Link between an Ape and a Man, I would place our Pygmie.*

Πίθηπος, &c. The Philosopher here does not enumerate all the several Species that are contained under the Ape and Monkey-kind; they are a very numerous and a large Classis of Animals. Scaliger upon the Place mentions several he had observed of both kinds; and all our Zoographers, and most Journals of Travels give a Description of a great many sorts of them. But for want of well distinguishing them, and ranging them into a Methodical Series, their History as yet is very confused and perplext. Mr. Ray (3) places these Animals under this general Title, Animalia Pede unguiculato multistido, πλατιώνυχα & ανθρωπόμορρα. Tis call'd Pithecus, παιρά το πείθεδαι ύρ πμῶν, quia facile ab homine persuadeatur; and oftentimes this word is taken as a Genus which includes the whole; when strictly taken, it signifies an Ape without a Tail, and in Latin is call'd Simia; that which hath a Tail is call'd Cerco-

pithecus, in English a Monkey. Thus (4) Martial.

⁽²⁾ Scaliger ibid. in Com, pag. 201. (3) Raij Synopsis Animal. pag. 148. (4) Martial. Epigram. lib. 14. Epigr. 202.

Callidus emissas eludere Simius Hastas, Si mihi Cauda foret, Cercopithecus eram.

(b) Arist. The Cebus is an Ape having a Tail.

(5) Conradus Gesner thinks, that this Cebus of Aristotle, which he defcribes only as having a Tail, must be the Cercopithecus or Common Monkey, fince he mentions not the Cebus any where else, and the Cercopithecus no where. (6) Harduinus, in his Notes on Pliny, advises not to mistake the Cepus in Pliny, for the Cebus in Aristotle. (6) Pliny's words are these; Pompeij Magni primum Ludi ostenderunt Chama, quem Galli Rufium vocabant, Effigie Lupi, Pardorum maculis. Iidem ex Æthiopia quas wocant whπ85, quarum Pedes posteriores, Pedibus humanis & cruribus, priores manibus fuere similes, hoc Animal postea Roma non vidit. And therefore because it was so uncommon as to be seen at Rome but once, it could not be the common Monkey. (7) Strabo, out of Artemidorus, describes the Cepus thus: γίγνονται δέ φησι η σρίγες, η πυνοκέραλοι, η κηφοι, λέοντος μὲν πείσωπον ἔχοντες, τὸ δὲ λοιπὸν σῶμα πάνθης ος, μέγεθος δὲ δοςκάδος. That the Cepus hath the Face of a Lion, the rest of the Body like a Panther, and is of the bigness of a Dorcas or Roe-Buck. (8) Diodorus Siculus hath much the same Description, δ δε λεγόμενος κήπος, ωνόμας αι μεν δατό της περί όλον τον όγκον ώραιας, η προσηνές ήλικίας. Το δε περσωπον έχων ομιοιον λέοντι, το λοιπον σωμια φέρει πάνθηρι παραπλήσον, πλίω τε μεγέθες, ο παρισεται δοςκάδι. Which Laurentius Rodomanus thus renders. "Cepus, i. e. Hortus (quem vocant) à totius "Corporis decore & staturæ venustate nomen accepit, facie Leonem imi-" tatur, & reliquo Pantheram, præter magnitudinem, qua Dorcadi par " est. (9) Ælian hath given a Description of the same Animal from Pythagoras, from whom, tis thought, it first received this Name; and he is more particular. His Account, tho' fomewhat long, I will give in P. Gillius's Translation, because I am apt to think this Animal is still in being. "Terrenum quoddam Animal Pythagoras scribit secundum " Mare Rubrum procreari & Cepum, hoc est Hortum apposité idcircò " nominari, quòd tanquam Hortus variis coloribus distinguatur. Cùm " existit confirmata ætate, pari magnitudine est cum Herythriensibus " Canibus. Jam porro ejus Colorum varietatem, sicut ille scribit, ani-" mus nobis est explicare. Ejus caput & posticas partes ad caudam usque " prorsus valde igneo colore sunt, tum aurei quidam Pili disseminati " spectantur, tum album rostrum, inde ad Collum aurez vittz pertinent, " Colli inferiores partes ad Pectus, & anteriores Pedes omnino albi, " Mammæ duæ manum implentes cæruleo colore visuntur, venter candi-" dus, Pedes posteriores nigri sunt, Rostri formæ Cynocephalo recte

⁽⁵⁾ Hist. de Quadruped. l. 1. p. 857. (6) Plinij Hist. Nat. lib. 8. cap. 19. cum Interpret. dy Notis Jo. Harduini, p. 167. (7) Geograph. lib. 16. p. 533. (8) Diodor. Sicul. Biblioth. Hist. l. 3. p. m. 168. (9) Ælian. de Animal. lib. 17. cap. 8. p. 474.

"comparari potest. The Cepus therefore of Pliny, Strabo, Diodorus Siculus, and Elian, in all probability must be different from the Cebus of Aristotle. Joh. Caius our Country-man sent Gesner a Description of a Mamomet or Marmoset he had observed, which Gesner thinks might be a sort of Cepus; but the Colours were different, as likewise the Magnitude.

(c) Arist. The Cynocephali have the same shape with Monkeys, but they are bigger, and stronger, and they have a Face liker a Dog's, and are of

a fiercer Nature, and they have Teeth liker a Dog's, and stronger.

I shall have occasion to Discourse of these Cynocephali in the ensuing Essay. For the the Philosopher makes them only a fort of Ape or Monkey, yet there have been those, that would impose them on the World for a Race of Men; and by (10) Ælian they are call'd ανθεωποι κυνοπρόσωποι; tho' (11) Galen tells us, they are much less like a Man, than an Ape is: For they can scarce stand upright, much less walk or run so. (12) Philostorgius mentions the Aegopithecus, the Arctopithecus, the Leontopithecus, as well as the Cynocephalus, and then adds, καί ἄλλαις πολλών ζωών είδεσης της πηθημείας μορφής βλημηγυμένης. That there is the Goat-Ape, the Bear-Ape, the Lion-Ape, the Dog-Ape; and that the Ape-kind have a resemblance to a great many other Animals; so large and numerous is this Classis of Animals, that perhaps there is none that is more; and that are so different from one another. The sterceness of the Cynocephali is taken notice of by all; our Pygmie was quite of another temper, the most gentle and loving Creature that could be. Those that he knew a Ship-board he would come and embrace with the greatest tenderness, opening their Bosoms, and clasping his Hands about them; and as I was informed, tho' there were Monkeys aboard, yet 'twas observed he would never affociate with them, and as if nothing a-kin to them, would always avoid their Company. The Teeth of the Cynocephali are like a Dog's; those of our Pygmie exactly resembled a Man's, as I shall shew in the Ofteology.

(d) Arist. Apes are hairy on their Backs, as they are Quadrupeds, and on their Bellies, as they are like Men: For in a Man and a Beast this hairiness is quite contrary, as was said before. So that Apes are very hairy

in both Places, their Hair being strong or course, and thick set.

The Place that Aristotle refers to, is this. (13) "Εςι δε τω μων άλλων ζωων τω εχώντων τείχας, τὰ πρανή δασύτερα, τὰ δι ὑπία, ἤ λεία πάμπαν, ἤ δασέα πτον. ὁ δι ἀνθρωπος τουνἀντίον. i. e. That in Brutes the Back or upper Parts are more hairy, the Belly or under Parts either smooth or less hairy: In a Man is observed the contrary. But in our Pygmie we observed it different; for here all behind from the Head downwards, 'twas very hairy, and the Hair so thick, that it covered the Skin almost from being seen.

⁽¹⁰⁾ Ælian. Hist. de Anim. lib. 10. cap. 26. in Edit. P. Gillij. in aliis cap. 25. (11) Galen. de Administr. Anat. l. 1. cap. 2. (12) Philostorgij Hist. Ecclesiast. lib. 3. cap. 11. p. 41. (13) Arist. Hist. de Animal. lib. 2. c. 5. p. 160. Edit. Scalig.

But in all the Parts before, the Hair was much thinner, and the Skin every where appeared, and in some places 'twas almost bare. Nature therefore has cloathed it with Hair, as a Brute, to defend it from the Injuries of the Weather; and when it goes on all four, as a Quadruped, it seems all hairy: When it goes erect, as a Biped, it appears before less hairy, and more like a Man. After our Pygmie was taken, and a little used to wear Cloaths, it was fond enough of them; and what it could not put on himself, it would bring in his Hands to some of the Company to help him to put on. It would lie in a Bed, place his Head on the Pillow, and pull the Cloaths over him, as a Man would do; but was so careless, and so very a Brute, as to do all Nature's Occasions there. It was very full of Lice when it came under my Hands, which it may be it got on Ship-board, for they were exactly like those on Humane Bodies. (14) Seignior Redi observes in most Animals a particular

fort of Loufe, and gives the Figures of a great many.

The Hair of our Pygmie or Wild Man was of a Coal-black colour. and strait; and much more resembling the Hair of Men than the Furr of Brutes: For in the Furr of Brutes, besides the longer Hair, there is usually a finer and shorter Pile intermixt: Here 'twas all of a kind; only about the Pubis the hair was greyish, seemed longer, and somewhat different; so on the upper Lip and Chin, there were greyish hairs like a Beard: And I was told by the Owners, that once it held the Bason it's felf, to be trimmed. The Face, Hands, and Soles of the Feet were bare and without Hair, and so was most part of the Forehead: But down the sides of the Face 'twas very hairy; the hairs there being about an Inch and half long, and longer than in most Parts of the Body befides. The tendency of the Hair of all the Body was downwards; but only from the Wrists to the Elbow 'twas upwards; so that at the Elbow the Hair of the Shoulder and the Arm ran contrary to one another. Now in Quadrupeds the Hair in the fore-limbs have usually the same Inclination downwards, and it being here different, it suggested an Argument to me, as if Nature did design it as a Biped. But we will lay no more stress upon it than it will bear: The Hair on the back-side of the Hands did run transverse, inclining to the outside of the Hands; and those of the hinder sides of the Thighs were transverse likewise.

Man, tho' not so hairy as Brutes, and (as Aristotle observes) more hairy before, than behind; yet if exposed to the hardships of the Weather, like them; no doubt, but he would become hairy on the Body likewise; which might possibly be the Case of Nebuchadnezzar. (15) And very Remarkable is that Story of Peter Serrano a Spaniard, who was castaway, and escaped to a Desart Island, which from him afterwards received it's Name, as 'tis related by the Inca Garcilasso de la Vega. (16) For having with the greatest difficulty sustained a miserable Life for three

⁽¹⁴⁾ Franc. Redi Experimenta circa generat. Insector. (15) Daniel, Cap. 4. 33. (16) Royal Commentaries of Peru. lib. 1. cap. 3.

Years, "The Hairs of his Body grew in that manner, that he was co-" vered all over with Bristles; the hair of his Head and Beard reach-" ing to his Waste, that he appeared like some Wild or Savage Crea-" ture.

(e) Arist. Their Face hath many Resemblances to a Man's, for they have Nostrils and Ears alike; and Teeth like a Man's, both the Fore-teeth and the Grinders.

Pliny (17) feems to have respect to this Text of Aristotle, and what follows, where he tells us, "Nam simiarum genera perfectam Hominis " imitationem continent, facie, Naribus, Auribus, Palpebris, quas solæ " Quadrupedum in inferiore habent Genâ. Jam Mammas in Pectore, " Brachia & Crura in contrarium-similitèr flexa. In manibus, ungues, " digitos, longioremque medium. Pedibus paulum differunt, sunt " enim, ut manus, prælongi, sed vestigium Palmæ simile faciunt. Pol-" lex quoque his & Articuli, ut homini; ac præter Genitale, & hoc in " maribus tantum. Viscera etiam interiora omnia ad exemplar. We will compare both their Accounts, with our Pygmie; and observe where-

in they agree or differ from us.

As for the Face of our Pygmie, it was liker a Man's, than Ape's and Monkeys Faces are: For it's Forehead was larger, and more globous, and the upper and lower Jaw not so long or prominent, and more spread: and it's Head more than as big again as either of theirs: But why the Philosopher, after his general Affertion of the likeness of the Face of an Ape to that of a Man's, should first of all instance in the Nose, which is so much different, may seem strange: Since in a Man the Nose is protuberant and rifing, jutting out much beyond the whole furface, and herein 'tis altogether unlike to that of Brutes, and the Ape-kind too. -'Tis not therefore on this account that the Comparison is made. But 1 rather think, his meaning must be, that an Ape's Nose is like a Man's. in that it is not extended to the length of the Rostrum, or upper 7 aw, as in Dogs and other Brutes, but reaches only to the upper Lip. à simis Naribus, or this flatness of the Nose, most do derive the word Simia; tho others, as Vossius, would have it, quasi mimia à munisque, imitari, from mimicking. But Scaliger will not allow it. Dicitur autem Simia (saith he) non ab Imitatione, ut Grammatici imperiti, sed à simitate.

The Nose of our Pygmie was flat like an Ape's, not protuberant as a Man's; and on the outside of each Nostril there was a little slit turning upwards, as in Apes. 'Tis observed of the Indian Blacks, that their Nose is much flatter than the Europeans; which may be thought rather Natural to that Nation, than occasioned (as some would make us believe) by the Mother's tying the Infant to her Back, and so when at Work bruifing and flatting it against her Shoulders; because 'tis so uni-

verfal in them all.

As to the Ears, none could more refemble those of a Man, than our Pygmie's; both as to the largeness, colour, shape, and structure. Here I observed the Helix, Ant-Helix, Concha, Alvearium, Tragus, Anti-tragus, and Lobus; only the Cartilage was very fine and thin, and the Ears did not lye so flat to the Head, as they do in a Man. But that may be from the Custom of binding our Heads, when Infants.

The Teeth of our Pygmie resembled a Man's, more than do those of

Apes and Monkeys; as I shall shew in the Ofteology.

(f) Arist. And whereas other Quadrupeds have not Hair on both Eye-lids, these have; But 'tis very fine, especially that on the lower Eye-lid, and very small. But other Quadrupeds have none there.

In our Pygmie the Cilia or Hair of both Eye-lids appeared very fair and plain, but not so large as in Men. The Supercilia or Hair of the Eye-brows, seem'd to be rubb'd off; which might be occasioned by the jutting out of the Cranium in that place, more than in Men: Which is a Provident Provision of Nature, for the better safeguard of the Eyes, and their defence from the Injuries they might otherwise receive in the Woods. But the Philosopher's Affertion, that no Quadruped hath Hair on the under Eye-lid besides Man but the Ape-kind, I cannot justifie; or I do not take his meaning aright: Tho' he has much the same Opinion a little before. (18) Where he tells us, Kal ελεφαρίδας δ μικν ανθρωπος επ' ἄμρω έχει, η ον μαχάλαις έχει τείχας, η όπι της ήθης. Των δι άλλων έθεν έτε τέτων εδέτερον, έτε την κάτωθεν βλεραρίδα, άλλα κάταθεν τε βλεράρε ενίοις μαναί τρίχες περύκασιν. Which Scaliger thus renders: Ac Palpebras homo utrâque in Genâ habet tum & in Alis, & in Pube Pilos. Catera Animantes neque in his locis, neque in Genà inferiore: Sed sub Genam & paucos & pancæ. Our Pygmie had Hair in the Arm-pits, and that in the Pubis feemed fomewhat different from what grew on the rest of the Body; being not so strait, but somewhat curled; and greyish, not black. But I must here Remark, that Pliny uses the words Palpebræ and Gena, in his Translating this Text of Aristotle, different from what commonly they signifie now. For by Palpebræ he means, what Aristotle and Hippocrates call breagidas, i.e. the Hair on the Rim of the Eye-lids, à palpitatione; and Festus calls Cilia, quia oculos celent & tueantur: And by Gena, he understands the Eye-lid; as appears from that Passage of Pliny I have just now quoted, , Palpebris quas solæ Quadrupedum in inferiore habent Genâ. And so Scaliger uses these words in this Translation of Aristotle: And he makes Cilium to signifie, Summum Gena ambitum, and not the Hair there.

(g) Arist. They have two Teats or Nipples of small Breasts on the Sternum.

⁽¹⁸⁾ Hist. Animal. lib. 2. p. m. 161.

The Philosopher here observes, That the Ape-kind, common with Humane, have the Mamma on the Sternum or Breast, which is different from Brutes. And tho' the Elephant herein feems fomewhat alike, yet he makes this distinction, (19) ὁ δὲ ἐλέφας ἔχει μὲν μας εκ δύο, ἀλλ εκ εν τω ς κθει, ἀλλὰ πρὸς τως ς κθει. Juxta Pettus potius, quam in Pettore, as Scaliger renders it; or as Theodorus Gaza, non in Pectore, sed paulo citra. And a little after, (20) he more particularly expresses himself, if δ δ ελέφας έχει τους μας ες δύο περί τας μαχάλας. Sub Armis, as Gaza renders it; ad Axillas, as Scaliger, where he further tells us, That the Male as well as Female Elephant have these Teats; but they are very small, in respect of the Bulk of it's Body, and so placed that side-ways, you can't fee them. The Bear (he adds) hath four Teats; Sheep have but two, and those between the hinder Legs; Cows have four Teats there. Other Animals (he faith) have these Teats in the middle of the Belly, and usually more numerous; as the Dog and Swine-kind: But the Panther hath but four in the Belly: The Camel hath two Mamma there, and four Teats, as a Cow; and a Lioness but two there.

But Apes and Monkeys have their Teats upon the Breast, as Women have; and (21) Albertus Magnus gives this Reason for it, Mammillas autem habet in Pectore sicut Mulier, eò quòd manus dedit ei Natura, quibus ad Pectus potest elevare partum, sicut Mulier. Our Pygmie was a Male, yet here the two Papilla or Teats appeared very plain, and were exactly situated as they are in Men. The Mamma or Breasts were small and thin, and not protuberant. The Female Orang-Outang of (22) Bontius is pictured with pendulous large Breasts, and they are so described by (23) Tulpius. And (24) Gassendus, in the Life of Peiresky, speaking

of the Barris, saith, Huic Mamme ad pedis longitudinem.

(h) Arist. They have Arms like a Man, but hairy; and they bend them and the Legs as a Man does; the flection of the one being contrary to the other.

The Shoulder and Arm of our Pygmie were very hairy outwards, not fo hairy inwards. The Contratendency of the Hair here, as that of the Shoulder pointing downwards, and that of the Arm pointing upwards, like Lucan's Pila minantia Pilis, I have already noted. This difference I shall here remark of this fore-limb in our Pygmie, as well as in Apes and Monkeys; that 'tis longer in them proportionably, than in Man. I shall examine this Part more particularly in the Myology and Osteology.

But the Curvature or Flection of the Arms and Legs in our Pygmie, as also in Apes and Monkeys, is just the same as in Man; the Arms bending forwards, and the Legs backwards; whereas in other Brutes, the slection

⁽¹⁹⁾ Arist. ibid. p. 151. (20) Arist. ibid. p. 176. (21) Albert. de Animal. lib. 22. p. 224. (22) Jac. Bontij Hist. Nat. G Med. lib. 5. cap. 32. p. 84. (23) Nic. Tulpij Observ. Med. l. 3. cap. 56. (24) Gassend. de vita Peireskij. lib. 5. p. m. 170.

of the fore and hinder Legs is both the same way. Homini Genua & Cubita contraria (saith (25) Pliny) item Ursis & simiarum generi, ob id minime pernicibus. I shall examine this Place of Pliny in the Osteology.

(i) Arist. Besides they have Hands, Fingers, and Nails like a Man's,

but all these somewhat ruder.

The Hand of our Pygmie was different from a Man's, in that the Palm was much longer; so the Thumb too, was less than the other Fingers; whereas in a Man, the Thumb is usually thicker than the rest of the Fingers: In both these respects, it more resembled the Ape-kind. But the Fingers of our Pygmie being so much bigger than those of Apes and Monkeys; and its Nails being broader, and flatter, on both these Accounts it was liker a Man. Ungues Clausula Nervorum summa existimantur (saith (26) Pliny) omnibus hi, quibus & digiti: sed Simia imbricati, Hominibus lati.

In the Palms of the Hands of our Pygmie were remarkable those Lines which are usually taken notice of in Palmestry; and at the ends of the Fingers were those Spiral Lines, which are usually in a Man's.

(k) Arist. The Feet are particular; for they are like great Hands, and the Toes like Fingers; the middlemost being the longest: And the Sole of

the Foot like the Palm of the Hand, but more extended, or longer.

Pliny (as I have remark'd) renders this Passage thus: Pedibus paulum slifferunt, sunt enim, ut manus, prælongi; sed vestigium Palmæ simile faciunt. Now the Palms of the Hands, and the Soles of the Feet of our Pygmie, were equally long, and longer, proportionably, than in Man; and herein it resembled more the Ape-kind: As it did likewise in the length of the Toes, which were as long as the Fingers, as also in having the middlemost Toe longer than the rest. For in the Hand of a Man, the middle Finger is the longest, but in the Foot, the middle Toe is not. The Philosopher does very well liken it to a Hand, since besides the length of the Toes, like Fingers, it had the great Toe, like the Thumb set off at a distance from the range of the other Toes, as we shall shew hereafter.

(1) Arist. The sole of the Foot in the hinder part was more callous, ill, and odly imitating a Heel: For they use their Feet in both Capacities, both as a Hand and Foot, and bend them like Hands.

In the Ape-kind there is a true Os Calcis, besides this Callosity. And in our Pygmie this Heel-bone was liker that in a Man, than theirs is. The Philosopher in the former Paragraph shewed what resemblance this Part had to a Humane Hand, in this, by reason of the Os Calcis, how 'tis like

⁽²⁵⁾ Plinij Nat. Hift. l. 11. cap. 45. p. m. 594. (26) Plinij Nat. Hist. lib. 11. cap. 45. p. 594.

a Foot; and then makes an Inference from the different structure of this

Organ, that it performs the Uses and Offices of both.

All which is very agreeable to our Pygmie. But this Part, in the Formation and it's Function too, being liker a Hand, than a Foot; for the distinguishing this sort of Animals from others, I have thought, whether it might not be reckoned and call'd rather Quadru-manus than Quatru-manus than Qua-

drupes, i.e. a four-handed, than a four-footed Animal.

And as it uses it's hinder Feet upon any occasion, as Hands; so like-wise I observed in our Pygmie, that it would make use of it's Hands, to supply the place of Feet. But when it went as a Quadruped on all sour, 'twas awkwardly; not placing the Palm of the Hand slat to the Ground, but it walk'd upon it's Knuckles, as I observed it to do, when weak, and had not strength enough to support it's Body. So that this Species of Animals hath the Advantage of making use of their Feet as Hands, and their Hands as Feet, as there is occasion.

(m) Arist. The Os Humeri, and the Os Femoris are short, in respect of

the Ulna and Tibia.

In a Humane Skeleton, the Os Humeri, and the Os Femoris are much longer than the Ulna and Tibia. For in a Skeleton of a Woman I have by me, the Os Humeri was Twelve Inches and a half, and the Os Femoris Seventeen Inches long; whereas the Ulna was but Nine Inches and three quarters, and the Tibia Fourteen Inches long. In our Pygmie, the Os Humeri was Five Inches and a half, and the Os Femoris Five Inches long. The Ulna was Five Inches and a half, and the Tibia was Four Inches long. These Bones in the Skeleton of a Monkey, were much of the same length with our Pygmie's, so that herein both differ from a Man, and our Pygmie more resembles the Ape-kind.

(n) Arist. They have no prominent Navel, but something hard in this

place of the Navel.

In our *Pygmie* the *Umbilicus* or Navel appeared very fair, and in the exact Place, as 'tis in a Man; not prominent nor harder, but in all re-

spect Natural and alike.

(o) Arist. They have the upper Parts much larger than the lower, as being Quadrupeds, almost as sive to three; and as upon this account, so because they have Feet like Hands, as if they were compounded of a Hand and Foot: Of a Foot, in respect of the Heel behind; and of a Hand, as to the other Parts; for they have Fingers, and what we call the Palm.

In Quadrupeds usually the *Opper* or fore-parts are much larger than the *Lower* or hinder; and 'tis so in the *Ape* and *Monkey*-kind, as the *Philosopher* Remarks. But in our *Pygmie* I think this Observation will not hold. For tho' it was much emaciated, by reason of it's long illness, so that it seemed very thin and lank in the *Belly*; yet behind it look'd square enough, and proportionable as a Man. But the *Orang-Outang* of *Tulpius* had

had a large fquob Belly. We shall presently give the Dimensions of all

the Parts, as foon as we have done with this Text of Aristotle.

We shall hereafter farther consider the structure of the Foot in the Ofteology, where we shall describe the Or Calcis, and shew how well it performs its Office, when this Animal stands erect. But since Nature design'd it not always to live on the Ground, but to get it's Prey in the Trees likewise, it hath very wisely formed this Part like a Hand, by which means it can more easily climb them; and when there, shift much better by this Contrivance; as I have shewn in my Discourse (27) upon the Carigueya, seu Marsupiale Americanum, or the Anatomy of an Opossum; which Animal had its hinder Feet formed like Hands

(p) Arist. They live most of their time as Quadrupeds more than as

. Bipeds, or erect.

Our Merchants tell me, when first they take Apes or Monkeys, to learn them to go erect, they usually tye their Hands behind them. And I am of the Philosopher's Mind, that Naturally they go more on all Four, than erect. But whether 'tis so in our Pygmie, I do suspect; since walking on it's Knuckles, as our Pygmie did, seems no Natural Posture; and 'tis sufficiently provided in all respects to walk erect.

(q) Arist. As Quadrupeds they have no Buttocks; as Bipeds, no Tails;

or but very little, like a shew of one.

Our Pygmie had Buttocks or Nates, as we shall see in the Myology, but not so much as in Man. The Os Ischij or Coxendix was very different, as appears in the Skeleton, and as I shall describe in the Osteology. Our Pygmie had no Tail, but an Os Coxygis, as is in Man, which outwardly made a little appearance, as in my Second Figure, and may be what Aristotle Remarks. Scaliger has this Note upon it: Cauda notam sive vestigium animadvertit, quam vix Oculis deprehendas. Tastu tamen subesse intelligas, quam si attrastare tentes, prompta miraque celeritate sese subtrabit, ridiculà indignatione lasum pra se fert.

(r) Arist. The Female hath the Privy-parts, like a Woman; but the Male,

more like a Dog's, than a Man's.

Our Subject was a Male, and this Part here was nothing like a Dog's. For in the Penis of a Dog there is a large Bone, which is not in the Ape and Monkey-kind. Scaliger's Note here does not make out the Affertion: Caninum Genitale dixit Simij, non temere; nodos enim quosdam deprehendimus: differt autem figura Glandis. I did not observe these Nodes here; but of this, more in the Anatomy of this Part.

(s) Arist. The Cebi (as was said before) have Tails: As to the Viscera

they have them all like a Man's.

So Pliny, Viscera etiam interiora omnia ad Exemplar. But I find this a great Mistake. For, as we shall shew, our Pygmie, who comes much nearer to a Man in the Structure of the inward Parts, than either Apes or Monkeys, yet in a great many things is very different; but where it is so, there it resembles an Ape. But on the other hand, Albertus Magnus is much more mistaken, who will not allow any likeness at all. For speaking of an Ape, he tells us, (28) Et sicut in ante habitis diximus, homini in exterioribus simile existens, in nullo similitudinem habet cum interioribus hominis, & minùs fere omnibus aliis Bestiis. Galen (29) is much more in the right, who acknowledges a very great similitude between an Ape and a Man, both in the outward and inward Parts, where he tells us, Καὶ δ πίθηκος άπαντων τζω ζώων δριοιόλατος ανθεώπω, κὸ σπλάζχνοις, મું ભાજો, મું તેરુ જાર વિલ્ફા, મું જેમ્લો, મું મદાર લાક, ઉત્તા મું ત્રી ઉંક લિંગ હિસ્તુ. Δારે 28 την τέτων ούσιν όπε τε δυοίν βαβίζει σκελοίν, ης τοίς περολοις κώλοις ώσπερ χεροί γρήται, η τέρνον πλαθύτατον άπαντων τη τετραπόδων έχει, η κλείς ώσαθτως ανθεώπω, η πεόσωπον εεσγγύλον, η τεάχηλον μικεόν. i. e. An Ape is the most like a Man of any Quadruped: In the Viscera and the Muscles, and in the Arteries, and Veins and Nerves, because 'tis so in the structure of the Bones. For 'tis from their make, that it walks on two Legs, and uses its fore-limbs as Hands. It hath the largest Breast of any Quadruped, and Clavicles or Collarbones like a Man, and a round Face, and a small or short Neck.

All which is very agreeable to our *Pygmie*, whom we shall find more exactly to answer this Character, than an *Ape*. And now having compared our *Pygmie* with this general Description that *Aristotle* gives of the *Ape*-kind; we shall compare him with himself, by taking the different *Dimensions* of the several *Parts*, as well as of the whole *Body*; and

shall observe what Proportions they had to one another.

As from the top of the Head, to the heel of the Foot in a strait Line, it measured Twenty six Inches. The Girth of the Body in the biggest part about the Cartilago Ensiformis, was Sixteen Inches; over the Loins twas Ten Inches about. The Compass of the Head over the Eyes and Ears, Thirteen Inches and a half. The aperture of the Eye-lids, three quarters of an Inch. From one corner of the Mouth, to the other, Two Inches and a quarter. From the middle of the upper Lip to the Eyebrow, 'twas two Inches three quarters. From the Eye-brow to the O_c ciput Seven Inches and a half. The Perpendicular Diameter of the Ear from the Top to the Lobe, was Two Inches and a half. The Horizontal Diameter of the Ear was an Inch and half. The Verge or Compass of the Ear about, was near Five Inches and a half. Where the Ear was fastened to the Head, it measured above an Inch and half. From the Clavicula or Collar-Bone, to the Penis, Ten Inches. From the Cartilago Ensiformis to the Navel, Three Inches and a half. From the Navel to the Penis, Three Inches. The distance between the two Teats, Three Inches

⁽²⁸⁾ Albertus De Animal. lib. 22. p. 224. (29) Galen. de Anaț. Administr. lib. 1. cap. 2. p. m. 26.

and a quarter. The length of the Arm, from the Shoulder to the end of the Fingers, Seventeen Inches. The Girth of the Shoulder about the middle, Four Inches and a quarter; of the Arm near the Elbow. Five Inches. The Hand from the Wrift to the end of the Middle Finger, measured Five Inches and an half. The Thumb was an Inch and a quarter long; the Fore-Finger Two Inches, the Middle-Finger Two Inches and an half; the Ring-Finger Two Inches and a quarter, and the Little Finger One Inch and an half long. The Girth of the Thumb and the Little Finger, was One Inch; the Girth of the other Fingers was an Inch and a quarter. The Palm of the Hand was Three Inches

long, and an Inch and three quarters broad.

From the head of the Thigh-Bone to the Heel, it measured Twelve Inches: From the Heel to the end of the Middle-Toe (which was the longest) Five Inches three quarters. The Girth of the Thigh was Six Inches; of the Leg at the Calf, Four Inches and a quarter; of the Foot at the fetting on of the Great Toe, near Five Inches. The Great Toe was an Inch and half long, the Fore-Toe One Inch, the Middle-Toe an Inch and half, the Third Toe an Inch and a quarter, the Little Toe One Inch long. The Sole of the Foot, about the fetting on of the Great Toe (where 'twas broadest) was Two Inches over; but nearer the Heel, 'twas an Inch and half broad. The Girth of the Great Toe, where biggest, an Inch and half; the other Toes were an Inch about. These Measures were taken before the Skin was strip't off, in the Skeleton,

or the Skin stuff'd, they may prove otherwise.

And having now given these Dimensions of the whole, and of most of the External Parts; you will the better conceive the exact shape of this wonderful Animal by the Figures I have caused to be made of it. As the First Figure represents our Pygmie erect, where you have a view of all the Fore-Parts. Being weak, the better to support him, I have given him a Stick in his Right-Hand. But our Figure being made after he was dead, the Head seems too much fallen in between the Shoulders. as if it had a very short or little or no Neck, which takes off from the Beauty of the Figure; but this is rectified and mended in the Figure of the Skeleton, where you will see the Neck proportionate. The Head here is large and globous; the Ears standing off, not lying close. The Face looks like an Old wither'd Man's, which without doubt was render'd much more so, by an *Ulcer* it had in one of it's *Cheeks*, occasioned by a Fall it had on Ship-board upon a Cannon, which forced out one of it's Teeth; and the Jaw-bone afterwards proving carious, it might hasten it's Death. The rising of the Cranium just under the Eye-lids, as I have remark'd, is different from what is in a Man, and renders the Face harder; as does likewise it's flat Nose, and the Upper Jam being more prominent, and lesser spread, than in a Man; and it's Chin or Under Jaw being shorter. The Eyes were a little sunk, the Mouth large, the Teeth perfectly Humane. The Face was without Hair, and the Colour a little tawny; the Skin on the rest of the Body was white. The The Shoulders are spread and large, the Thorax or Breast extended altogether like a Man's, the Mamma and Teats the same; the Belly was lank and pinch'd in, not prominent, by reason of it's illness; but here it held a more proportionable breadth to a Man's, than a Quadruped's. The Arms were longer than in a Man, and so were the Palms of the Hands; but the Thumb was much less, the Nails exactly like a Man's, and the Navel the same. The Penis was different, as we shall hereaster shew. Here was no Scrotum, but the Testes were contained in the Region of the Pubis under the Skin, which made it here more protuberant. The Thighs and Legs were somewhat divaricated or stradling, for want of strength, either from it's illness, or being but young. We observed Calves in it's Legs; the Feet long, as likewise the Toes, which were liker Fingers; and the Great Toe exactly like a Thumb, more than that on the Hand.

The Second Figure represents the hinder Parts of this Creature, in an Erect Posture likewise. Where may be observed, the Globous Figure and largeness of the Head, with the Ears standing off; the curious shape and straitness of the Back, and how it spreads. At the Os Coxygis there is a little Protuberance, but nothing like a Tail.

In this Figure I have represented him with the Fingers of one Hand bended, as if kneeling upon his Knuckles, to shew the Action, when he goes on all four: For the Palms of his Hands never touch the Ground, but when he walks as a Quadruped, 'tis only upon his Knuckles. The other Hand is holding a Rope, to shew his Climbing; for he will nimbly run up the Tackle of a Ship, or climb a Tree: And having this hold, he is the better supported, to shew the Sole of the left Foot, and the Heel there; on account of which Heel it may be thought a Foot: But the Great Toe being set off so far from the range of the others, and they all being so large and long, it more resembles a Hand, as has been observed.

If we compare our Figures with those given by Tulpius, Bontius, and Gesner, we shall find a great difference. That of Tulpius seems the most Natural; but being made sitting, it does not so well represent the Proportions of the several Parts. The Chaps or Rostrum is longer, and 'tis less hairy in the fore-parts than ours. The Mamma are larger and pendulous, and the Belly more protuberant. Dapper, (30) in his Description of Africa, has borrowed this Figure from Tulpius, without naming him, as likewise his Description, which is the same. For avoiding the often quoting it, I will here Transcribe Tulpius's Account: But why I think it not a Satyr, as he and Dapper make it, I will give my Reasons in the following Essay. Tulpius his words are these: (31)

⁽³⁰⁾ Dapper Descript. de l' Afriqu. p. m. 365. (31) Observat. Med. lib. 3. cap. 56.

Quamvis extra forum Medicum, attexam tamen huic telæ, Satyrum Indicum; nostrå memoriå, ex Angolà delatum: & Frederico Henrico, Arausionensium Principi, dono datum. Erat autem hic Satyrus quadrupes: sed
ab humana specie, quam præ se fert, vocatur Indis Orang-Outang: sive homo
Sylvestris, uti Africanis Quoias morrou. Exprimens longitudine puerum trimum; ut crassitie sexennem.

Corpore erat nec obeso, nec gracili, sed quadrato: habilissimo tamen, ac pernicissimo. Artubus verò tam strictis, & musculis adeò vastis: ut quidvis & auderet, & posset. Anteriùs undique glaber: at ponè hirsutus, ac nigris crinibus obsitus. Facies mentiebatur hominem: sed nares sima, & adunca,

rugosam, & edentulam anum.

Aures verò nihil discrepare, ab humana forma. Uti neque pectus; ornatum utrinque mamma pratumida (erat enim sexus seminini); venter habebat umbilicum profundiorem; & artus, cum superiores, tum inferiores, tam exactam cum homine similitudinem: ut vix ovum ovo videris similius.

Nec cubito defuit requisita commissura: nec manibus digitorum ordo: nedum pollici figura humana: vel cruribus suræ: vel pedi calcis sulcrum. Quæ concinna, ac decens membrorum forma, in caussâ suit, quod multoties incederet erectus: neque attolleret minus gravate, quam transferret facile, quale-

cunque, gravissimi oneris, pondus.

Bibiturus prehendebat canthari ansam, manu altera a alteram verò vasis fundo supponens, abstergebat deinde madorem labis relictum, non minùs adposite, ac si delicatissimum vidisses aulicum. Quam eandem dexteritatem observabat utique cubitum iturus. Inclinans quippe caput in pulvinar, & corpus stragulis convenienter operiens, velabat se haud aliter, ac si vel mollismus illic decubuisset homo.

Quin imò narravit aliquandò affini nostro, Samueli Blomartio, Rex Sambacensis, Satyros hosce, præsertim mares, in Insulà Bornæo, tantam habere animi considentiam, & tam validam musculorum compagem: ut non semel impetum secerint, in viros armatos: nedùm in imbellem, sæminarum, puella-

rumve, sexum.

Quarum interdum tàm ardenti flagrant desiderio: ut raptas non semel constuprarint. Summe quippe in venerem sunt proclives (quod ipsis, cum libidinosis veterum Satyris commune) imò interdum adeò protervi, ac salaces: ut mulieres Indica, proptereà vitent, cane pejus & angue, saltus, ac lustra, in quibus delitescunt impudica hac animalia.

Dapper, who hath transcribed this Account of Tulpius, (as I said) but without taking any notice of him, makes this Presace to it. "The "Quoias Morrou (of which I have spoken in the Kingdom of Quoia) "are bred likewise in the Kingdom of Angola. This Animal, as it hath a great deal of a Man, so a great many have thought it to be the Issue of a Man and an Ape: But the Blacks themselves reject this Opinion. Now in the Place that Dapper refers to, he seems to give it as the Opinion of the Blacks, that they are the Issue of Men; but that by their always living

living in the Woods, they are become half-Beasts. I shall transcribe his Words, and so have done with him: (32) On trouve dans les bois une Espece de Satyre que les Negroes appellent Quoias-Morrou, & les Portugais, Salvage. Ils ont la tête grosse, le Corps gros et pesant, les bras nerveux, ils n'ont point de queve, et Marchent tantôt tout droit, et tantôt à quatre pieds. Les Animanx se nourrissent de sruits et de Miel Sauvage, & se battent à tout moment les uns contre les autres. Ils sont issu des Hommes, à ce disent les Negroes, mais ils sont devenus ainsi demi-bêtes en se tenant toûjours dans les Forêts. On dit qu'ils forcent les semmes & les silles, & qu'ils ont le courage d'attaquer des Hommes armez.

We will now examine facobus Bontius's Figure, and compare it with ours: And tho' he tells us, that he had feen some of both Sexes that went erect, especially that Female one, whose Effigies he here gives us; vet I can't but think, he indulged more his Fancy herein, than copied the true Life; or at least it was much different from ours. For ours had no such long Hair on the Head, and all round the Face; the Face of our Pygmie was not so flat and round, nor the Nose and Under-Lip fo rifing: The large Breafts in his, answers the Description which is given of it by others; ours being a Male, had but small ones. But the Armes in our Pygmie (as 'tis in the Ape-kind) were much longer than they are represented in his Figure, and the Feet are altogether different; for he makes them exactly like Humane Feet, and nothing like Hands, which is so Remarkable a thing in all these Animals, that this Mistake of it felf, is enough to discountenance the Truth of his Picture, and render it suspected. I shall not take notice, how ill the Hair is drawn, nor make any further Remarks upon the structure of the Limbs, since I confess I do mistrust the whole Representation. But because he hath expresid, that this Creature had so much Modesty, I have added to his Figure what becomes that Character.

That Figure in Conradus Gesner, (33) which he tells us he had out of a German Book, wrote about the Holy Land, in some Particulars I think more exact and just: For here he makes the Feet like Hands, the Legs more divaricated, the Face longer, and the Rostrum more extended. But the Arms are too short, and I do not know for what reason there is a Tail clap't on, which sits untowardly enough, which must be surely an Addition of the Painter; or if there is any such Creature in Nature, it must be of another Family, different from ours.

However, I have caused all these Figures to be copyed, that they may be the easier compared: But since they are so disagreeing, as are likewise

⁽³²⁾ Dipper ibid. p. m. 257. (33) Hist. de Quadruped. p. m. 859.

the Descriptions they give of them, it sufficiently justifies my Complaint of the uncertainty we have of the true Animal, that they are discoursing about; fince the same Name probably may be given to different Species of the Ape-kind. Now Orang-Outang, or Homo Sylvestris, or the Wild Man, being a General Name, I have given it also to our Subject: Tho' I confess I am not fully satisfied whether it be exactly the same with that of Tulpius or Bontius; or even whether that of Bontius be the same with that of Tulpius. For Bontius his Account is so very imperfect, that from thence one cannot make a fafe Conclusion; and I rather fuspect the contrary: For Bontius describes it with soft, tender Passions; Tulpius and Dapper make it Warlike and Fighting. Bontius's words are these: (34) Ast quod majorem meretur admirationem, vidi ego aliquot utriusque sexus erecte incedentes, imprimis eam (cujus Effigiem hic exhibeo) Satyram femellam, tanta verecundia ab ignotis sibi hominibus occulentem, tum quoque faciem manibus (liceat ità dicere) tegentem ubertimque lachrymantem, gemitus cientem, & cateros humanos actus exprimentem, ut nihil ei humani deesse diceres, præter loquelam. Loqui verò eos easque posse, Javani aiunt, sed non velle, nè ad labores cogerentur: ridicule mehercules. Nomen ei indunt Ourang Outang, quod Hominem Sylvæ significat, eosque vasci affirmant è Libidine Mulierum Indarum, que se Simiis & Cercopithecis detestanda libidine miscent:

Nec pueri credunt, nist qui nondum ære lavantur.

And then adds, that in Borneo there are these Wild Men, and with Tails, but much shorter than that pictured in Gesner. Porrò in Insula Borneo (saith Bontius) in Regno Succodana dicto, à nostris Mercatoribus propter Oryzam & Adamantes frequentato, Homines montani Caudati in interioribus Regni inveniuntur, quos multi è nostris in Aula Regis Succodana viderent. Cauda autem illis est prominentia quadam ossis Coccygos, ad quatuor, aut paulò ampliùs, digitos excrescens, codem modo, quo truncata cauda (quos nos Spligiones vocamus) sed depilis.

'Tis for this Reason therefore, that I might more particularly distinguish our Animal, that I have call'd it a Pygmie; a Name that was formerly given to a sort of Ape, as I shall prove. But the Poets and Historians too of former Ages have invented so many improbable Stories about them, that they have rendred the whole History concerning them ridiculous, and not to be believed. We shall therefore endeavour to distinguish the Truth from the Fables in the following Essay.

The Baris or Barris likewise seems to be an Ourang Outang, or a Wild. Man; but whether exactly the same with ours, I will not determine, but leave to farther Enquiry. For all the Accounts concerning it that I

have at present met with, relate rather it's Docility and Actions, and the Servile Offices 'tis capable of performing in a Family, than any thing particular as to the Description of the Body; only in general that 'tis an Ape like a Man. Thus Peter Gassendus (35) in the Life of Peiresky tells us, that in Java Major were observed by the Sieur de Saint-Amant. Animalia que forent Nature homines inter & simias medie; which being doubted of, Peiresky produced a Letter from Natalis or Noël, a Physician who lived in Africa, which gave him this Account. Effe in Guineà Simias, barba procera, canaque, & pexa propemodum venerabileis, incedere ipsos lente, ac videri sibi præ cæteris sapere : qui maximi sunt, & Barris dicuntur, pollere maxime judicio : semel duntaxat quidpiam docendos ; veste indutos illicò bipedes incedere; scitè ludere fistulà, Citharà, aliisque id genus (nam quod everrant domum, convertant veru, pinsant in mortario, aliaque ratione famulatum præstant, hand reputari admodum) fæminas denique in iis pati menstrua, & mares mulierum esse appetentissimos. He likewise produced other Letters from Arcofius or d'Arcos, which related what happened to one of Ferraria when he was at Angola, the Country from whence our Animal, as likewife that of Tulpius came. I will give it in Gassendus's words: Incidit nempe quâdam die in Nigritam Canibus venantem Homines ut visum, Sylvestreis. Capto, casoque illorum uno, inhumanitatem Nigritæ increpuit, qui in suum genus ità sæviret. Ille verò, falleris, inquit, nam hic non est homo, sed bellux homini persimilis. Quippe solà pascitur herba, intestinaque Ovina habet, quod ut credas melius, rem ecce; simulque abdomen aperuit. Sequenti die rursus venatum, captique mas & fæmina: huic Mammæ ad pedis longitudinem: cæterà mulieri simillima fuit; nist quod Intestina quoque herbis oppleta, & cujusmodi Ovis, habuit. Totum utique pilosum Corpus, sed pilo brevi, ac satis leni.

Our Animal was not so bearded, as that of Natalis; and what Arcosius relates of his Wild Man, or Barris; as it's feeding upon Grass, and having it's Intestines like a Sheep's, all this is far different from ours; tho' as to it's docility and capacity of performing those Actions mentioned, I can't but think our Subject might easily have been taught to do them; and, it may be, others too of the Ape-kind, tho' different: As there are wonderful Instances of this kind given of them by Nierembergius (36) and others. Dapper's (37) Description is much the same. There is a fort of Ape (saith he) call'd Baris, which they take when young; and breed them up, and make them so tame, that they will do almost all the Work of a Slave: For they go ordinarily upright as Men do; they will beat Rice in a Mortar, carry Water in a Pitcher, and shew such pretty Actions of Address, that they extreamly divert their Masters. And in Nierembergius (38) there is much the same Account. "In Guinea scribit P. Jaricus existere Simias, que instar samuli in Pila tundant quecunque in

⁽³⁵⁾ Lib. 5. p. m. 171. (36) Hist. Nat. lib. 9. cap. 44- (37) Dapper Descript. de l'Afrique. . . p. 249. (38) Hist. Nat. l. 9. cap. 45.

eam imponuntur, quæ aquam à fluviis in Hydriis capite domùm deferant, ità tamen ut ubi primum domus fores attigerint, illicò Hydriis exonerandæ fint, alioqui eas excidere, casuque isto frangi, atque tum clamoribus ac sletu compleri universa. Neque ista modo, sed plurima item alia obire de domesticis ministeriis dicuntur hi Simij Baris. Torosi sunt & robusti.

But all this does not sufficiently inform us of the particular shape, structure, and make of the Body and the several Parts of this Animal, so as to be fully certain whether it be the same, or a different Creature from the Ourang-Outang. And tho' I have mentioned it, as a Conjecture that probably the Baris might be, what we call a Drill, yet I own it as an uncertainty, since I have not met with what can justifie, or fully satisfie me herein.

The Pongo likewise which is described by Purchas, as a sort of Wild Man, is different from our Subject; as it may be also from the rest hitherto mentioned. The Reason, therefore, why I insert the Description of this, as likewise of the others, I own to be, that hereby I might excite some Inquisitive Observers to give us a truer Account of this large and noble Species of Animals. 'Tis an Enquiry that would recompence their Curiofity with abundance of Satisfaction, by the many and useful Discoveries that they would make, and extreamly enrich the Natural History of Animals, whose enlargement, I think, in this Inquisitive Age. hath not advanced so much as that of Botanie. For how great Diligence hath been used of late, to ransack both the Indies, to pry into all the Corners of the World, both inhabited, and uninhabited, to find out a new Plant, not before described? And with what great Expence, and how magnificently are their Figures Printed? And how little hath been done in the Improvement of the History of Animals? Not that I any ways dislike the former, but the latter being a Nobler Subject, I can't but recommend it, as deserving the Labours of the Curious likewise; and if any, this kind, I think, which comes so near to a Man, may bespeak the preference.

But I beg the Reader's Pardon for this Digression. Purchas's (39) words are these: This Pongo is in all Proportions like a Man, but that he is more like a Giant-Creature, than a Man: For he is very tall, and hath a Man's Face, hollow-eyed, with long Hair upon his brows. His Face and Ears are without Hair, and his Hands also. His Body is full of Hair, but not very thick, and it is of a dunnish colour. He differeth not from a Man, but in his Legs, for he hath no Calf. He goeth always on his Legs, and carries his Hands classed on the Nape of his Neck, when he goeth upon the Ground.

⁽³⁹⁾ Purchas Pilgrims, Part. 2. l. 7. cap. 3. S. 7.

They sleep in the Trees, and build shelters for the Rain. They feed upon Fruits that they find in the Woods, and upon Nuts; for they eat no kind of Flesh. They cannot speak, and have no Understanding, no more than a Beaft. The Reople of the Country, when they Travel in the Woods, make Fires, where they sleep in the Night: And in the Morning when they are gone, the Pongoes will come and fit about the Fire, till it goeth out; for they have no Understanding to lay the Wood together. They go many together, and kill many Negroes that Travel in the Woods. Many times they fall upon Elephants, which come to feed where they be, and so beat them with their clubbed Fists, and pieces of Wood, that they will run away roaring from them. These Pongoes are never taken alive, because they are so strong, that Ten Men cannot hold one of them: But yet they take many of their Young Ones with poisoned Arrows. The Young Pongo hangeth on his Mother's Belly, with his Hands fast clasped about her; so that when any of the Country People kill any of the Females, they take the Young one which hangeth fast upon his Mother. When they die among themselves, they cover the Dead with great heaps of Boughs and Wood, which is commonly found in the Forrests.

Our Pygmie had Calves in his Legs, tho' not large, being emaciated; and it being young, I am uncertain to what height in time it might have grown; tho' I cannot think to the just Stature (if there be any such) of a Man. For different Nations extreamly vary herein, and even those of the same. Nor did our Pygmie seem so dull a Creature as these Pongoes, but on the contrary, very apprehensive, tho' nothing so robust and strong as they are represented to be.

I shall only further add what le Compte, a Modern Writer, tells us of the Savage Man, and so I think I shall have done: For this Argument. is so Fruitful, that one does not know when to conclude. (40) Lewis le Compte therefore in his Memoirs and Observations upon China, tells us, That what is to be seen in the Isle of Borneo, is yet more Remarkable, and surpasseth all that ever the History of Animals hath hitherto related to be the most admirable, the People of the Country assure us, as a thing notoriously known to be true: That they find in the Woods a sort of Beast, called the Savage Man; whose Shape, Stature, Countenance, Arms, Legs, and other Members of the Body, are so like ours, that excepting the Voice only, one should have much ado not to reckon them equally Men with certain Barbarians in Africa, who do not much differ from Beasts.

This Wild or Savage Man, of whom I speak, is endued with extraordinary strength, and notwithstanding he walks but upon two Legs; yet is he so swift of Foot, that they have much ado to out-run him. People of Quality

Course him, as we do Stags here, and this sort of Hunting is the King's usual Divertisement. His Skin is all hairy, his Eyes sunk in his Head, a stern Countenance, tanned Face; but all his Lineaments are pretty proportionable, although harsh, and thickned by the Sun. I learn'd all these Particulars from one of our French Merchants, who hath remained some time upon the Island. Nevertheless, I do not believe a Man ought to give much Credit to such sort of Relations, neither must we altogether reject them as fabulous; but wait till the unanimous Testimonies of several Travellers may more particularly acquaint us with the Truth of it.

Passing upon a time from China to the Coast of Coramandel, I did my self see in the Straits of Molucca a kind of Ape, that might make pretty credible that which I just now related concerning the Savage Man.

It marches naturally upon it's two hind Feet, which it bends a little, like a Dog's, that hath been taught to Dance, it makes use of it's two Arms as we do; it's Visage is in a manner as well favoured, as theirs of the Cape of Good Hope; but the Body is all covered with a white, black, or grey Wool: As to the rest, it cries exactly like a Child; the whole outward Action is so Humane, and the Passions so lively and significant, that dumb Men can scarce express better their Conceptions and Appetites. They do especially appear to be of a very kind Nature; and to show their Affections to Persons they know and love, they embrace them, and kiss them with transports that surprise a Man. They have also a certain motion, that we meet not with in any Beast, very proper to Children, that is, to make a noise with their Feet, for joy or spight, when one gives, or refuses them what they passionately long for.

Although they be very big, (for that I saw was at least four Foot high) their nimbleness and slight is incredible; it is Pleasure beyond expression to see them run up the Tackling of a Ship, where they sometimes play, as if they had a particular knack of Vaulting to themselves, or as if they had been paid, like our Rope-Dancers, to divert the Company.

Sometimes suspended by one Arm, they poise themselves for some time negligently to try themselves, and then turn, all on the sudden, round about a Rope, with as much quickness as a Wheel, or a Sling that is once put in motion; sometimes holding the Rope successively with their long Fingers, and letting their whole Body fall into the Air, they run full speed from one to the other, and come back again with the same swiftness. There is no Posture but they imitate, nor Motion but they perform; bending themselves like a Bow, rowling like a Bowl, hanging by the Hands, Feet, and Teeth, according to the different Fancies which their whimsical Imagination supplies them with, which they Act in the most diverting manner imaginable; but their Agility to sling themselves from one Rope to another, at Thirty and Fifty Foot distance, is yet more surprising.

In this Character there are several things I could take notice of, and I may hereafter have occasion to refer to some of the Particulars; But what is mention'd of it's Cry, like a Child's; and it's expressing the Passions of Joy and Grief, by making a Noise with it's Feet, is agreeable enough to the Relation I had of our Pygmie: For I heard it Cry my self like a Child; and he hath been often seen to kick with his Feet, as Children do, when either he was pleased or angered.

We shall now proceed to the Anatomy, which in a History of Animals, is certainly the most Necessary, most Significant, and Instructive Part. Nor can I fee, how an History of Animals can be well wrote without giving the Diffection of the Inward Parts: 'Tis as if one should undertake to describe a Watch, and at the same time, take notice only of the Case or Cover, and tell what fine Garniture there is about it; but inform us nothing of the admirable Contrivances of the Wheels and Springs within, which gives it Life and Motion. Galen (41) thought the Diffection of Apes very useful for the understanding the Structure of the Parts in Humane Bodies; and recommends it to his Scholars to Practice themselves herein. Not that he only diffected Apes, (as Vefalius oftentimes charges him with) or preferred it before the Dissection of Humane Body: But where that could not be had, he advises them to get Apes, and diffect them; especially those that come nearest to a Man. Had he known our Pygmie, no doubt but he would have preferred it, for this purpole, as much beyond the Ape, as he does the Ape beyond the Cynocephalus, and all other Animals. For, as we shall observe, there is no Animal, I have hitherto met with, or heard of, that so exactly refembles a Man, in the Structure of the Inward Parts, as our Pygmie: But where it differs, (as I have remark'd) there it resembles an Ape; being different both from a Man and an Ape: And in many things agreeing with both of them.

The Skin of the whole Body of our Pygmie was whitish; but that on the Head was tawny, and of a darker colour. Twas thin, but strong, and adhered pretty firmly, and more than usually to the Flesh; it's greatest adhæsion was at the Linea alba, and in the Palms of the Hands, and the Soles of the Feet, and in the Fingers and Toes; as it is in Men. In the Skin of the Arm-pits, I observed those Glandulæ Cutaneæ Axillares, which secrete that Orange-coloured Liquor, which in some Men stains the Shift here, with that colour. I call them Cutaneæ, to distinguish them from those larger Glands, that lie bedded under in the Fat, and are call'd Glandulæ Axillares. For these I have observed to be Lymphatic Glands; and have traced the Lymphaduæs thence to the head of the Ductus Thoracicus, where they empty themselves.

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⁽⁴¹⁾ De Anat. Administr. lib. 1. cap. 2. p. m. 27.

Together with the Skin, we took off the Mamma or Breasts, which stuck close to it: And in our Subject, being a Male, they were but small and thin; yet I could plainly perceive they were made up of abundance of small Glands. I have already mentioned, how large the Breasts are in the Female Orang-Outang, and the Baris, so that no Woman's are larger. As to their Situation, and their being placed upon the Pectoral Muscles, this I find is common to the Ape-kind: And they are so described by the Parisians (42) in the Monkeys they dissected; as also in the Apes dissected by Drelincourt: (43) And because I shall have frequent occasion of referring to these Authors, unless I signific otherwise, I shall always mean the Places here quoted, without mentioning them any more.

In Brutes, next under the Skin, lies a Musculous Membrane, which therefore is call'd Panniculus Carnosus, which gives a motion to it, whereby they can shove off what offends them. In Man'tis otherwise; for next to the Skin, lies the Membrana Adiposa; or the Fat, and under that, the Membrana Carnosa: And the same I observed in our Pygmie; for the Fat here lay next to the Skin. Drelincourt, in the Apes he dissected, observed the Panniculus Carnosus next to the Skin, as 'tis in Brutes. For in the Male Ape, he tells us, Adeps nullus inter Panniculum Carnosum & Cutim; and in the Female, Panniculus Carnosus cuti coharens, nullo adipe interjecto; Adiposus nullus. So that in this Particular, our Pygmie is like to a Man, and different from the Ape-kind.

Having separated the Skin and Membrana Adiposa, which in our Subject was not very thick, it being emaciated by it's illness, we come now to the Muscles. But I shall reserve my self to treat of them in the Myology. Next under the Muscles was the Peritonaum, a Common Membrane, that lines all the infide of the Abdomen, and sends a common outward Membrane to all the Viscera contained therein, and so secures their Situation. In this Membrane in Quadrupeds there is in the Groin of each fide, a Perforation, or rather a Processus, by which the Seminal Vessels pass down to the Testes in the Scrotum, as is very plain in Dogs and other Animals. But in Man, whose Posture is erect, tis otherwise. For here these Vessels pass between the two Coats, that make up this Membrane, the Peritonaum; so that the inward Coat, that respects the Cavity of the Abdomen, is altogether entire, and continued, and 'tis only the outward Coat that is protruded into this Process; and this for a very good Reason. For otherwise, a Man, whose Posture is erect, would be constantly liable to an Hernia, or a Rupture; which happens when this inward Coat is protruded down likewise; and if there be a descent of the Intestines, 'tis then call'd Entero-cele: If of the Omentum, Epiploocele. In our Pygmie I observed the Peritonaum, in this respect, to be

⁽⁴²⁾ Memoirs for a Natural History of Animals, p. 162, Gc. English Translation. (43) Apua Ger. Elasi, Animal. cap. 33. pag. 109, Gc.

formed exactly as 'tis in Man; and to be entire, and not protruded; as if Nature did design it to go erect. In Apes and Monkeys 'tis otherwise. So Blassus (44) observed in the Ape he dissected, Processus Peritonai (saith he) eodem modo hic se habet, ac in Cane. Datur & hic facilis via stylo ex ventre in Processum dictum inserendo. And the Parisians have remarked the same in the Monkeys they dissected, which is a hotable difference of our Pygmie's from the Ape-kind, and an agreement with the Humane. Hereaster, whenever I mention Blassus, unless I specifie otherwise, be pleased to take notice, that I refer to this Quotation.

The Omentum or Caul in our Pygmie was very thin and large, falling over and covering most parts of the Guts. 'Twas fastened a little to the Peritonaum in the Left Side. It had but little Fat, and was tinged in many places with a deep Yellow Colour, by the Bladder of the Gall, as was likewise part of the Duodenum. It had numerous Blood-Vessels. and it's adhæsion to the Stomach, Colon, and other Parts, as in Man. The Remarks the Parisians make upon the Epiploon or Omentum of the Monkeys they diffected, were different from our Subject. For they tell us, That the Epiploon was different from that of a Man, in several things. First, It was not fastened to the Colon in so many places, having no connexion with the left part of this Intestine. Ours I found was fastened just as 'tis in Man. Secondly, It had another Ligature, which is not found in Man, viz. to the Muscles of the Abdomen, by means of the Peritonaum, which formed a Ligament; which we have observed in the Hind of Canada. Ours adhered to the Left side: Drelincourt observed it in an Ape, to be fastened to the Right Side. Both I believe to be accidental, as I have frequently seen it in Humane Bodies. And in one Patient I found it fixt to the Peritonaum in the Groin, which gave him a great deal of Pain and Trouble, especially when his Bowels were any thing extended with Wind. Thirdly, The Parisians Say, The Vessels of the Epiploon, which in Man proceed only from the Vena Porta, did nevertheless in one of our Subjects come from the Cava, having there one of the Branches of the Hypogastrica, which was united to the Branches of the Porta. In our Animal these Vessels came all from the Porta, or rather emptied themselves into But they observing it only in one Subject, and it being different in all other Animals, it must be accidental. Fourthly, In fine, the whole Epiploon was without Comparison greater than it generally is in Man; because that it did not only cover all the Intestines, which is rarely seen in Man, (whatever Galen says) but it even enveloped them underneath, as it does in Several other Brutes; where it is frequently seen, that the Epiploon is larger than in Man, especially in Animals that do run, and leap with a great deal of Agility: As if it were so redoubled under the Intestines to defend them, with the rest of the Bowels, against the rude jolts which these Parts do

⁽⁴⁴⁾ Ger. Blasij Miscellan. Anat. Hominis Brutorumque variorum, &c. in Octavo. p. m. 253.

receive in running. It is true, that the Membranes of the Epiploon were entire and continued, as in Man, and not perforated like a Net, as they are in the generality of Brutes. The Epiploon or Caul in our Pygmie was very large, yet I have feen the same frequently in Humane Bodies; but when they are diseased, 'tis often less, and wasted; so that Galen's Observation may be true. But methinks the Reason they give, why it should be so large in Brutes, may be doubted of; for it being so tender a Part, it would be in danger, upon those violent motions, of being broken, had not Nature made it loofe below, and free from any adhæsion; and it being so, it cannot perform the Office they assign it. Drelincourt's Account of the Epiploon, as he observed it in the Female Ape, I like better. Epiploon macrum (saith he) vasis turgidis involvens Intestina omnia, usque ad pubem, adhærens Extremo Hypochondrio dextro, qua parte Colon substratum jecoris limbis. Idem adhæret ventriculi fundo & Colo, ut in homine. And in the Male Ape he diffected 'twas tinged yellow, as ours was.

We shall proceed now to the Ductus Alimentalis, at least those parts of if that are contain'd in the Abdomen, viz. the Stomach and Intestines; which I make to be the true Characterisk of an Animal, and a Proprium quarto modo. For all Animals have these Parts; and all that have them, are Animals. The Senfes, or some of them, are wanting in a great many Animals, and in some we perceive none but that Universal one, Tactus, yet here we find a Ventricle and Intestines. By these Parts 'tis, that the Animal Kingdom is principally distinguish'd both from the Vegetable and Angelick. Vegetables, 'tis true, receive constantly Nourishment, and without it, they perish and decay; but 'tis in a far different manner; 'tis not received into such an Organick Body, where the Food is prepared and digested, and so the Nutritive parts thereof dispensed afterwards into all the Body, and the rest ejected, as Excrementitious; this is only to be met with in Animals, and in all of them. But yet I find there are intermediate Species of Beings between Vegetables and Animals, as the Zoophyta: the History of which I could extreamly defire might be given us; and can't but think that regularly in compiling a History of Animals, one should commence from them; and amongst these, no doubt, but that there are several degrees of Perfection, till we come to what might be properly called an Animal. I have had no Opportunity of observing any of them, but only one; wherein I could perceive a fensible Motion and Contraction of some of the Parts, but could not distinguish any thing like the Structure of any of the Parts in an Animal, or the Organs that belong to them. An Accident disappointed me of perfecting my Observations, otherwise I should have communicated what I had discovered. But am sensible that there are great Curiosities here to be met with, if diligently enquired into; and that they might be, was the occasion of this Digression.

This Canalis Alimentalis therefore, or Inductory Vessel (as I call it, for the Reasons I have often mentioned in my Anatomical Lectures at Chirurgeon's Hall) is commonly distinguished into three Parts; The Gula, the Ventricle, and Intestines: The two latter do lie in the Cavity of the Abdomen, the former, in the Thorax and Neck; but being but one continued Canalis, I shall treat of the whole here.

The Gula or Gullet, by (45) Tully (in that excellent Anatomical Lecture he gives us, where he is proving a Providence) is call'd Stomachus. As 'tis also by Celsus, (46) so likewise in A. Gellius, (47) and frequently by Hippocrates. (48) And Aristotle (49) and Galen (50) expressly tell us, that that Part between the Fauces and the Ventricle, which the Antients called Oesophagus, after Aristotle's time, was wont to be call'd Stomachus, tho' now this word is more appropriated to the Ventricle it self, which Tully in the same place calls Alvus. So true is that of Horace,

(51) Ut Sylvæ foliis pronos mutantur in annos Prima cadunt: ita verborum vetus interit ætas.

However I shall follow *Horace's* Rule, since Custom now hath appropriated the word *Stomach*, to the *Ventricle*, especially our *English Tongue*, I shall do so too.

Multa renascentur, que jam cecidere: cadentque Que nunc sunt in honore vocabula: si volet usus: Quem penes arbitrium est, & vis & norma loquendi. (52)

This Gula or Gullet is a Hollow Muscle, and fitly enough compared to a Funnel; where the Month, which may be thought a Part belonging to it, being more capacious, first receives the Food, and prepares it, by chewing, and then forces it down into this Stem or Pipe, to convey it to the Ventricle. I did not observe, upon the Dissection, any difference of this Part in our Pygmie, from that of a Man. For as in a Man, (and so conformable too in other Circumstances) it passed under the lower Muscle of the Diaphragm, which by that slant running of it's sleshy Fibres over it, may perform to it the Office of a Valve, and prevent the Regurgitation of the Food that way. Which may be the more necessary in our Subject, because being used to climb Trees, and in coming down, to be prono Capite, it might be the more liable to this Accident. But for the better preventing this, I find here, that the Passage of the Gula, a little above where it empties it self into the Ventricle, was straiter, and

⁽⁴⁵⁾ M. T. Cicero de Nat. Deorum, lib. 2. \$. 54. p. m. 427. (46) Cornel. Celsus, de re Med. lib. 4. cap. 1. . . (47) A. Gellij. Nott. Attic. lib. 17. cap. 11. (48) Vid. Anut. Fæsii Oeconom. Hipp. in verbo. (49) Arist. Hist. Anim. lib. 1. cap. 10. \$. 108. p. m. 89. & passim alibi. (50) Galen de locis assectivis. lib. 5. cap. 5. p. m. 490. (51) Horace de Arte Poetic. vers. 60. (52) Horace. Ibid. v. 70.

the inward Membrane here more rugous than in a Man; so that it seemed somewhat Analogous to a Valve. Drelincourt describes it, in the Female Ape he dissected, thus. Orificium ejus superius, nulla Valvula clausum; sed interceptum duplici portione Diaphragmatis carnosa, ab ejus tendinibus oriunda.

The Ventricle or Stomach, as we shall call this Part, in our Pygmie, as to it's Situation and Figure, exactly represented a Humane Stomach. When inflated, from the entrance of the Gula along the upper part to the Pylorus, it measured Two Inches and three quarters. Measuring with a Thread from the Pylorus along under the Fundus, up again to the entrance of the Gula, I found it to be Fifteen Inches; in all, near Eighteen Inches. The length of the Stomach in a strait Line, was Six Inches and an half; and it's breadth in a strait Line, where broadest, near Four Inches. The Girth of the Stomach in the middle, was near Twelve Inches. So that I thought the Stomach large, in Proportion to the bulk of the Body. It had numerous Blood-Vessels, spreading themselves all over, as in a Man's; and I could plainly perceive the Inosculations of large Trunks of the Coronary Branches, with those that descended from the upper Parts.

The Parisians observed in their Monkeys, That the Ventricle did like-wise differ from a Man's, it's inferiour Orifice being very large and low; for it was not elevated so high as the superiour, as it is in a Man. I did not observe this in our Pygmie. So Drelincourt tells us in the Female Ape, Ventriculus rugis interiùs nullis gaudet; and some other Particulars he takes notice of. But there was nothing in ours, that I observed, different from a Man's.

As to their Food, I find it very different in the Ape-kind; as in part appears by what I have already mentioned of the Ourang Outang, the Baris, the Pongo, &c. So that I can't but think, (like a Man) that they are omnivorous. What chiefly our Pygmie affected, when Wild, I was not informed of; after it was taken, and made tame, it would readily eat any thing that was brought to the Table; and very orderly bring it's Plate thither, to receive what they would give him. Once it was made Drunk with Punch, (and they are fond enough of strong Liquors) But it was observed, that after that time, it would never drink above one Cup, and refused the offer of more than what he found agreed with him. Thus we see Instinct of Nature teaches Brutes Temperance; and Intemperance is a Crime not only against the Laws of Morality, but of Nature too.

Facobus Bontius (53) tells us, that the Bezoar-stone is bred in the Stomachs of Apes, as well as Goats, and he prefers it as the best. Porrò vidi (faith he) & Lapides Pa-zahar natos in ventriculis Simiorum, qui teretes sunt & longitudinem digiti aliquando excedent, qui prastantissimi omnium censentur. Pa-zabar, he tells us a little before, signifies in the Persian, contra venenum, whence may come the word Bezoar. 70b. Georg. Volchamerus (45) takes notice of one he had from Grimmius out of the Baboon-kind, as big as a Wallnut. And in the Scholium on that Observation, Joh. Bapt. Tavernier's (55) Travels are quoted, where he prefers two Grains of this, before fix of the Goat-Bezoar. Tho' Philip. Baldaus, in his Description of Malabar and Cormandel, does esteem it much cheaper. Casper Baubinus hath wrote a distinct Treatise of the Bezoar-stone, to whom I refer my Reader; and shall only farther obferve of it, that I think this Medicine ought not to be despised, because in Health a Man may take a large Quantity of it, without any Injury; for I have evidently seen in the greatest Weaknesses, most Remarkable Effects from it, and have had Success beyond expectation; it supporting the Spirits, and relieving them, where a more active Medicine might over-power them, and yet not have done that Service.

But this Stone in Goats and Monkeys is a Disease, and not Natural; as well as the Stone in the Bladder or Kidneys of a Man. Bontius (56) therefore observing the good Essects of the Bezoar-stones bred in these Animals, argues with himself, why those in Men, which he finds laminated in the same manner, might not be of as great an Essicacy; and upon Tryal, he assures us, that they are so. Hoc certè compertum habeo, Lapidem in vesicà hominis repertum, urinam & sudores probé ciere, quod tempore ingentis illius pestis, que Anno 1624 & 1625. Leydam, Patriam meam & reliquas Hollandie Civitates, miserandum in modum vastabat, in penurià Lapidis Basartici, nos exhibuisse memini, & Sudorissicum (ausim dicere) melius & excellentius invenisse, cum admixtà Theriacà, aut Mithridatio, cum Oleo Succini aut Juniperi guttis aliquot.

We come now to the Third Stage of the Ductus Alimentalis, the Intestines; which serve for the separating the Chyle from the Faces, and so transmitting it into the Vasa Chylisera, or Vena Lastea, as they are call'd, which conveys it into the Blood, for the recruiting the constant waste that is made there, and repairing it's losses; as also for the Nourishment and Augmentation of the Parts: And for the doing this, 'tis requisite that the Intestines should be long; and they being so, that they should be coyled and winding; that this Separation might be the better performed, and so we find the Guts in our Pygmie. For from the Pylorus

⁽⁵³⁾ Jac. Bontij, Hist. Nat. & Med. lib. 4. in Animadv. in Garcia ab Orto, cap. 45. p. m. 48. (54) Miscell. Curiosa German. Decuria secunda annus secundus An. 1683. Observ. 189. p. 420. (55) Jo. Bapt. Tavern. lib. 2. Itin. Indic. cap. 24. (56) Bontius ibid. in cap. 46. p. m. 48.

to the Anus, they measured Thirteen Feet and three Inches, viz. from the Pylorus to the Cacum or beginning of the Colon, was Nine Foot Ten Inches; and the Colon and Rectum were Three Feet and Five Inches long. The Cacum here, or Appendicula vermiformis, was Four Inches and three quarters long. So that the length of the Guts here, in proportion to the length of the Body, is much the same as its in a Man. But in two of the Sapajous dissected by the Parisians, the whole Intestines were but Five Foot two Inches; and in the other two Monkeys, Eight Foot long. So that herein our Pygmie more resembles a Man, than their Monkeys did.

And as in the length, so likewise in other Circumstances, the Intestines of our Pygmie were liker to those of a Man, than those of the Monkey and Ape-kind are. For the Parisians tell us, that in their Monkeys, the Intestines were almost all of the same bigness, and that the Ileon was in proportion a great deal bigger, than in a Man. In our Subject we found a sensible difference. For the small Guts, which were much of a bigness, being a little extended, measured in Compass about Two Inches and three quarters. The Colon was Three Inches and three quarters about; and the Appendicula Vermisormis (which was in our Pygmie as its in a Man, and is not to be met with in Apes and Monkeys) was about the bigness of a Goose-quill. It's length I have mentioned before.

Into the Duodenum of our Prymie, a little below the Pylorus, were inserted the Duotus Communis of the Gall, and the Duotus Pancreaticus; they both emptying themselves into the Gut at the same Orifice as is usual in Man. And the same is observed likewise by Drelincourt in the Male Ape he dissected, where he tells us, à Pyloro qui videtur suggrunda esse circularis & carnosa principio Ecphyseos praposita, ad foramen usque intra eandem Ecphysin Commune Duotui Bilario & Wirzungiano, pracise pollex est Mathematicus; ab illo autem foramine intra duplicem Ecphyseos tunicam stilus gracillimus intrusus est in pradictam Vesicula fellea recurvitatem, rursusque ab eodem Intestinali foramine idem stilus compulsus est in Duotum Wirzungianum. But the Parisians observed in the Monkeys, that the Insertion of the Ductus Pancreaticus into the Intestine, (which in Man is always near the Porus Bilarius) was Two Inches distant there-from. So that in this Particular the Monkey does not so much resemble a Man, as Apes and our Pygmie do.

The Convolutions and Windings of the *small Guts* in our *Pygmie*, and their Situation, were much the same, as in a *Man*: And they were all plentifully irrigated with *Blood-Vessels*. In the inward Coat of the *Intestines* I could observe the *Miliary Glands*, described by Dr. *Willis*; as also those larger clusters of *Glands*, mentioned by *Joh. Conrad. Peyerus*. The *Colon* I thought proportionably longer, than 'tis in a *Man*. It had the same *Ligaments* and *Cells*, and leaves of *Fat* hanging to it, as a Man's hath:

hath; and the fituation, was the fame: but it being so long, it had more windings than usually. The Paristans observed in their Monkeys, that the Colon was not redoubled like an S. as in Man, being quite strait. Drelineourt's Ape was more like ours, for speaking of the Colon, he saith, retorquetur varie antequam producat Rectum; cellulas habet ut in Homine. For the length of the Colon in the Monkeys dissected by the Paristans, was but thirteen Inches; and an Inch in Diameter; whereas, the Colon of our Pygmie with the Rectum, was three Foot sive Inches, as I have mentioned; and therefore liker to a Man's, and requiring these convolutions the more.

In a Man the Intestines are commonly distinguished into Intestina Tenuia and Crassa: The Tenuia are subdivided into the Duodenum, Jejunum, and Ileon; The Grassa, into the Cacum, Colon and Rectum: and the Cacum commonly is reputed that Appendicula Vermiformis, which is placed at the beginning of the Colon, where the Ileon empties it self into it. Now this Part in a Man, being so small; and being observed never to contain any Excrement; I can't think, that it deserves the Name of an Intestine, much less to be reputed one of the Crassa. 'Tis true, in Brutes, this part is often found to be very large and capacious; and to be filled with faces; and in such, it may be justly esteemed an Intestine. As in a Rabit, 'tis very long and hath a Cochlear Valve; so in an Ostridge, there are two Cacums; each a yard long, with a like Valve. But in Man, 'tis far different. Many therefore do not think this Processies Vermiformis, to be the Cacum; but rather take for is, that bunching out of the beginning of the Colon; which is projected beyond the entrance of the Ilean; which in the Common Ape and Monkey is more, than in a Man. However, I think it not enough, as to make it a distinct Intestine; and the number of the Intestines in a Man, ought to be made fewer.

Our Pygmie therefore having this Processus Vermiformis in all Circumstances, so like to that in a Man; and Monkeys and Apes having nothing like it: it is a remarkable difference of our Subject from them, and an agreement to the Structure of a Humane Body. So the Parisians tell us in their Monkeys, the Cacum had no Vermiform Appendix. So in the Ape dissected by Blasius, he saith, Processus Vermiformis in totum hic desideratur. And so Drelincourt, Cacum caret Epiphysi Vermiformi, qualem homines habent. We will see therefore, what kind of Cacum'tis, that they describe in the Monkeys and Apes.

The Parisians tell us, in the Dissection of their Monkeys; That the Cæcum was very large, containing two Inches and half in length; and an Inch Diameter at the beginning: it went pointing, and was fortisted by three Ligaments, like as the Colon is in Man; there to form little Cells; this Conformation is wholly different from that of a Man's Cæcum. 'Tis true,' tis more projected, than in a Man; So Blasius in his Ape, makes it jutting

out beyond the Insertion of the Ilean, Manus transversa, seu trium digitorum spatium. And Drelincourt tells us, duarum unciarum est. But since it hath those Ligaments of the Colon, 'tis plain, that 'tis only a part of it, and not a distinct Intestine; or as Blasius more truly calls it, Principium Coli. He hath given a figure of it, but not very exact; and in another figure he represents the Valve of the Ileon at the Colon, or rather Valves; for he makes more than one. His Description, as 'tis faultily printed; fo I am afraid, it is not very accurately drawn up, and therefore do omit it.

But what is different from a Man, as also from the Ape and Monkey. too, or any other Animal I yet know of; is a fort of Value I observed at the other Extream of the Colon in our Pygmie, where it passes into the Rectum. For the turn of the Colon here, is very short; and in the infide I-observed a Membranous Extension like a Valve, an Inch in length, which divided the Cavity half way. The Rectum did not much differ from the Colon in the magnitude of it's fistula, but was much the same; and in other respects, as 'tis in a Man.

This great length of the Intestines in our Pygmie was orderly colligated and fastened to the Mesenterie, which kept them in a due situation; and so, as to make in them, several windings or convolutions; that hereby they might the better make a distribution of the Chyle; and the whole was, as 'tis in a Man. But I observed here, the Membranes of the Mesenterie, to be more loosly joyned together, than usually. For by moving them by my fingers, I found the blood vessels which were fastened to the upper Membrane, would easily shove over those, that were fixt in the under Membrane of the Mesenterie; and run on either side of one another, as I would draw them. I have fometimes feen the same in H_{u-} mane Bodies.

The Mesaraic Vessels here, were very numerous; as they approach the Intestines, they form several Arches, whereby they communicate with one another; and from these Arches, they send out numerous Branches to the Intestines of each side, which run clasping them; afterwards they subdivide, and inosculate with one another in infinite Ramuli: so that by injecting these Vessels with Mercury, they appeared so numerous; as almost wholly to cover the Trunk of the Intestines. the same is in Man.

I have likewise seen, by injecting the Mesenterick Vessels; that the Mereury has passed into the Lymphaducts; and so into the Vena or Vasa La-Elea. Which is a great contrivance of Nature. For the Motion of all fluids being Pulsion, without this advantage, part of the Chyle, must necessarily stagnate in some of the Vessels; till a fresh distribution of Chyle comes; to protrude it on; and so it would be apt to coagulate and

cause

cause Obstructions. But by the Lympha thus passing into them; the Chyle is still forced forwards, and the Vessels washed clean of it; and being thus often moistened, they are preserved from becoming over dry, or closed or obstructed. So Provident therefore is Nature, that in the whole Via lactea, not only in the Mesenterie; but into the Receptaculum Chyli, and Ductus Thoracicus likewise; abundance of Lymphæducts are emptied. Which gives us one good Reason; that Nature does not act in vain, in making such a separation of a Liquor from the Mass of Blood; which is so soon to be return'd to it again; since hereby she performs so great an Office.

In the Mesenterie of our Pygmie I observed several small Glands scattered up and down, as in a Man; but not so regularly amassed together in the middle; as the Pancreas Asellij is in Brutes. And Drelincourt observed much the same in the Male Ape. Glandulæ ad radicem Mesenterij, opposition in ambitu, numerosæ op planæ, magnitudinem Lentulæ, sed Ovales. Anastomoses frequentissimæ Venarum cum Venis of Arteriarum cum Arteriis in universo Mesenterij circulo. And as that part of the Mesenterie which sattens the Colon is call'd Mesocolon; so for the same reason, that slip of it represented in our sigure, that runs down to the Processius vermiformis, may be call'd the Meso-cacum.

We shall next proceed to the Liver, in which part our Pygmie very remarkably imitated a Man, more than our common Monkeys or Apes do. For the Liver here was not divided into Lobes as it is in Brutes; but intire as it is in a Man. It had the same shape; it's situation in the body was the same; and it's Colour, and Ligaments, the same. It measured in it's greatest length about five Inches and an half; where broadest, 'twas about three Inches; and about an Inch and three quarters in thickness. Towards the Diaphragm'twas convex: it's under part was Concave, where it receives and emits the Vessels, having a little Lobe here, as 'tis in a Man.

The Parisians remark in the Monkeys they dissected, that the Liver was very different from the Liver of a Man, having five Lobes as in a Dog; viz. two on the right side; and two on the left; and a sifth laid upon the right part of the body of the Vertebræ. This last was divided, making as it were two leaves. So Drelincourt in the Male Ape observes, Jecoris Lobi duo juxta umbilicalem venam, quorum secundo incuneata erat vesicula fellis, duo alij ventriculum amplectebantur, cum lobulo quinto se inserente in spatium ventriculi intra orisicium utrumque. So likewise in the Female Ape he tells us, Jecur opplet regionem Epigastricam quintuplici lobo, uno sexto minimo opplens cavitatem lunarem ventriculi. But Blasius in the Ape he dissected saith, Epar cum humano minime, optime cum Canino convenit, manifestissime in lobos VII divisum, tanta magnitudinis ut etiam utrumque Hypochondrium

drium occupet. Vefalius (57) therefore is in the right, where he faith, Qua enim Dissectionum Professores de Jecoris forma, ac penulis seu sibris (quos A6885 Graci vocant) commentantur ; è Canum potius, & simiarum sectionibus, quam hominum didicerunt. Humanum enim Jecur in fibras, Porcini, ac multo adhuc minus Canini Jecoris modo, non discinditur. And that he hints here at Galen, is plain, from what he expresses in his Epistle ad Joachim Roelants, (58) where he farther enlarges upon it. And Galen (59) himself tells us, that Herophilus was of this Opinion. So Theophilus Protospatarius (60) saith, that the Liver is divided into four Lobes; and gives us there a distinct Name for each. Aristotle, (61) 'tis certain, was much more in the right, where he faith, σε οχύλον δ' εξί το τε ανθεώπε Exact & Second To Bocko. Rotundum Jecur hominis est, ac simile bubulo. For the Liver of a Bullock, like a Man's is entire; and not divided into .- Lobes. However Franciscus Puteus (62) in his Apology, having named feveral Physicians and Chirurgians, that were with him at the opening of Charles the Ninth, Duke of Savoy, saith, hi omnes per Jovem mihi poffunt esse Testes, quod observatum est Epar habuisse quatuor pinnulas. Jacobus Sylvius (63) likewise justifies Galen, against Vesalius; and tells us, Quin & Hippocrates Lobos Epatis humani quinque connumerat libro suo de ossibus. Rufus autem quatuor vel quinque. But Renatus Henerus (64) hath answered Sylvius as to this matter; and there needs no farther dispute about it, if one will but believe his own Eyes, he may fully fatisfie himfelf, that, in an Humane Liver there are none of those Lobes, but that 'tis one entire Body; as it was also in our Pygmie. But in Apes and Monkeys the Liver is divided into Lobes...

The great use of the Liver is for to make a separation of the Gall from the Mass of Blood. We will therefore here examine the Biliary Vessels; nor do I find them any thing different from those in a Man; only the Bladder of Gall here in our Pygmie seemed longer, being four Inches in length. It's adhassion to the Liver was not so much as it is in a Man; for at the fundus or end, it juts beyond the Liver about half an Inch. For about three quarters of an Inch, it is more closely joyned to the Liver; afterwards it is sastened to it only by a Membrane, as is also the Dustus Cysticus. So that the Vesica fellea when inflated with wind, seemed more to represent an Intestine by it's anstractus and length, than the usual shape of the Bladder of Gall; which commonly is more bellying out.

The Parisians observed in their Monkeys, that the Bladder was fastened to the first of the two. Lobes which were on the right side. That it was an Inch long, and

⁽⁵⁷⁾ Vefalij de fabrica corporis humani, lib. 5. cap. 7. p.m.619. (58) Andr.Vefalij Epistola,&c.p.m.81.. (59) Galen. de Anat. Administrat. lib.6. cap. 8.. (60) Theophilus de Corporis humani fabrica, lib. 2. cap. 2.. (61) Arist. Hist. Animal. lib. 2. cap. 17. p. m. 595. (62) Franc. Putei Apologia pro Galeno in Anatomicis contra Andr. Vefalium, lib. 5. p. m. 153. (63) Vasani cujusdam Calumniarum in Hipp. Galenique rem Anat. depulsio. per Jac. Sylvium. vid. Depuls. 26. p. m. 150. (64) Renat. Henerus adversus Jacobi Sylving Depulsionum Anat. Calumnias pro Andrea Vesalie Apologia, p.m. 55...

half an inch broad; it had a great Ductus, which was immediately inserted underneath the Pylorus. This Ductus received three others, which instead of that, which in Man is single, and which is called Hepaticus; these three Ductus's had their Branches dispersed like Roots into all the Lobes of the Liver, so that the first had four roots, viz. one in each of the three right Lobes, and one in the first of the left; the second and third Ductus had both their roots in the second of the left Lobes, these branches did not run under the Tunicle of the Liver, so that they were apparent, and not hid in the Parenchyma, as they generally are. But in our Subject the distribution of the Ductus Hepaticus was altogether the same as it is in Man. In the Male Ape, Drelincourt describing the Bladder of Gall, saith, Vesicula sellea longa 2° pollicibus à fundo ad cervicem, ubi recurvitatem habet maximam, dimidiate hæret mersa substantiæ Jecoris.

The Ductus Hepaticus in our Pygmie issued out of the Liver with two branches; one arising from the right, the other from the left part of the Liver; and after a short space, joined into one Trunk; and that, after a little way, joyning with the Ductus Cysticus, do form the Ductus Communis, which empties it self into the Duodenum a little below the Pylorus, at the same Orifice with the Ductus Pancreaticus, exactly as 'tis in Man, as I have mentioned.

At the Simous part of the Liver I observed the Vena Porta to enter, as likewise the Epatic Arteries and Nerves. And here in the Membrane about these Vessels, I observed a pretty large whitish Gland. The Vena Umbilicalis entered the Liver at the sissue. It seemed large, but I found it's sissue or pipe was closed. The Vena Cava issued out of the Liver at the Convex part, where 'twas joyned to the Diaphragm.

In the Spleen of our Pygmie I did not observe any thing extraordinary, or different from a Humane Spleen. It was of a lead Colour, and of the shape represented in our figure; 'twas fastened by Membranes to the Peritoneum; and by the Omentum and Vasa brevia to the Stomach, so that upon inflating the Stomach, the Spleen would be brought to lye close on the Stomach, as if it was fastened immediately there. The Spleen here was two Inches and an half long; and one Inch and a quarter broad; and seated as usually in the left Hypochondre under the Bastard Ribs. The Ramus Splenicus was very remarkable, sending it's Trunk along the Pancreus, as in Man, and having numerous branches near the Spleen.

The Paristans tell us, that in their Monkeys the Spleen was seated along the Ventricle as in Maw; but it's sigure was different, in one of our Subjects being made as the Heart is represented in Blazonry; it's Basis containing and Inch. They give a sigure of it, but nothing like that of ours, which more represented the sigure of an Humane Spleen; tho' in Man it's sigure is often observed very different. Blassus in the Ape he dissected, observes

than

that the Spleen triangularis figura est, exiguus admodum respectu corporis, coloris nigricantis, lave equidem molleque valde corpus, ast exterius inæquale, quasi ex globulis variis confectum, adeò ut etiam conglomeratis Glandulis Substantiam Lienis annumerare velle, tali in subjecto fundamentum aliquod agnoscat. Ex Ramo Splenico numerosos eosque insignes Ventriculo Suppeditat ramos, magnitudinem & siguram externam Fig. 24. Tab. XI. exhibet. But his figure of the Spleen was nothing like to that of ours. For I did not observe those inequalities in the Superfice which he represents in his, to exhibit the conglomerate Glands. 'Tis true, having injected the Spleen of our Pygmie, the Mercury filling the collulated body of the Spleen, did make an appearance on the surface somewhat like those inequalities in his figure. But Frederic. de Rusch (65) is very positive, that neither those Glands, nor Cells mentioned by Malpighius, are to be met with in a Humane Spleen: tho' he grants, that they are in the Spleen of Brutes. Drelincourt in the Female Ape faith, Lien Scalenum figura refert, coharet Reni sinistro & liber est à Diaphragmate. And in the Male Ape he observes, Lien triangularis & crassior quam in famina, Pancreas excipiens.

We shall therefore now proceed to the Pancreas, which in our Pygmie was situated, just as it is in a Humane Body; lying under the Stomach, transverse to the Spine, from the Spleen towards the Liver. It was about two Inches long, about half an Inch broad, of a white yellowish Colour; it's surface uneven, being made up of abundance of Glands; it's Secretory Dust emptied it self into the Duodenum, just where the Dudus Communis of the Gall doth, as I have mentioned before.

The Parisians in their Monkeys observed, that the Pancreas had only it's figure, which made it to resemble that of Man; it's connection, and insertion being wholly particular. For it was strongly fastened to the Spleen; and the insertion of it's Ductus into the Intestine (which in Man is always near the Porus Bilarius) was two Inches distant therefrom. Blassus in his Ape describes it thus; Pancreas ventriculo substratum, solidæ admodum substantia est, nec aded molle, quam in Canibus aliisque Animalibus notatur. Longum itidem insigniter, ast latitudinis ejus, qua ne minimi digiti latitudini respondeat. He takes no notice here, how the Ductus Pancreaticus was inserted; which Drelincourt tells us in the Female Ape was eight lines above the Porus Bilarius. Pancreas connatum Lienali Cauda, & extremo Reni finistro. Ejus ductus inseritur octo lineis supra Porum Bilarium, contrà ac Canibus, substernitur immediate Ventriculo, & supersternitur brevi Intestino. Tho' in the Male Ape lie tells us, 'tis inserted into the Duodenum at the same Orifice with the Duct of the Gall; as I have already mentioned and quoted before.

⁽⁶⁵⁾ Epistola Anatomica Problematica quarta.

The Glandulæ Renales in our Pygmie were very large, and placed a little above the Kidnies as they are in Man. That on the right fide, was of a triangular; that on the left of an oblong figure. They were about three quarters of an Inch long: and almost half an Inch broad. They had the same Vessels, as there are in a Man.

The Parisians in their Monkeys, observe that the Gland called Capsula Atrabilaria, was very visible, by reason that the Kidney was without fat. This Gland was white, and the Kidney of a bright red; it's figure was triangular. Blasius in his Ape tells us, Glandula Renalis triangularis fere figure est, notabilis valde pro ratione Corporis, and gives us a figure of it, which was nothing like ours. What Drelincourt remarks in the Male Ape, is, Capsula Atrabilaria triplicem Scrobiculum habent, quarum liquor expressus linguam non ità constringit, uti in Capsulis semineis. And in the Female Ape he tells us, Ren Succenturiatus sinister ab Emulgente venam habet; idem major Dextro. This I observed in our Pygmie; but he saith nothing farther here of their Liquor, nor did I taste it in ours.

We shall now proceed to the Kidneys. In our Pygmie I did observe very little or no fat in the common or outward Membrane, usually called Adiposa: Drelincourt observed the same, nullus hic Adeps in Tunica communi vel proprià, as he tells us of his Ape. The Kidneys of our Pygmis were two Inches and a quarter long, an Inch and an half broad; and about an Inch in depth. They had not altogether so large a Sinus at the Entrance of the *Emulgent* Vessels, as there is in a Man's; and the whole appeared somewhat rounder; but their situation was the same, as were likewise the Emulgents. Having divided the right Kidney length-ways, I observed the Cortical or Glandulous Part to appear like a distinct Subflance, being a of tawny or yellowish colour; and different from the Inward or Tubulary Part; which was more entire and compacted together, than in a Man's; and was of a red colour, by means of the blood veffels which run between the Tubuli Urinarij or Secretory Ducts, which make up this part of the Kidneys. Which Vessels when inflamed and overextended, by making a Compression on these Tubuli Urinarij, may cause a Suppression of Urine; in which case Phlebotomy or Bleeding is very necessary. And without doubt was the Cause of the Success Riverius (66) met with in a Patient, who had a Suppression of Urine for three days; for upon bleeding freely, he was presently relieved, and in a short time rendered a large quantity of Urine. In this Tubulary Part of a Humane Kidney I always observe these Blood Vessels: but here usually the Cortical or Glandulous Part makes a deeper descent between the heads of this Tubulary, and divides it into several Bodies; and as many of them as appear, so many lesser Kidneys may be reckoned to make up the Body of each Kidney. In Infants the Kidney externally appears more divided

⁽⁶⁶⁾ Riverij Observ. Med. Cent. 1. Obs. 1.

than in Adult Persons; but most remarkably they are so, in a Bear, the Porpois and an Ostrich; where there are abundance of distinct small Kidneys amassed together to make up each.

The Parisians in the Kidneys of their Monkeys observe, that they were round and stat; their situation was more unequal, than in a Man; the right being much lower than the left, viz. half it's bigness. Drelincourt in the Female Ape remarks, Renes globosi, dexter intra Hypochondrium incumbit Costa 11. & 12. Sinister locum habet intra Costam ultimam. Altitudo Renis dimidiæ unciæ. Renalium venarum dextra longe elatior sinistra. Rene aperto Carnis discrimen ut in homine, exterior quidem nigricans lineis quatuor crassa, interior albicans lineis duabus.

The Pelvis of the Kidney in our Pygmie was as 'tis usually in a Man; and the Ureters had nothing remarkably different in their Structure, from the common make. They were about the bignels of a Wheat straw; and were inserted into the neck of the Bladder, as represented in our figure; rather somewhat nearer the neck, than in an Humane Bladder.

The Parisians and Blasius have no remarks upon the Ureters. Drelin-court in the Male Ape saith, Ureteres suprà Psoas Musculo & Iliaco, atque subiùs vasis Spermaticis, quibus decussaim substrati sunt etiam quibus vascula admittunt, sese reslectunt in Hypogastricam, decussantes ramos Iliacos & Ejaculatorios. And in the Female, Ureteris expansiones arcuatim reslexa ut in homine. Vasa habent superne à Renalibus, inferne à Musculis.

The Bladder of Urine in our Pygmie was of an Oblong figure, not so globous as commonly in Man, for being moderately blown up it measured four Inches in length; and two Inches and half in breadth. In other Circumstances 'twas agreeable enough with an Humane Bladder.

The Parisians tell us, that in the Female Monkey, the Neck of the Bladder had it's hole otherwise than in Women, being very far in the Neck of the Matrix, viz. towards the middle, at the place where it's roughness began, which were seen only towards the Extremity of the Ductus, near the internal Orifice. Blasius saith nothing of it in his Ape; and all that Drelincourt tells us is, Vesica Peritonaeo suspensa ut in aliis Brutis.

Before we proceed to the Parts of Generation (which remain besides to be here described) we shall a little take notice of those large Canales of the Blood, the Arteria Aorta and the Vena Cava, and the Rivulets they emit or do receive; all which I find in our Pygmie to be just the same, as they are in a Man. For from the Aorta arises here, the Arteria Caliaca; the Arteria Mesenterica superior; then the Emulgent Arteries; below them, the Spermatick Arteries; then the Arteria Mesenterica inferior; then the Trunk

Trunk divides into the Iliac Branches. So the Vena Cavatoo in our Pyg mie exactly imitated that in a Man.

How the Structure of these Vessels are in Monkeys, the Parisians do not tell us, and their sigure is very impersect; as is likewise that in Blassus, which seems altogether sicitious. What he writes, is this; Arteria magna circa Renem dextrum succumbit Venæ Cavæ, & ubi Iliacos Ramos constituit eandem supergreditur; contrà ac in Homine, Cane, aliisque animalibus sieri reperimus, ubi sinistra occupat, hinc à sinistra ad dextram progreditur supera Arteriam. So Drelincourt tells us in the Male Ape, Aorta descendens mox atque bifurcatur equitat, & adscendenti Cavæ incumbit.

We come now to the Parts of Generation; and shall begin with the Vasa Praparantia; The Arteries and Veins. The Spermatic Arteries in our Pygmie do both arise out of the Trunk of the Aorta, a little below the Emulgent Arteries, as in our figure; and after having ran a little way, they meet with the Spermatic Vein; and are both included in a common Capsula, and so do descend to the Testes. These Arteries do carry the blood to the Testes, from whence the Semen is afterwards separated; the residue of the Blood is return'd from the Testes by the Spermatic Veins; whereof that on the right side enters into the Trunk of the Vena Cava, a little below the right Emulgent Vein; and that of the lest, is emptied into the lest Emulgent Vein, just all one as it is in a Humane Body. Having injected the Spermatic Vein with Mercury, it discovered abundance of Vessels, running waving; which otherwise did not appear: and a great many of them were extreamly fine and small.

The Paristans give no description of the Spermatic Vessels in their Monkeys; and in their figure the left Spermatic Vein is omitted, or left out. Thomas Bartholine (67) in his Anatomy of a Mamomet (which he defcribes, as not having a Tail; and therefore it must be of the Ape-kind, and not a Cercopithecus, or a Monkey, as he calls it) in his figure of these parts, represents the left Spermatic Vein, emptying it felf into the left Emulgent, as it is in our Creature. Blasius therefore in the account of the Ape he dissected, must be mistaken; both in his figure and description too; for in the former, he represents the left Spermatic Vein running into the Trunk of the Cava; and justifies it in the latter; in telling us, Vasa Spermatica utroque latere ex Trunco Cava & Aorta oriuntur, & quidem altiori loco ea que sunt lateris dextri, inferiore que sinistri. But Drelincourt certainly is more in the right, who informs us, that in the Male Ape lae dissected, Vena Spermatica dextra crassa, & ab interiori trunco Cava adscendentis pollice infra Emulgentem sinistram enascitur, surculosque emittit sinistros in Membranas vicinas. Arteria Spermatica dextra à trunco anteriori

^{.(67)} Them. Barthelin. Alla Medica & Philos. Hafniens. an. 1691.65 1672.0bl. 36.

Aortæ paulo infra Emulgentem sinistram enascens sub Venå Emulgente intercruciat Cavam ascendentem, quæ superinequitat, & conjungitur Venæ Consociali eo præcisè loci ubi Vena inseritur suum in truncum. Sinistra Vena Spermatica inseriturin Emulgentem juxta truncum Cavæ, & consocialem Arteriam admittit eo præcisè loci, in quo enascitur dextra. So in the Female Ape he saith, Spermatica Vena sinistra ab Emulgente sinistra, dextra è Trunci parte anteriore, pollice insra Emulgentem sinistram.

We come now to describe the Testes, which in our Pygmie were not contained in a pendulous Scrotum, as they are in Man, but more contracted and pursed up by the outward Skin, nearer to the Os Pubis, and were seated by the sides of the Penis, without the Os Pubis; and I observed them bunching out there, before the Dissection; so that it seemed to want a Scrotum; or at least the Skin which inclosed them, was not so dilated, as to hang down like a Cod; but contracted them up nearer to the Body of the Penis; which to me seems a wise Contrivance of Nature. For hereby these Parts are less exposed to the injuries, they might otherwise receive in climbing Trees, or other accidents in the Woods. However, the outward Skin here that incloses them, performs altogether the office of a Scrotum. And if I mistake not, I observed that Sepimentum, as in a Humane Scrotum; which is made by a descent of a Membrane there, which divides each Testicle from one another.

But whether the Testes being thus closely pursed up to the Body, might contribute to that great salaciousness this Species of Animals are noted for, I will not determine: Tho' 'tis said, that these Animals, that have their Testicles contained within the Body, are more inclined to it, than others. That the whole Ape-kind is extreamly given to Venery, appears by infinite Stories related of them. And not only so, but different from other Brutes, they covet not only their own Species, but to an Excess are inclined and follicitous to those of a different, and are most amorous of fair Women. Besides what I have already mentioned, Gabriel Clauderus (68) tells us of an Ape, which grew so amorous of one of the Maids of Honour, who was a celebrated Beauty, that no Chains, nor Confinement, nor Beating, could keep him within Bounds; so that the Lady was forced to petition to have him banished the Court. But that Story of Castanenda in his Annals of Portugal (it true) is very remarkable; of a Woman who had two Children by an Ape. I shall give it in Latin, as 'tis related by Licetus; and 'tis quoted too by Anton. Deusingius (69) and others.

In hanc Sententiam faciunt (saith Fort. Licetus (70)) quæ Castanenda retulit in Annalibus Lusitaniæ de filius ex muliere, ac simio natis, mulierem

⁽⁶⁸⁾ Miscell. Curiosa German. Decur. 2. Ann. 5. Obs. 187. (69) Ant. Deusingij Fassicul. Dissertat selectide Ratione & Loquela Brutorum, p. m. 196. (70) Fortun. Licetus de Monstrorum Causis, lib. 2. cap. 68.p. m. 217. nempe

nempe ob quoddam crimen in insulam desertam navi deportatam, quum ibi exposita fuisset, eam simiorum, quibus fertilis locus erat, agmen circumstetisse fremebundum; supervenisse unum grandiorem, cui reliqui loco cesserint: hunc mulierem blande manu captam in antrum ingens abduxisse, eique cum ipsum tum ceteros copiam pomorum, nucum, radicumque variarum apposuisse; O nutu ut vesceretur invitasse; tandem à ferà coactam ad stuprum; facinus hoc multis diebus continuatum adeò, ut duos ex ferà liberos pepererit : ita miseram (quanto mors optabilior!) victitasse per annos aliquot; donec Deus mifertus navim ed Lusitanam detulisset; quumque milites in terram aquatum ex proximo ad antrum fonte exscendissent: abessetque forte fortuna simius; feminam ad invisos diu mortales accurrisse, & occidentem ad pedes supplicasse, uti se facinore, & calamitosissima servitute irent ereptum, adsentientibusque, & casum miserantibus illis, eam cum ipsis navim adscendisse. Sed ecce tibi simium supervenientem inconditis gestibus, & fremitibus conjugem non conjugem revocantem: ut vidit vela ventis data, concito cursu de liberis unum matri ostentat, minatur, ni redeat, in mare præcipitaturum; nec segniter fecit, quod minatus: tum recurrit ad antrum, & eadem velocitate ad littus rediens oftentat alterum, minatur, & demergit : subsequitur, donec unda natantem vicere. Rem totam Lusitania teste notissimam, & à Rege mulierem Ulyssipone addictam ignibus, quorundam precibus vita impetrata. lethum cum claustro perpetuo commutasse.

But to return to our Business. Our Pygmie in this Particular of the Scrotum, more resembles the Ape-kind, than a Man. For the Parissans tell us, that the Parts of Generation in three of our Subjects, which were Males, were different from those of Man, there being no Scrotum in two of these Subjects, and the Testicles not appearing, by reason that they were hid in the fold of the Groyne. It is true that the third, which was one of the Sapajous, had a Scrotum, but it was so sbrunk, that it did not appear. Or, as they afterwards express it, The Testicles were sout up in a Scrotum, which joyned them close up to the Penis. So in the Ape Blasius describes, Testes insignes satis, sacculo suo inclusi, non dependent extra abdomen, ad modum eum quo in Homine, Canibus, similibusque Animalibus aliis, sed vicini adeò sunt tendinibus musculorum Abdominis, quos vasa Spermatica transeunt, ac si iis uniti essent, sic ut potius in Inquine utroque collocatos eos dicerem quam ultra offa Pubis a Corpore pendulos. And so Drelincourt to the same purpose; Scrotum pendulum nullum est, sest Testiculi utrinque juxta Ossis Pubis summa latera, vel Spinam summam ejus decumbunt extra prorsus Abdominis cavum, & proinde extra Musculorum Epigastrij Aponeuroses.

In the other Parts I am here to describe, I find our Pygmie more conformable to the Structure of the same in a Man. For the Testes were included in a Tunica Vaginalis, and had a Cremaster Muscle; which being separated, I observed the Epididymis large, and the Body of the Testis to be about the bigness of a Filbird; and it's compounding Parts nothing at all different from those of a Man. Jacobus Sylvius

vius (71) in the Ape he dissected, observed, the Testes humanis majores.

The Parisians tell us, that in some of their Subjects the Testicles were long and strait, and but one line in breadth, and eight in length. In one of their Sapajous they were found of a sigure quite contrary, and almost as remote from the sigure of those of Man, being perfectly round. Drelincourt's account in his Ape is, Tunica Elytroides sibris carneis à Cremastere conspersa, ut in homine. Arteria Spermatica miro lusu, spiratim revolvitur super Testiculi dorsum. Testiculus autem Ventri Epididymidum adhæret, nisi sibrillis paucis de laxis, capite suo, quo Spermatica Deferentia admittit, separatur illasus, cauda autem sua, qua ejaculatoria vasa emittit, tot punctula candicantia exhibet, divulsus ab Epididymide, quot à Testiculo canaliculi protenduntur.

From the Epididymis in our Pygmie (as it is in a Man) was continued the Vas Deferens; a slender Ductus, which conveys the Semen from the Testicle to the Vesiculæ Seminales. These Vesiculæ were two cellulated Bladders placed under the neck of the Bladder of Urine; which on the outside, did seem (as it were) nothing else but the Vas Deferens dilated, and placed in a waving sigure there. And as the Body of the Testes was made up of a curious convoluted Contexture of Seminal Vessels, which running into sewer, form at last the Body of the Epididymis 3 and these Vessels afterwards passing all into one Duct, do make up the Vas Deferens: so this Vas Deferens here, being dilated and enlarged, does form the Vesiculæ Seminales. And the same is in a Man.

The Paristans here do take notice of that Passage in Aristotle I have already quoted, where he likens the Parts of Generation in the Male Ape to those of a Dog, more than a Man. But the Philosopher herein, is under a Mistake; for, as they instance, in the Penis of a Dog, there is a Bone, which is not in the Monkey's; so likewise in Monkeys, there are Vesicula Seminales, which are not to be met with in a Dog. They de-Icribe them in their Monkeys thus: The Glandulous Prostatæ were small; the Parastatæ Cyrsoides were in requital very large; they contained an Inch in length; their breadth was unequal, being four lines towards the neck of the Bladder, and a line and an half at the other end, differing herein from those of Man, who has them senderest near the neck of the Bladder. were composed of several little Baggs, which opened into one another. Caruncle of the Urethra was small, but very like to that of a Man. fins hath given us a figure of these Parts, which I do not like; as neither that of the Parisians. He describes them thus: Vesiculæ Seminales bic valde amplæ, quæ immisso slatu per ductum Seminalem Ejaculatorium insigniter intumescunt. Quod si premantur, manifestissime observamus Mate-

⁽⁷¹⁾ Jac. Sylvij Variorum Corporum dissett. Operum, p. m. 130.

riam iis contentam moveri in Meatum Urinarium, Vesicæ continuum, Equidem per foramen singulare, quod in unoquoque latere unicum est, que res occasionem videtur dedisse Jacobo Sylvio duos ductus Seminales in simila constituendi. All that Drelincourt saith of them is, Vasa ejaculatoria retrò Vesicam tendunt in Corpuscula prædura mirè ansractuosa, ut E ipsum initium Epididymidis. Which is very contormable to what I observed in our Pygmie.

Between the root of the Penis, and neck of the Bladder, is seated the Corpus Glandulosum, or the Prostata, which in our Pygmie appeared the same as in Man. The Parisians tell us in their Monkeys that they were small. Blassus in his sigure, besides the Prostates, which he saith are Glandula vesicis adstans, albidior solidiorque represents another, at the Letters (H. H.) viz. Glandula alia, major, rubicunda & plexu Nervorum, aliorumque vasorum prædita; which is no Gland, but the Bulb of the Penis. Drelincourt in his Ape tells us, Corpora Glandulosa duos velut Nates circa vesicæ cervicem suprà Sphinterem exhibent.

We come now to the Penis, which in our Pygmie was two Inches long; the girth of it at the root was an Inch and a quarter; but it grew taperer towards the end. It had no frænum, fo that the Præpuce could be retracted wholly down; and herein our Pygmie is different from a Man. The Slit of the Penis here was perpendicular as in a Man. In the figure the Parisians give us, it seems to be horizontal, as it is plainly represented by Bartholine in his third and fourth figure of his Mamomet, altho' by his second figure one would think otherwise. Whether there was any Balanus or Glans in the Penis of our Pygmie, or what it was, I am uncertain: I do not remember I observed any. In my third figure the Penis is represented decurtated at the end, and without the Praputium, which was left entire to the Skin. Dreclincourt's account of it in the Ape is this; Genitale prorsus expers est franuli ac proinde Praputium devolvitur ad radicem usque Penis , & denudatur Glans ipsa, atque Penis integer. Balanus confimilis virili, excepto fianulo, atque praterea hiatum maximum exhibet, qu'à parte Ligamenta Cavernosa desinant, & Glans ntringue prominet. At the root of the Penis of our Pygmie, we observed the Musculi Erectores to be short, and thicker proportionably than in a Man; and the Ligamentum Suspensorium larger: The Musculus accelerator Urina was large, covering the Bulb of the Cavernous body of the Grethra. The Corpora Nervosa, or the two Cavernous bodies of the Penis were divided length-ways by a Sepimentum in the middle, as in Man. In the Urethra likewise there was a Cavernous body. The Vessels of the Renis answered exactly to those of a Man.

Blasius in his Ape saith, Persis Nervosum Corpus unicum tantum habere videtur, sepimento notabili destitutum. But I am apt to think he might be mistaken; for in our Subject 'twas very plainly divided, but more remarkably

markably towards the root than forwards. What he adds afterwards, Circa radicem Penis Tuberculum exile occurrit, exteriùs carnosæ naturæ, interiùs reticulari vasorum plexu refertum, interstitia ipsius materià rubicundà occupante, by this I suppose he means the Bulb of the Penis. Drelincourt expresses it better, where he saith, Totus Penis duobus Ligamentis Cavernosis à tuberibus Ischij gaudet. In our Subject these two bodies were very large and cavernous within. But what Drelincourt adds, Vrethra planè carnosa; This was different in our Pygmie; for as I have mention'd, the sides of the Vrethra here were Cavernous too, tho' not much.

How the Organs of Generation are in the Female of this Species of Animals, I have had no opportunity of informing my felf. But by Analogy I can't but think, they must be very like to those of a Woman, since they are so even in Monkeys and Apes in several respect; tho' in some, they imitate the Structure of these Parts in Brutes. Thus the Parisians observe. The generative Parts of the Female had also a great many things which rendered them different from those of Bitches, herein resembling those of Women; there were some of them likewise which were as in Bitches, and after another manner than in Woman; for the exteriour Orifice was round and strait, as in Bitches, and the generality of other Brutes, and had * neither Nymphænor Carunculæ. The Neck of the Bladder had it's hole otherwise than in Woman, being very far in the Neck of the Matrix, viz. towards the middle, at the place where it's roughness began, which were seen only towards the extremity of the Ductus near the Internal Orifice. The Trunks of the Matrix were also different from those of Women, and resembling those of Brutes in that they were proportionably longer, and more redoubled by various turnings. The Clitoris had something more conformable to that which is seen in other Brutes that have it, than in that of Women, being proportionably greater, and more visible than it is in Women. It was composed of two Nervous and Spongious Ligaments, which proceeding from the lower part of the Os Pubis, and obliquely advancing to the sides of these Bones, did unite to form a third Body, which was ten lines in length. It was formed by uniting of the two first, which a very strong Membrane joyned together, going from one of the Ligaments to the other, besides a hard and nervous Membrane which inveloped them. They terminated at a Gland like to that of the Penis of the Male. The little Muscles, which were fastned to these Ligaments, proceeded as usual from the tuberosities of the Ischi-These Ligaments were of Substance so thin and spongious, that the wind penetrated, and made them easily to swell, when blown into the Network of the Veins and Arteries which is in this place. This Network was visible in this Subject, being composed of larger Vessels than they proportionably are in Women. It was situated as usually under the second pair of Muscles of the Clitoris. It's figure was Pyramidal, ending from a very large Basis in a point, which run along the third Ligament to it's extremity towards the Gland.

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The rest of the Parts of Generation were like to those of Women. The Neck of the Bladder had it's Muscles as in Women: For there were a great number of sleshy Fibres, which proceeding from the Sphinster of the Anus, were fastened to the sides of the Neck of the Uterus, and other such like Fibres which did come from the Sphinster of the Bladder to insert themselves at the same place. The Body of the Uterus, it's Membranes, internal Orifice, it's Ligaments as well the round as broad, and all it's Vessels had a conformation intirely like to that, which these same Parts have in Women. The Testicles, which were ten lines long, and two broad, were as in Women, composed of a great number of small Bladders, and fastned near the Membranes which are at the extremity of the Tubæ, and which is called their Fringe.

Drelincourt hath very little on this Subject, all he saith is, Urethra rubicunda solida & brevis. Vagina admodum rugosa, monticulum habens in medio, Papillis extuberans ut in Palato, Pollicem longa, transversim scissa, Pollicem lata. Orificium interiùs valde solidum. Cervix interior admodùm dura, & paulò intrà osculum internum duritie cartilaginosà.

We shall proceed now to the Parts of the Middle Venter, the Thorax; and here, as the Parts are fewer, so my Remarks will be also: and the rather, because in our Pygmie we observed so very little difference from the Structure of the same Parts in a Man. I must confess I can't be so particular in all Circumstances, as I would, because for the preserving the Sceleton more entire, I did not take off the Sternum. However, I observed enough to satisfie my self with what I thought most material.

This Cavity was divided from the Abdomen by the Diaphragm, whose Aponeurosis or Tendon seemed rather larger than in a Man: and the second Muscle which encompassed the Gula, as it passes through it, was very fair.

I made no Remarks upon the Pleura, and Mediastinum: The Thymus in our Pygmie was about an Inch long, and placed as 'tis in Man; downwards 'twas divided, but upwards 'twas joyned together. So in a Man I have often observed it divided. Generally this part is larger in Infants and Embrios than in grown Persons, for the Reasons I have frequently mentioned in my Anatomical Lectures. The Paristans observed in their Monkeys that the Thymus was large. Blasius and Drelincourt have no Remarks about it.

The Lungs in our Pygmie had three Lobes on one side, and buttwo on the other; sive in all. Their Colour, Substance, Situation, and all Circumstances exactly resemble a Man's. The Parisians tell us, that in their Monkeys the Lungs had seven Lobes, three on the right side, and as many

many on the left, the seventh was in the Cavity of the Mediastine, as in the generality of Brutes. This again makes a notable difference between the internal parts of the Ape, and those of Man, whose Lungs have generally at the most but five Lobes, oftener but four, and sometimes but two. Vesalius affirms that he never saw in Man this fifth Lobe, which he reports to be in Apes, Supposing that they have but five. The Passage that the Parisians hint at in Vesalius is this, Lobum autem qui in Canibus, simisque Venæ Cava Caudicem susfulcit, nunquam in homine observavi, & hunc illo destitui certo certius scio, quamvis interim Galeni locus in septimo de administrandis Dissectionibus mihi memoria non exciderit, quo inquit, quintum hunc Pulmonis Lobum eos non latêre, qui recte sectionem administrant; innuens Herophilo & Marino ejusmodi Lobum fuisse incognitum, uti sane fuit, cum illi Hominum Cadavera, non autem cum ipso, simiarum ac Canum duntaxat aggrederentur, in quibus prasenti Lobo nihil est manifestius. (72) Tho' Galen be herein mistaken, Vesalius certainly is too severe in his Censure, in charging him, that he never dissected any thing but Apes and Dogs; for the contrary evidently appears in abundance of Instances, that might be produced. And one would think he had not diffected Apes and Monkeys in making but five Lobes in their Lungs. whereas in either there are more. In what he argues, that this fifth Lobe in a Man could not lie upon the Vena Cava; because in a Man the Pericardium is fastened to the Diaphragm, and the Vena Cava enters there, and so immediately passes to the Heart; this is true, and the same I observed in our Pygmie. So that in the formation of this Part, our Pygmie exactly resembles a Man; and is different from both the Monkey and Ape-kind. The former we have feen; as to the latter. Drelincourt tells us in the Male Ape; Pulmo dexter quadrifidus, Lobus insimus omnium crassissimus, superior minus crassus, intermedius reapse medius situ & magnitudine. Quartus demum crenam insculptam habet, quà parte Cavæ fulcrum præbet. Pulmo sinister bisidus, & Lobus ejus Superior bifurcatus. So in the Female Ape, Lobi Pulmonis dextri totalitèr divisit IV, quorum superior, bistidus totus, adeo ut sint quinque in ea parte : sinister Pulmo bistidus totus, & Lobus superior ultrà dimidium sui divisus.

The Trachea or Wind-pipe in our Pygmie was altogether the same as in a Man; consisting of a regular order of Cartilaginous Annuli, which were not perfectly continued round; but towards the Spine, were joyned by a strong Membrane. Drelincourt saith of it, Trachee annuli se has bent uti Intestinorum spira, nervosis Membranis colliguatur. The Comparison, I think, is not so well made.

⁽⁷²⁾ Andr. Vefalij de Cortoris humani fabrica, lib. 6. cap. 7. p. 724.

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For the present we will leave following the Duct of the Trachea up to the Larynx, (the Part according to the Method of Nature, we should have began with) and make some farther Observations, on those under our present view. In the Cavity of the Thorax therefore, (as I have remark'd) the Pericardium or that Bag that incloses the Heart in our Pygmie, was fastened to the Diaphragm, just as 'tis in Man. I must confess, when I first observed it, I was surprised, because I had not seen it so in Brutes before. And Vesalius, and others make it as a peculiarity to a Man. I will quote Vesalius's words, and make an Inference from our Observation, and so proceed.

Vesalius (73) therefore tells us, Caterum Involucri mucro, & dextri ip-sius lateris egregia portio Septi transversi nerveo circulo validissimè, amploque admodùm spatio connascitur, quod Hominibus est peculiare. Simiis quoque & Canibus & Porcis involucrum à septo multùm distat. Tantùm abest ut ipsi magnâ sui portione connecteretur, adeò sanè ut & hinc luce clarius constet, Galenum hominis viscera aut oscitantèr, aut neutiquàm spetâsse, Simiasque & Canes nobis describentem, immerito veteres arguisse. He can't forbear at all turns to have a sling at Galen: But he is here in the right, and Galen mistaken. So Blancardus (74) tells us, Homo pra cateris Animalibus hoc peculiare habet, quod ejus Pericardium Septi transversi medio semper accrescat, cum idem in Quadrupedum genere liberum, & aliquanto spatio ab ipso remotum sit.

Now our Pygmie having the Pericardium thus fastened to the Diaphragm, it seems to me, as if Nature designed it to be a Bined and to go erect. For therefore in a Man is the Pericardium thus fastened, that in Expiration it might affift the Diastole of the Diaphragm: for otherwise the Liver and Stomach being so weighty, they would draw it down too much towards the Abdomen; so that upon the relaxation of it's Fibres in it's Diastole, it would not ascend sufficiently into the Thorax, so as to cause a Subsidence of the Lungs by lessening the Cavity there. In Quadrupeds there is no need of this adhasion of the Pericardium to the Diaphragm: For in them, in Expiration, when the Fibres of the Diaphragm are relaxed, the weight of the Viscera of the Abdomen will easily press the Diaphragm up, into the Cavity of the Thorax, and so perform that Service. Besides, was the Pericardium fastened to the Diaphragm in Quadrupeds, it would hinder it's Systole in Inspiration; or it's descent downwards upon the contraction of it's Muscular Fibres; and the more, because the Diaphragm being thus tied up, it could not then so freely force down the weight of the Viscera, which are always pressing upon it, and consequently not sufficiently dilate the Cavity of the Thorax, and therefore must hinder their *Inspiration*. Thus we see how necessary it is,

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⁽⁷³⁾ Andr. Vesalij de Corporis Humani sabrica, lib.6.cap.8.p.m.728. (74) Steph: Blancardi Anatomo reformat. cap.2. p.8.

that in a Man the Pericardium should be fastened to the Diaphragm; and in Quadrupeds how inconvenient it would be; that from hence I think we may safely conclude, that Nature design'd our Pygmie to go erect, since in this particular 'tis so like a Man; which the common Apes and Monkeys are not; and tho' they are taught to go erect, yet 'tis no more than what Dogs may be taught to do.

We proceed now to the Heart; where we observed that in our Pygmie, it's Auricles, Ventricles, Valves and Vessels were much the same as they are in a Man's. It's Cone was not so pointed, as in some Animals, but rather more obtuse and blunt, even more than a Man's. What Avicenna (75) remarks of the Heart of an Ape, having a double Cone, must be accidental and extraordinary: for he tells us, Et, jam repertum est Cor cujusdam Simij habens duo Capita. And a little after, he denies the Heart to be a Muscle; Jam autem erravit (faith he) qui existimavit, quòd sit Lacertus, quamvis sit similium rerum in eo, verum motus ejus non est voluntarius. The Person he hints at, I suppose, is Hippocrates, who so long ago afferted this; H rapsin (faith (76) Hippocrates) μῶς Ἐςτν κάρθα ἰζυνρός, ἐ τῶς νδύρω, άλλα πιλημαίι σαρκός. Cor musculus est validus admodum non Nervo, verum Carnis spissamento. And Steno and Dr. Lower since have shewed us the way of diffecting it, and have made it most evident that 'tis Muscular; and it's motion is such; but as Avicenne observes, 'tis not a volintary motion, but involuntary. 'Tis pity we had not a better Translation of his Works; for unless it be some particular Pieces, the rest is most barbaroully done, as appears from that little I have quoted of him. But to return to our Pygmie; the magnitude and figure of the Heart here, was exactly the same as represented in our Scheme, where part of the Pericardium is left lying on it. Both in the right and left Auricle and Ventricle, I observed two Polypous Concretions, which plainly represented the Valves both in the Arteria Pulmonalis, and Aorta. I must confess by what I have hitherto observed of them, (and I have very frequently met with fuch Concretions in Humane Bodies) I cannot think these Polypus's to be any thing else, than the Size of the Blood, or the Serum coagulated after Death. The Observation I formerly gave (77) of a Polypus in the Trachea and Bronchie of a Patient troubled with an Hemoptoe, in it's kind I think remarkable.

The Parisians observe that the Heart of their Monkey was a great deal more pointed, than it usually is in Man; which is likewise a Character of Brutes. Yet in the interiour Superficies of it's Ventricles, it had that great number of Fibres and sleshy Columns, which are seen in Men. Drelincourt in his Ape observes, Cor solidum in ventriculo sinistro, laxum in dextro; pradurus Conus ejus: Serum in Pericardio salsum. Vasa Coronaria tumida, prasertim circà Ventriculum. Adeps circà ea nullus.

⁽⁷⁵⁾ Avicenna lib.3. Fen.2. Truct.1. p.m.670 (76) Hipp. de Corae, p.m.270. (77) Vide Tho. Bartho-lini Alla Med. & Philof. Hafnienf. Vol. 5. Obs. 30. p.94.

There was nothing farther, I think, that I observed peculiar in the Thorax of our Pygmie. I shall now therefore follow the Duct of the Trachea up to the Throat. And here as in Man, I observed placed the Glandula Thyroidea, upon the Cartilago Scutisormis of the Larynx; 'twas red and spungy, sull of Blood vessels, not much unlike the inward Part of the Spleen, but somewhat firmer. In a Man I have always observed this part to be red. Drelincourt's Account of it in the Ape is, Glandulæ Thyroidea & Cricoidea crasse sunt, & submigricantes; & illus permeant surculi Corotidis Arteria & Jugularis vena externa; cum surculis Nervi Recurrentis. There is no sensible account yet given of the use of this part, as I have met with: And I think that from a Comparative Survey of it in other Animals, and a strict Observation of it's Structure, and the Vessels that compound it, it were not difficult to assign other uses of it more satisfactory.

As to the Larynx in our Pygmie, unless I enumerate all the Cartilages that go to form it, and the Muscles that serve to give them their Motion, and the Vessels that run to and from it, and the Membranes and Glands, there is nothing that I can further add, but only say, that I found the whole Structure of this Part exactly as 'tis in Man. And the same too I must say of the Os Hyoides. The Restection that the Paristans make upon the observation of this, and it's neighbouring Parts in the Dissection of their Monkey's, I think is very just and valuable. And if there was any farther advantage for the forming of Speech, I can't but think our Pygmie had it. But upon the best Enquiry, I was never informed, that it attempted any thing that way. Tho' Birds have been taught to imitate Humane Voice, and to pronounce Words and Sentences, yet Quadrupeds never; neither has this Quadru-manous Species of Animals, that so nearly approaches the Structure of Mankind, abating the Romances of Antiquity concerning them.

The Parifians therefore tell us, That the Muscles of the Os Hyoides, Tongue, Larynx, and Pharynx, which do most serve to articulate a word, were wholly like to those of Man; and a great deal more than those of the Hand; which nevertheless the Ape, which speaks not, uses almost with as much perfection as a Man. Which demonstrates, that Speech is an Action more peculiar to Man, and which more distinguishes him from Brutes than the Hand; which Anaxagoras, Aristotle, and Galen have thought to be the Organ which Nature has given to Man, as to the wifest of all Animals; for want perhaps of this Reflection: For the Ape is found provided by Nature of all those marvellous Organs of Speech with so much exactness, that the very three small Muscles, which do take their rife from the Apophyses Styloides, are not wanting, altho' this Apophysis be extreamly small. This particularity does likewise shew, that there is no reason to think, that Agents do perform such and such actions, because they are found with Organs proper there-H 2 mesto.

unto; for, according to these Philosophers, Apes should speak, seeing that they have the Instruments necessary for Speech.

I shall not engage in this Argument here, because it would be too great a digression; hereafter, it may be, I may take an occasion to do it; for this is not the only Instance in our Subject, that will justifie such an Inference: tho' I think it so strong an one, as the Atheists can never answer.

We shall take notice next of the *Vvula*, a Part of some use too in forming the *Voice*; for where 'tis missing or vitiated, it much alters the *sound*; and even this I sound in our *Pygmie* to be altogether alike as in *Man*. It had those two Muscles which are in a *Man*, the *Musculus Sphæno-Palatinus*, and the *Pterigo-Palatinus* seu Sphæno-Pterigo-Palatinus; the Tendon of which last, passed over the *Pterigoidal Process*, which was to it like a *Trochlea* or *Pully*, and was afterwards inserted as in a *Man*.

The Parisians tell us that the Uvula, which is in no other Brutes, was found in our Apes (it should be Monkeys) wholly resembling that of Man. And so Blasius, Uvula in Animalibus alies prater hominem & simiam nunquam à me observata. All that Drelincourt saith of it is, Uvula sirma est & carnosa.

The Tongue of our Pygmie in all respects, as I know of, resembled a Humane Tongue; only because 'twas somewhat narrower, it seemed longer: And under the Tongue in our Pygmie we observed the Glandulæ Sublinguales as in Man.

Drelincourt observes in the Ape, Linguæ basis non tantum incumbit Hyoidi superno, sed amplectitur ejus tuber inferius postice: Papillas habet Bovinis similes, & tunicam propriam permeantes.

At the Root of the Tongue of each fide were placed the Tonfillæ in our Pygmie, as they are in a Man. They were protuberant and hard, and not so foraminulous, as usually in Man; very probably being vitiated by the Ulcer in the Cheek. For Drelincourt tells us in the Ape, Amygdalæ cavæ, pertusæ & Scrobiculos habentes.

The Parotides under each Ear in our Pygmie were large, and of the same Figure as in Man. Parotis glandula contegit Musculum Sterno-Mastoideum, articulationem Maxilla & Musculi Postoralis portionem, saith Drelincourt.

The Maxillary Gland of the left fide (where the Ulcer in our Pygmie was) had two of it's Lobes, globous and protuberant, above the Surface of the other Part, being infected and tumefied by the Ulcerous Matter. These Glands were about an Inch long, and about half an Inch broad; and

and there were two other small Glands a little distant from the head of the Maxillary. Glandula salivales ad angulum Maxilla Inferioris oblonga, laxa, molles, albicantes, saith Drelincourt.

But before I leave these Parts, there are some others I must here take notice of, in this Comparative Survey; which tho' they are not to be met with, either in our Pygmie or in Man; yet are very remarkable, both in the Monkey and Ape-kind, viz. those Pouches the Monkeys and Apes have in their Chaps, which serve them as Repositories for to hoard up, upon occasion, food in; when they are not disposed for the present to devour it; but when there Stomachs serve them, they then take it out thence and so eat it. That the Ape-kind has these Pouches, Drelincourt does inform us; where he tells us, Musculus latissimus Mentum universum & buccas obtegit, qua parte simia saccum formant, intra quem Esculenta recondunt. Pling is very express, That both Satyrs and Sphinges (which I make to be of the Monkey kind) have them likewise, (78) Condit in Thefauros Maxillarum Cibum Sphingiorum & Satyrorum Genus. Mox inde-Jensim ad mandendum manibus expromit; & quod formicis in annum solenne est, his in dies vel horas. The account the Parisians give us of this Pouch in the Mouth of the Monkeys they dissected, is this; That it was composed of Membranes and Glands, and of a great many Musculous and Carnous Fibres. It's situation was on the outside of each Jaw, reaching obliquely from the middle of the Jaw to the under part of it's Angle, passing under a part of the Muscle called Longissimus. It was an Inch and an half long, and almost as broad towards it's bottom. It opened into the Mouth between the Jaw and the bottom of the Gum. 'Tis into this Pouch that Apes use to put what they would keep; and it is probable that the Musculous Fibres which it has, do serve to shut and open it, to receive and put out what these Animals do there lay up in reserve. Now our Pygmie having none of these Pouches in it's Chaps, nor nothing like them; 'tis a notable difference both from the Monkey and Ape-kind, and an Agreement with the Humane.

We should now come to discourse of the five Senses: But there is little I have at present to remark of them. For in the Organs of those of Tactus, and Gustus, there was no difference I could observe between our Pygmie and a Man. As to those of Hearing and Smelling, I shall make my Observations upon them, in the Osteology. Here therefore I shall only remark some things of the Eyes, the Organs of Seeing; and so proceed to the Brain.

The Bony Orbit of the Eye in our Pygmie was large, conical, and deep. Here we observed the Glandula Lachrymalis, and Innominata. The Bulb of the Eye in proportion to the Bulk of the Body, was rather larger than in a Man. The Iris was of a light hazel Colour: The Pu-

pil round and large: The Crystalline Humour Sphærical or Lentisormis, and almost as large as in a Man. The Optic Nerve was inserted exactly as in a Man. The Tunica Choroides rather blacker than in a Man. And whereas in Brutes, that are prono Capite, there is usually a Musculus Septimus, which from it's use is call'd Suspensorius; in our Pygmie there was none of this Muscle. All the other Muscles of the Eye, were exactly the same as in Man. This seventh Muscle is also wanting in the Ape, as appears by the sigures Casserius (79) has given us of the Eye of an Ape. Neither the Parisians, nor Blasius, nor Drelincourt do give us any Remarks upon this Part.

We proceed now to the upper Venter, the Head, where at present we shall examine the Brain; that Part, which if we had proceeded according to the Method of Nature in forming the Parts, we must have began with. For I can't but think, as 'tis the first Part we observe formed, fo that the whole of the Body, i. e. all the Containing Parts, have their rise from it. But I shall not enlarge upon this Argument here; it would be too great a digression, to give my Reasons for such an Hypothesis. From what is generally received, viz. That the Brain is reputed the more immediate Seat of the Soul it self; one would be apt to think, that fince there is so great a disparity between the Soul of a Man, and a Brute, the Organ likewise in which 'tis placed should be very different too. Yet by comparing the Brain of our Pygmie with that of a Man; and, with the greatest exactness, observing each Part in both; it was very surprising to me to find so great a resemblance of the one to the other, that nothing could be more. So that when I am describing the Brain of our Pygmie, you may justly suspect I am describing that of a Man, or may think that I might very well omit it wholly, by referring you to the accounts already given of the Anatomy of an Humane Brain, for that will indifferently serve for our Pygmie, by allowing only for the magnitude of the Parts in Man. Tho' at the same time I must observe, that proportionably to the Bulk of the Body, the Brain in our Pygmie, was extreamly large; for it weighed (the greatest part of the Dura Mater being taken off) twelve Ounces, wanting only a Dram. The Parifians remark, that in their Monkeys the Brain was large in proportion to the Body, it weighing two Ounces and a half: which nevertheless was inconsiderable to ours; fince our Prgmie exceeded not the Stature and Bulk of the Common Monkey or Ape; so that herein, as in a great many other Circumstances, our Premie is different from the Common Monkey and Ape, and more resembles a Man.

I can't agree with Vefalius, that the Structure of the Brain of all Quadrupeds, nay all Birds, and of some Fishes too, is the same as in Man.

⁽⁷⁹⁾ Jul. Casserij Placentini Pentastheseion, h. e. de quinque sensibus. Vide de Organo visus. Tab. 3. fig. 12, 13.

There is a vast difference to be observed in the formation of the Parts. that serve to compose the Brain in these various Animals. And tho' the Brain of a Man, in respect of his Body, be much larger than what is to be met with in any other Animal (for Vefalius makes the Brain of a Man to be as big as those of three Oxen) yet I think we can't safely conclude with him, that Animals, as they excell in the largeness of the Brain, so they do likewise in the Principal Faculties of the Soul: For if this be true, then our Pygmie must equal a Man, or come very near him, since his Brain in proportion to his Body, was as large as a Man's. (80) his words are these; Cerebri nimirum constructione Simia, Canis, Equus, Felis, & Quadrupeda que hactenus vidi omnia, & Aves etiam universa, plurimaque Piscium genera, omni propemodum ex parte Homini correspondeant : neque ullum secanti occurrat discrimen, quod sechs de Hominis. qu'am illorum Animalium functionibus statuendum esse prescribat. Nisi forte quis meritò dicat Cerebri molem Homini, Perfectissimo sanè quod novimus Animali, obtigisse maximam, ejusque Cerebrum etiam tribus Boum Cerebris grandius reperiri: & dein secundum Corporis proportionem mox Simia, dein Cani magnum quoque non secus obtingere Cerebrum, quàm si Animalia Cerebri: tantum præstarent mole, quanto Principis Anima viribus apertius viciniúsve donata videntur.

Since therefore in all respects the Brain of our Pygmie does so exactly resemble a Man's, I might here make the same Resection the Paristans did upon the Organs of Speech, That there is no reason to think, that Agents do perform such and such Actions, because they are found with Organs proper thereunto: for then our Pygmie might be really a Man. The Organs in Animal Bodies are only a regular Compages of Pipes and Vessels. for the Fluids to pass through, and are passive. What actuates them are the Humours and Fluids: and Animal Life confifts in their due and regular motion in this Organical Body. But those Nobler Faculties in the Mind of Man, must certainly have a higher Principle; and Matter organized could never produce them; for why elfe, where the Organ is the fame, should not the Actions be the same too? and if all depended on the Organ, not only our Pygmie, but other Brutes likewise, would be too near akin to us. This Difference I cannot but remark, that the Ancients were fond of making Brutes to be Men: on the contrary now, most unphilosophically, the Humour is, to make Men but meer Brutes and Matter. Whereas in truth Man is part a Brute, part an Angel; and is that Link in the Creation, that joyns them both together.

This Digression may be the more pardonable, because I have so little to say here, besides just naming the Parts; and to tell you (what I have already) that they were all like to those in a Man: For the Dura Mater, as a Common Membrane, firmly secured the situation of the whole Brain, strictly

⁽⁸⁰⁾ And. Vefalij de Corporis Humanis fabrica, lib. 7. cap. 1. p. 773,774.

adhering to the Sutures of the Cranium above; before to the Crista Galli; and at the basis so strongly, that it was not easily to be separated. By it's anterior Process of the Falx, it divided the two Hemispheres of the Cerebrum; by it's transverse Process, which descended deep, just as in a Man, it separated the Cerebrum and Cerebellum: it enjoyed the same Sinus's, and in all Particulars' twas conformable to what is in a Man.

The Pia Mater in our Pygmie was a fine thin Membrane which more immediately covered the Substance of the Brain, and may be reckoned it's proper Membrane; infinuating it's felf all along between the Anfractus of the Cerebrum and the Circilli of the Cerebellum; being copiously furnished with numerous Branches of Blood Vessels, but they appear'd more on the Convex Part, then at the Basis.

The figure of the whole Brain in our Pygmie was globous; but by means of a greater jutting in of the Bones of the Orbit of the Eye, there was occasioned a deeper depression on the Anterior Lobes of the Brain in this place, than in a Man. As to other Circumstances here, I observed all Parts the same. The Anfractus of the Cerebrum were alike; as also the Substantia Corticalis and Medullaris. On the basis of the Brain, we may view all the Ten pair of Nerves exactly situated and placed as in a Humane Brain; nor did I find their Originations different, or any Particularity that was fo. I shall therefore refer to the figures I have caused to be made of the Brain, and their Descriptions; where we may observe the Arteria Carotides, Vertebrales, and Communicans, and the whole of the Blood Vessels in our Pygmie to be the same as in a Man. Here was the Infundibulum, the Glandulæ duæ albæ pone Infundibulum, the Medulla Oblongata with it's Annular Protuberance, and the beginning of the Medulla Spinalis, just as in Man. I am here only a Nomenclator, for want of Matter to make particular Remarks upon. And the Authorrs that have hitherto furnished me with Notes, how the same Parts are in Apes and Monkeys, do fail me now; it may be, finding here nothing new or different, they are therefore silent. All the Paristans do tell us of the Brain in their Monkeys is this:

The Brain was large in proportion to the Body: It weighed two Ounces and an half. The Dura Mater entered very far to form the Falx. The Anfractuosities of the External part of the Brain were very like those of Man in the Anteriour part; but in the inward parts before the Cerebellum, there was hardly any: they in requital were much deeper in proportion. The Apophyses, which are called Mamillares, which are great Nerves that do serve to the smelling, were not soft, as in Man, but hard and membranous. The Optick Nerves were also of a Substance harder and sirmer than ordinary. The Glandula Pinealis was of a Conical sigure, and it's point was turned towards the hinder part of the Head. There was no Rete Mirabile: for the Carotides being entered into the Brain, went by one single Trunk on each side

of the edge of the seat of the Sphenoides to pierce the Dura Mater, and to be distributed into the basis of the Brain. In our Subject I thought the Anfractus of the Brain much the same, both in the anteriour and hinder part. Nor did I observe any difference in the Mamillary Processes or Optick Nerves, or Rete Mirabile, but all, as in a Man.

The Cerebellum in our Pygmie was divided by Circilli, as in Man. It had likewise the Processus Vermisormes. Dr. Willis (80) makes this Remark upon this Part: Cerebellum autem ipsum, in quibusvis serè Animalibus, ejusdem sigura & proportionis, nec non ex ejusmodi lamellis constatum reperitur. Qua Cerebrum diversimodè ab homine consiguratum habent, uti Volucres & Pisces, item inter Quadrupedes Cuniculi & Mures, quorum Cerebra gyris seu convolutionibus carent; his Cerebelli species eadem, similis plicarum dispositio & Partium caterarum compositura existunt. 'Tis from hence he forms lis noted Hypothesis, How that the Animal Spirits that are bred in the Cerebrum, do serve for Voluntary Motions; and those in the Cerebellum for involuntary.

If we survey the inward Parts of the Brain in our Pygmie, we shall here likewise find all exactly as in a Humane Body; viz. The Medullary Substance running up between the Cortical; The Concameration, the Corpus Callosum, the Fornix and it's Crura the same. The Ventricles large and spatious. The Corpora Striata, the Thalami Nervorum Opticorum all alike. The Plexus Choroides the same; as were also the three Foramina as in Man; The Glandula Pinealis proportionably large. The Protuberantie Orbiculares; i.e. The Nates and Testes in our Pygmie were the same as in Man; whereas in Brutes (as Dr. Willis well observes) the Nates are always proportionably larger than in Man; but it was not so in our Pygmie. The Valvula major here was very plain. The Cerebellum being divided, the Medullary Parts represented the Branches of Trees, as a Man's The Medulla Oblongata and Medulla Spinalis the same as the Humane; and all Parts being so conformable here to a Humane Brain, I thought it sufficient just to name them, since I have caused to be made two figures of the Brain in our Pygmie from the Life, and in its Natural Bigness, where all the Parts are plainly represented to the Eye.

⁽⁸⁰⁾ Willis Cerebri Anat. cap.3. p.22.

THE

OSTEOLOGY,

OR

DESCRIPTION

OF THE

BONES.

E come now to the Ofteology, to give a Description of the Sceleton of our Pygmie, by comparing which, with that of a Man, an Ape and a Monkey, we may observe (as we have already of the other Parts) that here too, our Pygmie more resembles a Man than Apes and Monkey's do; but where it differs, there 'tis like the Ape-kind. Galen (as I have already quoted him, vid. p. 15.) tells us that an Ape of all Creatures is the most like to a Man in the Viscera, Muscles, Arteries, Veins and Nerves, because 'tis so in the Structure of the Bones. But it may be questioned, Whether even the Structure of the Bones themselves, does not depend upon that of the Muscles: fince in their first Formation, they are fost and vascular; then Cartilaginous, and in time at last are hardened into Bones. In Ricketty Children too, we find, that even the Bones are rendered crooked, by the Contraction of the Muscles, how much more, when they are tender and foft, might they be bended any way by them. But by understanding exactly the Structure of the Bones, we shall the better apprehend the Rife and Insertions of the Muscles. And for the better attaining this, Galen in the same Chaper (81) recommends to his Students, when they cannot have an opportunity of Consulting an Humane Sceleton, then to

⁽⁸¹⁾ Galen. de Anat. administr. lib. 1. cap. 3. p. m. 29, 39.

make use of those of Apes; not that he thinks them both alike, but the most like: and tells them, that it was worth their while on this account to go to Alexandria, where the Physicians taught their Scholars the Doctrine of the Bones from the Inspection of Humane Sceletons themselves. which he much prefers before Books. But lince in his time Humane Sceletons were not to be had but at Alexandria, for the supplying this Defect, they might observe the Bones of Apes; and after that, they might read his Book De Ossium Natura, and to do as he did, visit the Sepulchres and Graves, and to observe there the Humane Bones themselves: And he tells us of two Sceletons he made use of; One that the River had washed out of a Tomb, where the Flesh was corrupted and washed away, yet the Bones held together. The other was of a Thief that was Executed, who was so much hated, that none would bury him; but the Birds pick'd off his Flesh, and left his Bones as a Sceleton. But saith he, อบ 🖰 ยัง แกละ ขอเราอง แกละง ยาบาทอนร อาสอนอน กาอากอง ซึ่ง ลังสายแล้ง, ยิลา ละใช้ หลาลงงหองง ะหลรอง รลิง อริเติง ลันอเอเติร, &c. i.e. If you can't happen to see any of these, dissect an Ape, carefully view each Bone, &c. Then he advises what fort of Apes to make choice of as most resembling a Man: And concludes áπάν ων, ώς έφεω, των ός ων καλανοήσαι χρη τιω φύσιν έντ' όπο άνθρώπε σώμαλι, είτ' εν π. Ικκ εί διωνθείης· άμεινον δο 67τι άμφοιν, είθ έξης 67τι τίω τῶν μωων αναδομίω ελθείν, i. e. One ought to know the Structure of all the Bones either in a Humane Body, or in an Ape's; 'tis best in both; and then to go to the Anatomy of the Muscles.

What Galen advised, no doubt he practised himself, and observed both. But Andreas Vesalius will not allow him this: For in his great and excellent Book De Corporis Humani Fabrica, he all along tell's us, that Galen gives us rather the Anatomy of Apes than of a Man: And in his Epistola ad Joachimum Roelants de Radice Chynæ, his chief Design is to prove, that Galen never dissected a Humane Body: and that he is often mistaken in the History of the Parts, as also in their Uses; and that his Reasonings are frequently unconclusive.

Upon the coming out of Vesalius his first Book, he was warmly opposed by Jacobus Sylvius a Physician at Paris, who had formerly been Vesalius his Master in Anatomy; in a Treatise stiled Depulsio Vesani cujusdame Calumniarum in Hippocratis & Galeni Rem Anatomicam. This was answered not long after by Renatus Henerus, who published another Treatise, viz. Adversus Jacobi Sylvij Depulsionum Anatomicarum Calumnias pro Andrea Vesalio Apologia. Sylvius afterwards procures a Disciple of his to write against Vesalius, who puts out, but unsuccessfully, Apologia pro Galeno contra Andream Vesalium Bruxellensem, Francisco Puteo Medico Vercellensi Authore. A Scholar of Vesalius, Gabriel Cunaus, makes a Reply to Puteus in his Apologiae Francisci Putei pro Galeno in Anatome examen. Upon Vesalius his leaving Rome, a Disciple of his, Realdus Columbus, grew very samous for Anatomy, but ungrateful to his Master, as Vesalius

complains in his Book De Radice Chynæ, and his Examen Observationum Falloppij. But Gabriel Falloppius was always kinder to him, and mentions him with the greatest Honour, and calls him Divine; tho' in several things he dissents from him, which occasioned Vesalius his putting out his Observationum Falloppij Examen.

Realdus Columbus was succeeded at Rome by Bartholomaus Eustachius; a Man very knowing and curious in *Anatomy*, but extreamly devoted to Galen, as one may see by this Passage; Ut uno verbo me expediam, talem eum esse (sc. Galenum) asseverem, qualem opinor neminem in posterum suturum, fuisse nunquam plane confirmo. Quare dubiis in rebus dissentire ab eo honeste non possumus, sed magis expedire, decereque putandum est, illo Duce errare, quam his illisve Magistris hodie erudiri, ne dicam cum iis vera sentire (82). Too great a Partiality for so ingenious a Man. And it may be, this was one Reason why Vesalius so much endeavoured to lessen Galen's Authority; because the Humour of the Age was such, that nothing then was to be received, but what was to be met with in him. But certainly they are in the wrong, who, because Galen is mistaken in fome things, do now wholly reject him, and lay him aside as good for nothing. The wifest and most experienced in the Art may read his Works, and in reading him, if just and not prejudiced, will acknowledge, a Satisfaction and an Advantage they have received from him.

The Design of Bartholomaus Eustachius in writing that Discourse of his, Ossium Examen, is to justifie Galen, that he did not only dissect Apes, but Humane Bodies likewise; and that his Descriptions are conformable to the Parts in Man, and not to Apes and Monkeys. He therefore draws a Comparison between the Sceleton of an Ape and a Man; and shews wherein they disser; and how far Galen's Descriptions of those Parts are disserent from those in an Ape. Volcherus Coiter has likewise made the same Comparative Survey, in his Analogia Ossium Humanorum, Simia & vera & caudata, qua Cynocephali similis est, atque Vulpis. In most things I find Coiter to follow Eustachius, but Eustachius I think is to be preferred, because in his Annotationes de Ossibus, he quotes the Texts of Galen at large. Johannes Riolanus the Son hath wrote upon the same Argument likewise; viz. Simia Osteologia sive Ossium Simia & Hominis Comparatio; and he being later than either of the former, and having made use of all before him, he may be thought to be the most exact.

In giving therefore an Account of the Ofteology of our Pygmie, and the better to compare it's Sceleton with that of a Man, and an Ape, and a Monkey, I thought I could not do better, than to insert this Discourse of Riolanus; and by Commenting upon it, to shew wherein our Pygmie a-

grees or differs. This I thought the most compendious way, and what other Observations I have, that conveniently I can't insert in my Comment, I shall add at the close of this Discourse. And tho' I may be cenfured by some for discoursing so largely upon an Ape, yet this Apology I have to make, That 'tis an Argument that has exercised the Pens of the greatest Anatomists we have had; and ours being one of a higher degree than the Common sort, and in so many Particulars nearer approaching the Structure of Man, than any of the Apekind, and it being so rare and uncommon, it may the more excuse me, if I endeavour to be as particular as I can. But in some measure to avoid this Fault, I shall omit Riolan's first Chapter, which is but Præfatory, and begin with the second.

CAP. II.

De Capitis & Faciei Ossibus.

CImia Caput (a) rotundum est, humano simile, cynocephali verò caput oblongius. Utrinfque (b) Suturæ adeo funt obscuræ, ut earum nullum appareat vestigium. Propterea potius harmonia dici merentur, quam sutura quia rerum consutarum siguram non æmulantur. Attamen Volcherus Coiter suturas attribuit simiis, parum ab humanis discrepantes. In cercopitheco squammiformes desiderantur. (c) Frontis Os in calvariæ basis sede, ad conjun-Etionem Ossis sphenoidis, transvers à potius line à qu'am sutura distinguitur: ampla oblongaque scissura homines divisum obtinent, in quam aliud Os instar cribri perforatum conjicitur, arctissimeque constringitur. At (d) Simiæ Os Frontale ea in parte omnino continuum existit, & quâ nasus principium sumit, non longe ab ea sede, que frontem constituit, alto & rotundo foramine parumper à lateribus compresso, illo foramine quod nervum visorium emittit, nonnihil ampliori, excavatum est. In ejus humiliori profundiorique sede, quatuor aut quinque alia foramina recta & lata cernuntur. In simia caudata (e) Os Ethmoides admodum profunde in nares descendit, paulo infra eans regionem ex qua nasus exoritur. Harmonia per medium dividitur. Gutrimque ab Osse frontis, quod etiam profunde descendit essingi videtur. (f) Superficies sellæ Sphenoidis ad narium principium in Osse frontis non est plana & aqualis ut in homine, sed est eminentissima. In posteriori sella eminentia glandulam excipiente, reperitur foramen exsculptum. In sellæ (g) hujus substantia nulla latet cavitas ut homine. (h) Cavitates illæ quæ in apophysibus pterygoideis exsculptæsunt, maximæ & profundæ apparent. (i) Ossa, Bregmatis, & Temporum, nec intus, nec foris, ullam demonstrant divisionem, quasi ex unico continuatoque Osse constarent. (k) In Osse temporum apophysis Mastoidis deest, Styloidis exigua est. (1) Cavitas auris videtur unica, orbiculatim in plures gyros striata, nec tria Ossicula Malleolus, Incus, & Stapes reperiuntur, quibus aliorum animantium aures instructe sunt, si credimus Casserio, sed ego semper observavi.

Os Zygoma (m), quâ parte ab Osse orbitario procedit, crassum & robustum est, atque ejus in medium lineà potiùs quàm suturà distinguitur. In homine verò tenue existit, & suturà dirimitur.

Simiæ Facies (n) rotunda est, cynocephali oblonga & antrorsum protuberans. Ossa verò Maxillæ superioris respondent humanis. (0) Suturæ sunt harmoniis, sive rimis similes, potissimum ea quæ medium palatum intersecat. Sed peculiaris sutura notatur, ab inferiore orbita incipiens, secundum longitudinem maxillæ ad caninum dentem cujusque lateris prorepit, ipsumque palatum dirimit.

Maxilla inferior (p) integra est, nullà lineà in mento dissetta, brevissima est corporis proportione, ita ut ex omni animantium genere nullum breviorem habeat, excepto homine. Extremitas quæ cavitati temporum articulatur, est condylodis, ut in homine. Quare non est gynglymoides hæc articulatio, ut scripsit Volcherus Coiter.

(g) Simia in dentibus caninis & molaribus differt ab homine. Caninos quidem habet dentes humanis similes, in unaquaque maxilla binos, qui utrimque assident & accumbunt incisoribus. Singulas radices ut incisores habent, sed altius infixas robustioresque, minus etiam ex anteriore parte, quam posteriore pressas & angustas. Ac simia cynocephalos dentes caninos longiores prominentioresque, qu'am vera simia obtinet. Molarium dentium numerus in homine incertus est, authore Galeno: Sepius enim in utraque maxilla sunt sexdecim, interdum viginti, nonnunquam viginti quatuor. At simix semper certus ac definitus molarium numerus. Differunt quoque Maxillares semiæ ab humanis, in figura externa, & radicum numero, quamvis enim priores duo molares simiæ, ab humanis, aut nihil, aut certe parum discrepent, quia in simia primus inferior unum tantum apicem obtinet: Attamen in posteriorum dentium mensis, secundum longitudinem maxillarum, profunda admodum linea exsculpta est. Quam lineam altera etiam transversa, quæ in quinto dente simiæ non caudatæ gemina est, intrinsecus & extrinsecus ad gingivam usque protractata intersecat. Quo fit, ut singuli ejusmodi dentes eminentias, ut plurimum quatuor in angulis (nam quinto sex sunt) tres verò foveas in medio habentes, duarum serrarum mutuo sibi occurrentium modo committantur: quod profecto accuratissius Author Galenus explicare minime prætermissset, si molares simiarum descripssset.

Os Hyoides (r) humano sirmè simillimum existit, præterquam quod medium ipsius ossiculum amplius est, quam in homine, & posteriore sede insigniorem ostendit cavitatem, gibbis ipsius laryngis partibus invehitur, sitque propugnaculum cartilaginis scutiformis. In illa enim lata oblongaque apophysi, interiores partes Ossis hyoidis efformat, quæ deorsum adeo producitur, ut instar clypei cartilagini thyroidi obtendatur.

- (a) The Cranium of our Pygmie was round and globous, and it feemed to be three times as big as the Head of a Common Monkey; for that I might the better compare them, I procured the Sceleton of a Monkey, which I found was exactly the length of that of our Pygmie: though at the same time we shall see, that in several of the Parts, 'twas vastly different. For measuring the Head of our Pygmie by a Line drawn round from the Nose, over the Orbit of the Eyes, to the Occiput or hinder part of the Head, and so to the Nose again, I observed 'twas Thirteen Inches. The Cranium of the Monkey measured there only Nine Inches and a quarter. The girth of the Head of the Pygmie, from the Vertix round by the Ears to the Vertix again, was Eleven Inches and an half: in the Monkey 'twas only Seven Inches and an half. The longitudinal Diameter of the Cranium of the Pygmie was Four Inches; of the Monkey Two Inches and a quarter. The latitudinal Diameter of the Cranium of the Pygmie was Three Inches and above a quarter; of the Monkey a little above Two Inches. The profundity of the Cranium of the Promie, from the Vertix to the Foramen where the Medulla Spinalis passes out, was about Three Inches and a quarter; in the Monkey Two Inches. So that in the largeness of the Cranium, the Pygmie much exceeds the Monkey, as also Apes, and more resembles a Man.
- (b) The Sutures in our Pygmie perfectly resembled those in an Humane Cranium; The Sutura Coronalis, Sagittalis, and Lambdoides being all ferrated or indented very curiously, as in Man. In the Lambdoidal Suture I observed Nine Osla triquetra Wormiana. In the Cranium of a Monkey I found the Coronary Suture for the most part to be Harmonia, and only for a little space to be serrated towards the middle, where it meets the Sagittal Suture. The Sagittal Suture here was indented throughout. The Lambdoidal Suture as extended from the Sagittal of each fide for about half an Inch, was ferrated; then the Suture disappeared, and there was formed here a rising ridge of the Cranium, which was continued to that Apophysis which makes the hinder part of the Os Zygomaticum. There was no fuch bony ridge in the Cranium of the Pygmie. In the Monkey too I saw the Squammous Sutures very plain, tho' Riolan denies them; which likewise in our Pygmie was very apparent. Our Pygmie therefore in the Structure of the Sutures exactly resembled a Humane Cranium, and more than Apes and Monkeys do: For in them the Coronary and Lambdoidal Sutures were only in part ferrated; and they had no Offa triquetra Wormiana.
- (c) In our Pygmie there was an Os Cribriforme, as in Man; 'twas about half an Inch long, and a quarter of an Inch broad; in it I numbred about Thirty Foramina; here was likewise that long ridge, (which is call'd Crista Galli) as in a Man, to which the Dura Mater was fastened.

- (d) In the Cranium of the Monkey there was no Crista Galli; and where the Os Cribriforme should have been, there was a hollow Passage which led towards the beginning of the Nostrils, at the end of which there might be a small Os Cribriforme perforated with four or five holes. But this Part appeared very different from the Structure of a Humane Skull, as likewise from our Pygmie; which was occasioned chiefly by the great bunching in of the Bones of the Orbit of the Eye, tho' our Pygmie too had these Bones more protruded in, than they are in a Humane Cranium.
- (e) This appeared more in the Cranium of a Monkey than in our Pygmie; tho' here too 'twas somewhat more than in a Man's Skull.
- (f) The Sella Equina in our Pygmie was exactly like a Man's. In a Monkey I observed it more rising and higher. In the middle of the Sella Turcica seu Equina of our Pygmie, I observed a Foramen; and the same I found in a Humane Cranium I have by me.
- (g) In our Pygmie I did not observe those two Cavities under the Sella Turcica which are to be met with in a Humane Skull. But the Bone here was very spungy and cavernous, and might answer the same end, tho' not formed perfectly alike.
- (h) These Cavities in our Pygmie, were nothing so large as they are in a Monkey, but conformable to the Structure of this Part in an Humane Skull. And in our Pygmie too, I observed the Pterigoidal Processes as they are in Man, but I did not find them in the Monkey.
- (i) The Offa Bragmatis and Temporum in our Pygmie were very plainly distinguished by an indented Suture. In the Cranium of the Monkey these Bones were divided by a lineal Suture call'd Harmonia.
- (k) The Mastoid and Styloforme Process in our Pygmie were very little, yet more than in the Monkey; but herein our Pygmie rather imitates the Ape-kind.
- (1) Because I would not spoil the Sceleton, I did not examin the Organ of the Inward Ear: But am wholly inclined to Riolan, who tells us he always found those Three little Bones, the Malleolus, Incus, and Stapes there; and no doubt but they are to be met with in our Pygmie. Tho' Casserius therefore thinks Galen does not mention them, and never observed them, because they are not to be found in Apes: But Riolan tells us the contrary.
- (m) The Os Zygomaticum in our Pygmie was not half so big or large as in the Cranium of the Monkey; herein therefore our Pygmie more refembles a Man.

(71) Tl:0'

- (n) Tho' the Face of our Pygmie was rounder than an Ape's, as that is than a Monkey, and a Monkey's more than the Cynocephalus, yet'twas not altogether so much as a Man's; the upper Jaw being proportionably longer and somewhat more protuberant. The Bones of the Nose too in our Pygmie more resembled the Ape-kind, than the Humane, being flat and simous; hence simia; and not protuberant and rising as in Man.
- (o) The Suture of the Palate in our Pygmie was just the same as in a Man. In a Monkey I observed that peculiar Suture Riolan mentions, but did not find it in the Pygmie: Only in the Palate of the Pygmie I observed a Suture, not from the Dens Caninus, as was in the Monkey, but from the Second of the Dentes Incisores.
- (p) In our Pygmie the under Jaw was perfectly closed at the Mentum, as 'twas in the Monkey; and 'tis so in a Man. Galen (83) tells us, 'Απάνων ης πών ζώων ἄνθρωπως ἔχει βραχυθάτων των γένων, ώς περός των ἀναλογίαν δικονότι τε πανθός σώμαθως. είθ εξής ἀνθρώπως πίθνικος, είπα κύδικες, εί σάτυες, κάπειθ εξής κυνοκέφαλοι. i. e. That of all Animals a Man hath the shortest Chin, or under Jaw, in proportion to his Body; then next to a Man, an Ape, then a Lynx, then Satyrs, and after these the Cynocephali. And I may add, of all Apes, our Pygmie hath the shortest. The Articulation of the under Jaw in our Pygmie was Condyloides, as 'tis in Man's and not Gynglymoides, as Volcherus Coiter and Barthol. Eustachius observe.
- (q) Our Pygmie had in each Jaw before, four Dentes Incifores; then following them, of each side a Dens Caninus; then after them of each side, Four Dentes Molares, in all Fourteen Teeth in each Jaw, in both Twenty eight. But our Subject being young, I observed that all the Teeth were not perfectly grown out of the Jaw-bone, and could perceive fome of the Molares, that still lay hid there, or were not much exerted. In a Monkey in each Jaw there were two Dentes Incifores before; then four Dentes Canini, two of each side; then eight Dentes Molares, tour of each fide. The Number of the Teeth in each Jaw, and in the whole the same as in the Pygmie: only the Monkey had four Dentes Canini in each Jaw, the Pygmie had but two, as in a Man: Or at least in the Monkey, the two first of the Canini seemed to be Amphibious, between an Incifor and Caninus; being not so broad as the two first Incifores, nor so much exerted or extended as the two other Canini were. In the number of the Teeth our Pygmie imitated more the Ape-kind than the Humane: But in the Structure of them, more the Humane than the Ape-kind; for the Mensa or Superficies of the Molares, was not so servated as the Monkey's, but liker Humane Teeth.

I have omitted the Printing the next Paragraph in Rielan, because I

⁽⁸³⁾ Galen de Anat. Administr. lib. 4. cap. 3. p. 94.

would not be tedious: And for the same reason, do not here particularly describe each Bone in the Head and Jaws of our *Pygmie*; for where I do not remark otherwise, 'tis to be understood, that all those Parts are the same in a *Man*, our *Pygmie* and the *Ape-kind*.

(r) There was nothing particular that I observed in the Os Hyoides of our Pygmie that was different from that of a Man's.

CAP. III.

De Spina & Ossibus & Adnexis,

IMIÆ (a) Cervix brevis est, septem vertebris extructa, corpora vertebrarum anteriori parte non sunt rotunda ut homini, sed plana. Postica apophyses spinose non sunt longa, & bisidæ, sed breves, simplices, & acuta. In prima (b) vertebra, nullum spina vestigium apparet, imà nulla sentitur asperitas, in anteriore parte corporis prima vertebra humana obtusa quadam eminentia apparet, qua in simia magis extuberat, & in mucronem producitur. Quod si vertebras & spinas breves habet simia, (c) apophyses transversas obtinuit longiores, atque ad anteriora magis, quàm in homine restexas. Imprimis verò sexta colli vertebra, qua hunc processum pra cateris insignem adepta est, eumque bisidum, magisque recurvum & aduncum, quàm in aliis vertebris. Hic autem spondylus sextus maximus est, propter illas transversas apophyses grandiores, in simia caudata minor est. Septimi spondyli transversa apophyses simplices & tenues, in caudata simia bisida, & satis longa existunt, qua licet in homine simplices appareant, sexto tamen crassitie non cedunt.

(d) Prima simiæ vertebra ad sinem processus transversi ascendentis utrimque foramen habet, ad nervum transmittendum, quo humana caret vertebra, septima colli vertebra in homine sæpius est perforata: Unde evenit, quod transversi processus hujus vertebræ non sunt similes apophysibus tranversis colli, sed potius thoracis apophysibus transversis assimilantur. (e) Vertebratum dorsi corpora parum ab humanis differunt, neque apophyses multim dissimiles sunt, exceptis rectis ultimarum duarum vertebrarum, quæ rectiores sunt in similes, paulim deorsum inclinat in hominibus. In (f) postremis vertebris dorsi reperiuntur quatuor infernæ apophyses articuli gratia constructæ. In humanis vertebris duæ tantim notantur, quas etiam in lumborum vertebris observabis. (g) In simia decima dorsi vertebra, infra suprave suscipitur, at in homine est duodecima.

- (h) Lumbi, inquit Galenus, in simils sunt longiores quàm in hominibus, si pro ratione reliquarum partium hoc astimare velis, nam in homine quinque vertebra lumbos efformant, in simils non secus, quàm in aliis quadrupedibus sex adsunt. (i) Harum vertebrarum processus ab humanis differunt. Siquidem transversi in homine teretes sunt & oblongi, nonnihilin exteriora conversi, costularum vicem gerentes. In simila sunt ampli, intrò spectantes, & instar squamma tenues: sigurà caudam hirundinis referunt, aut cornu retortum, quod oblongo acutoque mucrone erigitur, ac sursum vergit. Ac tertia lumbi vertebra primò incepit transversum consequi processum, qui brevis est. Reliqui subsequentes longiores existunt. (k) Posteriores processus spinosi non sunt recti, sed supernè spectant, atque excipiuntur à supernis incumbentibus vertebris, qua hiatu sive scissura triangulari inter duos transversales processus existente, dum in posteriora simia spinam inslectit, eosdem transversales excipiunt.
- (1) Observandum venit in homine circa radices infernas transversarum apophyseum iumbarium, atque etiam duarum infirmarum thoracis, quædam tubercula magnitudine figuraque mespilorum nucleos referentia sæpius reperiri, quæ cum in canibus & simiis non habeantur, suspicari posset aliquis vicem illarum quas paulò antè descripsi proceritatum in homine tenere.
- (m) Os Sacrum spinæ fundamentum in homine, ex tribus vertebris conflatur: In simits ex duabus tantum componitur, quibus ilium Ossa copulantur.
- (n) Simiæ longior est Coccyx, quàm homini, pluribus ideo constructus Ofsibus, quæ juxta commissuram Ossis Sacri persorata sunt, medullamque continent, atque nervos antrorsum & retrorsum emittunt, quæ omnia desunt in coccyge hominis: cur autem simia vero coccyge carucrit, rationem reddit Fallopius, in Observat. Anatomicis.
- (0) Homo, inquit Galenus, ex omnibus animalibus Costas curvissimas habet, propterea latissimum pectus obtinuit. Simia latius caeteris pectus datum, sed humano angustius.
- (p) Porro simia, tam caudata, quàm non caudata, costas viginti sex præ se fert, cum in homine tantum viginti quatuor reperiantur. Harum utrimque sunt octo veræ costæ, in homine septem, quæ per articulum sterno committuntur. Quinque vero nothæ costæ non desinunt in perfectam cartilaginem versus sternum invicem constrictæ, ut in homine, sed osseæ magis quàm cartilaginosæ, à se mutuò disjunguutur. Costæ in simia, tam caudata, quàm non caudata, spatiis vertebrarum intermediis inseruntur: at in hominibus magis corporibus vertebrarum attexuntur.
- (q) Sternum octo constat Ossibus rotundis, quorum primum aliquantisper prominet, supra cartilaginum duarum primarum conjunctionem, qua dua cartilagines videntur amplexari superiore parte primum os sterni. Cartilagines K 2

costarum commissuris Ossium sterni accrescunt, dua ultima concurrunt simul in articulationem ultimi & penultimi ossis sterni. Ultimum os sterni xiphoidem cartilaginem referens, impense longum est, & teres.

- (r) Simia quoad scapulas & claviculas homini maxime similis est, authore Galeno. Clavicula incipiens à primo sterni osse ad medium costa rettà procedit, inde ad acromion usque multùm curvata intumescit: huic articulationi interjectum est ossiculum, quod in homine ad decimum octavum annum & ultrà, appendix existit: at in simia, nec istud ossiculum, nec illius vestigium ullum apparet, imò pars illa robustissima est.
- (a) In our Pygmie there were seven Vertebræ of the Neck, as there are in a Man, and an Ape too; but they were short, making in length about two Inches; and seemed more to imitate those in Apes, being flatter before, and not so round as in Man. And their Spines, tho' they were longer, and more obtuse, and not so acute as in Monkeys; yet they were not bisside, as they are in Man.
- (b) In the first Vertebra of the Neck in the Pygmie there was no Spine, but an Asperity; in a Man there is a small Spine. And before, 'twas like to the Humane, having an Obtuse Eminence, and not running to a Mucro, as in the Ape and Monkey. The Dens of the second Vertebra in the Pygmie was partly Cartilaginous.
- (c) I did not observe in the Pygmie the Transverse Apophyses to be longer, nor to be reslected more forward, nor the sixth Vertebra to be larger than the others; nor the seventh Vertebra, to be any thing different from the same in Man; but in all these Circumstances, our Pygmie seemed to imitate the Structure of the same Parts in Man, more than does the Ape-kind.
- (d) Those Foramina observed in the Vertebræ of the Neck of Apes, were wanting in our Pygmie, who herein imitated the Humane Sceleton.
- (e) I did not observe any difference between the Vertebræ of the Back of our Pygmie and those of a Man's; nor what Riolan remarks of the Apophyses rectæ of the two last Vertebræ.
- (f) In the lower Vertebræ of the Back of the Pygmie, I observed but two Apophyses infernæ, as 'tis in a Humane Sceleton: in a Monkey there are four Apophyses there.
- (g) Our Pygmie if Riolan's account be true, is different both from the Ape and Man too; for here 'twas the thirteenth Vertebra, quæ infra, suprave suscipitur.

- (h) The Vertebræ of the Loins in our Pygmie were about two Inches long; and their number the same, as in a Man, viz. five; and not six, as are in Apes and Monkeys: But the Os Ilium of each side does ascend so high, as to include the two lower Vertebræ; which is not so in Man.
- (i) The Transverse Processes of the Lumbal Vertebræ in the Pygmie, were round and thick, as in Man; and not thin and slat, or broad, as in the Monkey.
- (k) The Spines of the Lumbal Vertebræ in the Pygmie, were strait, as in a Man; and not bending upwards, as in the Ape and Monkey kind,
- (1) I am apt to think these Tubercula are in our Pygmie; but our Subject being young, and several of the Parts not yet hardened into Bones, but Cartilaginous; I was not fully satisfied herein, and do leave it as a Quære.
- (m) Riolan in this account is miltaken, nor is he here confishent with himself, as to what he writes of this part in other places. Joh. Philip. Ingrassias (84) who has wrote a most learned and incomparable Comment upon Galen's Book de Ossibus, tells us; Amplum Sacrumve Os in Homine sex vel ad minus quinque ex Ossibus constat. Galenus tamen, Simiarum Canumve Sceletos dissecans, interdum quatuor ex Ossibus componi inquit. Sub Osse inquam Sacro largius sumpto, Coccygem quoque comprehendens: (quem Coccygem pro uno Osse, ut in præsenti textu facit, tanquam quartum adjungens assumplit, à Sacro interim distinguens-) sepius autem tribus duntaxat proprie sumptum Os Sacrum à Coccyge distinctum expressit, uti nunc etiam facit: unde tribus ex partibus constructum esse ait, tanquam ex propriis Vertebris. So Falloppius and others do make the Os Sacrum in a Man to confift of fix Bones, fometimes five. In our Pygmie the Os Sacrum was composed of five Bones: But in the Sceleton of a Monkey I observed but three Bones or Vertebræ which did make up the Os Sacrum.

But as our Pygmie in the number of the Vertebræ which composes the Os Sacrum, did imitate the Humane kind; so in other respects 'twas much liker to the Sceleton of Apes and Monkeys: For the Os Sacrum here, was nothing so dilated and spread, as 'tis in Man; but contracted and narrow as 'tis in Apes; and very remarkably different from the Humane Sceleton; as 'twas likewise in the Spines and Processes which more resembled the Ape-kind.

(n) The Os Coccygis in our Pygmie consisted of four Bones, as tis in an Humane Sceleton, and these not perforated. In the Ape, and especially in the

⁽⁸⁴⁾ Comment. in Galen. de Ossibus, Cap. x. Text. 3. pag. m. 184.

Monkey, there are more Bones, and those perforated, as Riolan describes them. Hence Julius Pollux stiles it, & tenso, Perforatus Coccyx. This Os Coccygis makes a little bunching out of the Skin in the Pygmie, as I have represented it in my second figure, and is remark'd before (vide pag.14.) but in Man, tis not protuberant. What Riolan observes out of the Nubian Geography, of a Nation in the Isle of Namaneg, having Tails, I think is fabulous; unless they be Monkeys, or of that kind: I am certain that Story of the Kentish Longtails he mentions, is utterly false, tho he modestly expresses himself, fabulosum puto. His words are these: In Insula Namaneg Maris Orientalis, Gens est caudata, ex Geographia Arabica Nubiensi, pag. 70. fabulosum puto quod de Anglis Caudatis referunt Historici, quibus ob injuriam D. Thoma Cantuariensi illatam, Deus Coccygem instar Cauda produxit (85).

- (o) In our Pygmie the Ribs were altogether as much curved, as in an Humane Sceleton; and it was as full chefted as a Man.
- (p) In the number of the Ribs our Pygmie imitated the Ape-kind: for it had thirteen of a side, six and twenty in all: In a Man there is but twenty four, the sometimes there has been observed thirteen of a side. As to the other Particulars that Riolan mentions, viz. the number of the Costa vera, and the ossious Extreams of the Notha, and the Articulation of the Ribs, herein our Pygmie more resembled a Man: for it had but seven Costa vera that were articulated to the Sternum; and the Extreams of the Notha were Cartilaginous, not Ossious, and continued to the Sternum as in an Humane Sceleton; and the Articulation of the Ribs was more on the Body of the Vertebra, than in the Interstices. Drelincourt is mistaken in mentioning but twelve Ribs in the Ape, of a side, or his was different.
- (q) Jo. Philippus Ingrassias (86) makes eight Bones in the Sternum of Infants; and tells us, that in time these Bones do coalesce, and grow sewer. Galen makes seven Bones in the Sternum, according to the number of the Costa vera that insert their Cartilages into them. But the eighth Bone Ingrassias saith, is for the Cartilago Ensisormis. In the Sternum of our Pygmie I numbred seven Bones, the two last being small and partly Cartilaginous; and here the Cartilages were inserted at the Commissures and Joynings of the Bones of the Sternum. The Cartilago Ensisormis was long and roundish. The whole of the Sternum of our Pygmie much more resembled the Humane Sceleton, than the Monkey's, being much broader and larger, and as far as I observed just alike.
- (r) The Scapula of our Pygmie, tho' in most respects it resembled a Man's, yet I thought it did not so much, as a Monkey's; for it seemed

⁽⁸⁵⁾ Riolan. Encheirid. Anat. lib. 6. cap. 16. p. 451. (86) Jo. Phil. Ingrassias Comment. in Galen. de Ossibus, Cap. 12. Text. 1. pag. m. 190,

(a) I

narrower, and the Basis was proportionably longer. But this I suppose might happen in preparing the Sceleton by paring away the Cartilages (for the Creature was young) which in a longer time would have hardened into a Bone. So likewise that Process which receives the Clavicula call'd Acromion, was Cartilaginous, as was likewise the End of the Processus Coracoides, and of the Cervix it felf, which last received the head of the Shoulder Bone. So that as yet there was not a Sinus formed here for the receiving it; but that Extream was flatter than usually and plain; nor was there that Sinus under the Spine, as in an adult Humane Scapula.

I observed no difference in the Figure and Structure of the Clavicula in our Pygmie and in a Man. Nor did I observe that Bone Riolan mentions, but a large Cartilage which did conjoyn that Extream of the Clavicula to the Acromium, which in time might become long; this Cartilage was about a quarter of an Inch long.

CAP. IV.

De Artubus Superioribus.

(a) SIMI Æ & Hominis Omoplatæ omnino similes sunt.

(b) Humerus simiæ non admodum ab humano differt, in caudatæ dissimilis est juxta inferius caput, quod cubito articulatur. Hac enim regione restectitur ab exteriori parte introrsum, atque in illa slexura canaliculum acquirit ex opposito latere pervium.

- (c) Cubiti Ossa duo in utraque simia humanis respondent.
- (d) Carpus simiæ non valde dissert ab humano, obtinuit tamen nonumos, de quo sic loquitur Eustachius: Hoc ossiculum non in prima brachialis acic est locatum, sed tertio ejusdem aciei ossi incumbit, atque inter ea quæ indicem & medium digitum sustinent seipsum inserit: vocatur à Galeno divies, hoc osse videntur carere simiæ caudatæ, sed ejus loco adipiscuntur os peculiare, quod carpi ossi cubito substrato annestitur, & satis longe protuberat. Deinde instar cornicis versus manus volam incurvatur, atque cum processu ossis carpiradio articulati, magnam cavitatem musculorum tendinibus efformat.
- (e) Metacarpij, Digitorumque Ossa simia, tam caudata quam non caudata, parum admodum ab humanis ossibus discrepant. Simia quidem magnum manus digitum Pollicem, mutilum obtinet, & curtum, & indiese propinquum, non oppositum, instar alterius manus, ut in homine: Reliqui digiti multo sunt minores digitis pedum.

- (a) I have already mentioned that the Scapula or Omoplata in our Pygmie did not feem so like a Man's, as a Monkey's did; nor does it appear so in my figure; not but that I think 'tis so, when adult; and it's Cartilages are hardened into a Bone: but my figure only represents what was now formed into a Bone, and without the Cartilages, which in time would have become bony.
- (b) The Os Humeri in our Pygmie was a little above five Inches long, just the same length with the Thigh Bone, and not altogether so thick. That end which was joined to the Bones of the Cubit, was about an Inch and a half broad. I observed here, upon the flexure of the Cubit forwards, that in the Os Humeri there was a deep sinus, and the Bone so thin here, that it would admit the Rays of Light thorough; but 'twas not pervious as Riolan saith it is in a Monkey; nor did I observe it so, in the Sceleton of a Monkey.
- (c) In the Pygmie the Bones of the Cubit were exactly like a Man's. The Ulna was five Inches long; the Radius five Inches and an half. They had large Cartilages at both Extreams.
- (d) So likewise the Bones of the Carpus in the Pygmie resembled those of a Man. I did not observe here that ninth Bone described by Eustachius. For indeed in our Subject, there were but four in each Carpus, that were offissed: the others were only Cartilaginous.
- (e) In the Hand, our Pygmie resembled the Ape and Monkey-kind. For tho' the Bones of the Metacarp and Fingers were like to those of a Man; yet the Thumb was much smaller, than the other Fingers, and shorter, and liker the Ape-kind. This Galen frequently takes notice of. 'Tis true, the other Fingers were much larger in our Pygmie than in the Ape-kind, and more resembling those of a Man, so that I was surprised to see them so big: but the Thumb, which the Ancients and Gallen call arrivered, and Hippocrates μέραν, in our Subject was so disproportionate and little, that as Galen remarks (87), any one that should view it, would think that it was but a ridiculous imitation of Man-kind, and nothing answering to it's Names. And in the precedent Chapter he vigoroully disputes against the Epicureans and the Followers of Asclepiades; and from the admirable Structure and wife Contrivance of all the Parts, and particularly the Tendons that go to the Fingers; he confutes their Hypothesis as vain, and hath this noble Epiphonema, είτ', ω πεζς Θεων έδεν έχουλες εν τοσαύταις καλαρύσεσ μέμλαρα, ούτ εν τ είκον τη πενόνιων, έτε τ τοπον, ούτε τ τρόπον της εμφύσεως άλλ' εν άπασαις αὐταῖς θυμαςίω ἀναλογίαν δρώνθες, μιᾶς μόνης δπολλυμένης η πτα τ αὐτον τείπον εν άμερολίεροις τοῦς μεγάλοις δακλύλοις, κλ, ταύτης έκ άλδ.

⁽⁸⁷⁾ Galen de usu Partium, lib. 1. cap. 22. p. m. 310.

ρως, ἀπὶ ὅτι μηθὲν αὐτῆς ἐχρήζομεν, εἰμῆ φάτε, τὰ χωρὶς τέχνης, ឪπανία τὰ τοιαῦτα γεγονέναι. i. e. Vos, per Deos immortales, cùm nihil habeatis, quod in tot Infertionibus reprehendațis, neque Tendonum molem, neque locum, neque Infertionis modum, sed in his omnibus mirabilem quandam Proportionem videatis, unâ solà in utroque magno digito similitèr perdità (& hoc non sine ratione, quod eà non egebamus) temerè dicitis & absque Arte omnia hujusmodi facta fuisse.

The Bones of the Metacarpus in the Pygmie were an Inch and three quarters long. The two last Joints of the Thumb were scarce an Inch long; the first Joint of the Thumb was a little above an Inch. The Fore-finger was two Inches and almost an half: The middle Finger, two Inches and three quarters. The third or Ring-finger was two Inches and half a quarter; and the little Finger was not full two Inches long. The first Joint of the fore and middle Finger was above a quarter of an Inch broad, and the Girth of each about was an Inch. The Pygmie therefore in the Fingers, having them so large and thick, imitated a Man; but in the Thumb, which was so slender and small, it resembled the Ape-kind.

CAP. V.

De Artubus Inferioribus.

SSA (a) Ilium in utraque simia, tam caudata qu'am non caudata, toto habitu, & figura distant ab humanis: dehiscunt enim eo in loco, ubi pubis Ossa esse debebant, atque omnino privantur Osse pubis: propterea ad velociter currendum ineptæ sunt. Ischij articulus plane dissimilis est ab illo hominis, ut notavit Galenus.

- (b) Ea est Femoris structura in simia, ut eam stare rectam non permittat, nec instar hominis corpus suum erigere, aut incedere, ne quidem sedere, quia femoris caput obliquius in articulo coxæ, committitur. (c) In homine cervix rotundi capitis femoris oblonga est, & sensim obliquè deorsum ducitur. In simia verò brevis, & propemodum transversa visitur. Sed semoris cervice, apophyses duæ, trochanteres dictæ, in simia similes sunt humanis, verum in illa, ut in caudata minores.
- (d) Patella utriusque simiæ manifestum discrimen ab humana demonstrat: est enim oblonga, non rotunda. Quamvis autem extrinsecus gibba sit, atque intus cava, nihilaminus longe aliter se habet quàm in homine. Nam secundum

dum ipsius longitudinem recurvatur, excavaturque adeo, ut nihil propemodum in medio emineat, curvo aduncoque ejus sinu naviculam quandam elegantissime referre videatur. In caudata simia patella videtur ex duobus Ossibus mutuo adnatis constructa.

- (e) Tibiæ utrumque Os in utraque simia humanis Ossibus simillimum est.
- (f) Simix Pes ab humano maxime discrepat, est enim oblongus latusque homini, angustus brevisque simix, pro ratione corporis, pedisque digiti longiores sunt, sed metatarsi Ossa breviora, calcaneum verò angustius, & anteriori in parte qua cum Osse cyboide committitur, latius evadens, magisque inibi longum, quàm retrò, impedit ne simia diu erecta, & stare, & ambulare queat. Astragalus Galeno tenuis non efficitur, sed manens sublimis, Ossi scaphoidi conjungitur, quod simix repugnat, in qua astragalus humilem, oblongam atque tenuem cervicem habet. Planta in simia ex quatuor Ossibus componitur. Follex ex tribus, inquit Eustachius. Quamvis Volcherus in caudata simia nullam observarit disferentiam, quà discreparent ab homine. (g) Digitorum notissima est discrepantia in homine, ut notavit Galenus, omnes una serie disponuntur, brevissimoque spatio discretì, multo minores sunt, quàm qui in mann habentur. Nam quantò pes summa manu major est, tanto illius digiti manus digitis sunt minores.
- (h) Accedit quod pollex longitudine indici aqualis est, quem dupla crassitudine superat, talisque est quatuor digitorum commensuratio, ut ab indice ad minimum semper desiciat longitudo: E secunda aciei Ossa, si indicem exceperis, breviora sunt iis, qua in tertia phalange reponuntur. Hac omnia in utraque simia aliter se habent, omnes enim pedis digiti insigni spatio discreti sunt, multoque longiores, quam in manu existunt: Pollex cateris digitis brevior tenuiorque est, atque diversam ab aliis positionem sortitur, dehiscit etiam, ut pollex in manu valde ab indice. Digiti pedis simia, manus humana digitorum seriem imitantur, est enim pollex in pede simia reliquis digitis brevior, inter alios quatuor digitos ut in manu, medius omnium longistimus.
- (a) There was no Part I think in the whole Sceleton where the Pygmie differed more from a Man, than in the Structure and Figure of the Os Ilium: for in a Humane Sceleton those Bones are spread broad, forming a Sinus or Hollow on the Inside. In the Pygmie they were proportionably longer and narrower, and not so Concave on the inside, but in all respects conformable to the Shape of the same Bones in the Ape and Monkey-kind. But why Riolan should deny the Os Pubis to be in Monkeys, I see no reason; for naturally there is not that Debiscence or Separation of the Os Pubis, as Coiter has given in his Figure of the Sceleton of a Monkey, and as he describes it; from whence I suppose Riolan borrows this Description: for in the Sceletons of two Monkeys I observed these Bones were joined together, and in the Pygmie they are closed as in a Man. When the Cartilage that joins them is divided, they will part as a sunder;

assunder; but otherwise they are firmly knit together. This therefore is no reason, why they should not run fast: and the contrary was observed of the *Pygmie* that it did so.

The length of the Os Ilium, from it's Spine to it's Conjunction with the Os Ischium, was three Inches; where 'twas broadest, 'twas an Inch and half; where narrowest, but three quarters of an Inch. The Os Ischium was an Inch and three quarters long; the Os Pubis was an Inch o long.

(b) I did not observe any difference in the Structure of the Thighbone in our Pygmie from that in Man; nor was it's Articulation or Insertion of it's Head into the Acetabulum, more oblique than in Man. So that from this Articulation, I saw no reason why it should not walk upright and sit; our Pygmie did both: When I saw it, 'twas just a little before it's death; and tho' 'twas weak and feeble, it would stand, and go upright.

The length of the *Thigh-bone* in the *Pygmie* was five Inches: The girth of it in the middle an Inch and three quarters; where 'twas joined to the Bones of the *Leg*, 'twas an Inch and almost an half broad.

- (c) The Neck of the Head of the Thigh-bone in our Pygmie was not different in it's length, as I did observe, from that of a Man's, but the same proportionably; as were likewise the two Apophyses, called Trochanteres.
- (d) The Patella in our Pygmie was not yet offified. As much as I could discover of it's shape, it was the same as in Man; round and not long; and but one Bone, and not two, as Riolan describes it in the Monkey. In the Sceletons of the Monkeys I used, these Bones were lost, so that I did not observe them.
- (e) The two Bones in the Leg, the Tibia and the Fibula were just the same in the Pygmie as in Man; and their Articulations were alike: The Tibia was four Inches long; the Fibula was a little shorter. The girth of the Tibia in the middle was about an Inch; of the Fibula, about half an Inch.
- (f) What makes the foot of the Pygmie seem different from a Man's, is chiefly the length of the Toes, and the Structure of the great Toc. In other respects, it has a great resemblance with it. For the Bones of the Metatarsus here, seemed proportionably as long as in Man. The Os Calcis, Calcaneum or Heel-bone was not narrow, but broad; and forewards, where 'twas joined to the Os Cuboide or Cubiforme, not broader, nor longer, than behind; where it juts out so far, as sufficiently secures it's standing

standing or walking erect. The Astragalus I did not observe different from a Man's. The Scaphoides or Naviculare here was Cartilaginous. If one reckons three Joints in the great Toe, then there can be but four Bones in the Planta Pedis, or Metatarsus; which with Enstachius I am more inclined to, because really this Part performs upon any occasion the use of an Hand too; and the great Toe, (like the Thumb in the Hand) stands off from the range of the other Fingers. Besides, I observed a difference in the Colour in the Bones of the Metatarsus and the Toes: for the Colour of the Toes was white and opace; the Colour of the Bones of the Metatarsus was like to that of the Cartilages, and more transparent. Now all the three Bones in the great Toe were of the same colour, white as were the other Toes. Therefore I shall make but four Bones in the Metatarsus, answerable to those of the Metacarpus in the Hand, and three Bones in the great Toe.

- (g) And as the Hand of our Pygmie in some Parts resembled the Humane; in others the Ape-kind: So the same may be said of the Foot too. For the Heel, the Tarsus and Metatarsus were like to the Humane. But all the Toes were liker to the Ape and Monkey-kind: For the Toes here, if we may call them Toes, and not rather Fingers, were almost as long as the Fingers in the Hand; much longer proportionably than in Man, and not lying so close together: But the Bones of the Fingers in the Hand, were larger and bigger than those of the Toes.
- (b) The great Toe in the Pygmie, was shorter than the sirst of the other Toes; tho' in a Man'tis altogether as long; and herein it resembles the Ape-kind. But whereas Aristotle (as I have remarked) mentions, that in Apes the middle Toe is the longest, as is the middle Finger in the Hand; In the Sceleton of the Pygmie I did observe, that the first and middle Toe were both much of a length, each measuring an Inch and three quarters: The third and little Toe were about an Inch and an half long; the little Toe being rather somewhat shorter than the third Toe. If in the great Toe you reckon three Articuli, as Enstachius does, then from the Tarsus to it's Extream, the great Toe measured two Inches and an half: but if with Coiter you make but two Articuli or Joints in the great Toe, and the other to be a Bone of the Metatarsus; these two were only an Inch and a quarter long: The four Bones of the Metatarsus were much of a length, being about an Inch and a quarter long.

This great Toe (as has been already frequently remarked) being fet off from the range of the others, more resembles a Thumb. This Difference I observe in it's make, That the Bones that compose it, are much bigger and larger, than any of the other Toes; and in respect of the Thumb in the Hand, vastly bigger. In the Sceleton of a Monkey I did not observe the Bones of the great Toe, to exceed those of the other. But as the Thumb in the Foot is much bigger, than that in the Hand; so the Fingers in the Hand are much larger than those in the Foot. CAP.

CAP. VI.

De Sesamoideis.

IN Homine Ossa Sesamoidea pauca sunt, magnaque ex parte cartilaginosa, & si ea que pollici applicantur exceperis, in constanti sede sirmata. In simia verò multa, atque magna occurrunt, & ossea perpetud sunt. Cuique primo quatuor digitorum internodio, & secundo pollicis gemina ferè semper adnectuntur. Duo ossicula magnitudine ciceris, supra utrumque tuberculum femoris in origine gemellorum reperiuntur.

As to the Ossa Sesamoidea in our Subject, I have very little to say: For it being young, very likely they might be only Cartilaginous, and the Skin adhering so sirmly here, they might be taken off with it. Since they are in Apes, I do not doubt, but that they were in our Pygmie too, tho' I did not observe them.

Having now made my Remarks upon the Comparison, that Riolan, or rather Eustachius and Coiter, have given us, between the Sceleton of a Man, an Ape, and a Monkey; and shewn wherein the Sceleton of our Pygmie either agreed or disagreed from any of them, I shall make some Reflections upon the whole; and more particularly upon some Parts, which deserve here a more distinct Consideration. But shall sirst of all take the Dimensions of the Sceleton, and of some other Parts I have not mentioned already.

As from the top of the Cranium to the Extream of the Heel in a strait Line, the Sceleton of the Pygmie measured about two Foot; from the first Vertebra of the Neck to the last of the Os Coccegis, eleven Inches; from the head of the Shoulder-bone, to the end of the middle Finger, 'twas about fifteen Inches; the end of this Finger reaching in an erect Posture an Inch and half below the Patella: whereas in an Humane Sceleton, from the end of the middle Finger to the lower part of the Patella, it wanted five Inches and an half: Our Pygmie therefore herein imitated the Ape-kind. From the head of the Thigh-bone, to the bottom of the Os Calcie in the Pygmie, was about ten Inches. From the fetting on of the first Rib, to the fastening on of the last, was four Inches. distance between the last Rib, and the Spine of the Os Ilium, not full two Inches. From the Spine of the Os Ilium, to the bottom of the Os Pubis, in a strait Line, was four Inches and three quarters. The distance between the end of the Scapula, and Spine of the Os Ilium about three Inches.

Both when it was alive, and after it's death, I admired the straitness and shape of it's Back. Now the Scapula coming down so low on the Ribs, and inclining towards the Vertebræ of the Back, and the Os Ilium rising so high, they do contribute very much towards it; and must also afford a great safeguard and strength to the Back and Spine.

The Sceleton of our Pygmie was just the same length of one of a Monkeys that I borrowed: But because I observed most of the Apophyses of the Bones to be Cartilaginous in the Pygmie, I must conclude, that 'twas but young; and that probably it might grow taller; to what height I am uncertain. Yet I can by no means be induced to believe, that it would ever arrive to the Stature of a Man, as some fort of this Species of Animals has been observed to do; for then I could not expect, to have feen here, the Bones themselves so solid, or the Cranium to be so entirely offified, or the Sutures to be so closed and indented, and the Backbone and Ribs fo fully hardened, as all the Bones of the Artus or Limbs were likewise, except at their Apophyses, and in the Carpus and Tarsus. Now all these Parts that had these Cartilaginous Apophyses, had already acquired so great a length, in proportion to the rest of the Body, that tis not to be imagined, that they would have exceeded it, or at least not much; and considering that Animals come to their axun of growth fooner or later, according to their Longevity, as a Man, (till he is past the Age that any of these Creatures, it may be, arrive to) does not leave growing: this inclines me to think, fince we found most parts of the Body so perfected here, that it might not in time much exceed the height it had already acquired. I could have wished that those that have wrote of any of this Species of Animals, had given us their Dimensions and Ages; but they are silent herein, or at least too general: only Le Campte observed an Ape in the Straits of Molucca four foot high; but this may not be our fort. As to those of Borneo, I was informed by a Sea-Captain who used those Parts, that the King there formerly had one as tall as a Man, that would frequently come down to the Town, and a great many Stories are told of him. The same Captain had two given him, both young, and about the height of our Pygmie; but these were not hairy, but naked as a Man; and one of them that he carried to Batavia, was looked upon as so great a Rarity, that all the time he staid there, his Ship was constantly visited by such as came to see it. But 'tis Matter of Fact, not Reasoning, that will best determine this doubt, and a faithful Observation that must inform us, to what tallness this fort of Animal in Angola, and the Countries thereabout, does usually grow; for in different Countries they may be different in this respect, tho' the same Species, as is seen even in Mankind.

'Tis not therefore that I am fond of the word Pygmie, that I have call'd our Animal so, or that I would undertake to justifie our present Subject

Subject to be exactly the Pygmie of the Ancients: Of this Quadru-manus fort of Animals there are divers Species, and some may be taller and others shorter; but all of them being but Brutes, I was unwilling to call ours a Man, tho' with an Epithet. 'Twas necessary to give it a Name, because not tallying exactly with the Descriptions of those that are given us. I did not know but that it might be different: and it's present height corresponding so well with that of the Pygmies of the Ancients, (and we may allow something for growth too) induced me to this denomination: For as A. Gellius (88) tells us, the Pygmies were two Foot and a quarter high. Pygmæos quoque (faith he) hand longe ab his nasci, quorum qui longissimi sunt, non longiores esse quam pedes duos & quadrantem. And so Pliny (89), Suprà hos extremà in parte Montium Trispithami, Pygmæique narrantur, ternas Spimathas longitudine, hoc est ternos dodrantes non excedentes; that is twenty seven Inches. For as Ludovicus Vives (90) observes, a Foot contains sixteen Digiti or twelve Pollices. The D_{0-} drans or Spithama, which is the Palmus major, contains nine Pollices; the Palmus minor is but three Pollices, or four Digiti, that is, a quarter of a Foot: And so Herodotus (91) informs us, that the Palmus contains four Digiti, and the Cubit six Palmi. The Pygmie therefore being Trispithamus or three Spithamæ long, was twenty feven Inches long, or as A. Gellius tells us, two Foot and a quarter. So our Animal, before Diffection measured twenty fix Inches; but in the Sceleton, only four and twenty Inches. Not but Strabo (92) out of Megasthenes, does mention too, the πενλαωπθάμες άνθεώπες, as well as the τελωπθάμες; but these latter (he tells us) were those, that Homer makes to fight the Cranes. However it be, if our Ape be not the Pygmie of the Ancients, yet I can't but think, the Pygmies of the Ancients were only a fort of Apes, notwithstanding all the Romances that have been made about them. And if so, and our Ape be found not much to exceed the measures given, I shall think my Conjecture in giving this Name, not amis. But of this hereafter. And to proceed:

Since the *Bones* are the main Timber-work in this Fabrick of *Animal* Bodies, by which the whole is supported, and upon their Structure, in a good measure, does depend their manner of *local motion*, we will here more particularly enquire, which may be thought the most natural way of walking in our *Pygmie*, either as a *Quadruped* or a *Biped*, for it did both upon occasion; and we will see whether by Nature 'twas equally provided for the doing both.

Now when I observed it to go upon all four, as a *Quadruped* (as has been already remark'd) it did not place the *Palms* of the *Hands* flat to

⁽⁸⁸⁾ A. Gell. Noël. Attic. lib. 9.cap.4.p.205. (89) Plinij Nat. Hist. lib. 7.cap.2.p.m. 13. (90) Lud. Vives Comment in D. Augustini de Civitate Dei, lib. 16.cap.8.p.m. 882, (91) Herodotus in Euterpe, No. 149.p.m. 448. (92) Strabo. Geograph. lib. 15.p.m. 489.

the Ground, but went upon it's Knuckles, or rather upon the first Joints of the Fingers of the Fore-hands, the second and third Joints being bended or touching the Ground; which seem'd to me so unusual a way of malking, as I have not observed the like before in any Animal. And I did expect it the less here: because the Fore-limbs being so very long, it might be thought, that it had the less need of thus raising the Body. And the whole weight of the Body thus lying upon these Joints of the Fingers, one would think, that they should be soon tired in supporting it, and that Nature did not design it for a Constancy, but only upon occasion, or a present shift: For if it was to be it's usual way of walking, no doubt, for it's greater ease, it would place the Palms stat to the Ground, as all other Animals do the sole of the Foot, and hereby it would be rendered better able to bear this weight.

Besides, when it walks thus upon it's Fingers, the flexure at the Elbow will be inwards, towards the fides of the Body, which is different from all other Quadrupeds, and in it's Progression will be of no use at all, may, will be an hinderance to it; and it will require a great tention of the Muscles to keep these Fore-limbs strait; and if they are not kept so, they must halt, and can't move swiftly; which makes me diffident, that this can't be it's Natural Posture in going; for Nature always contrives the easiest and best ways of Motion. Now in Quadrupeds the slection of the fore and hinder Limbs, is both the same way: But in a Man and an Ape (as I have before remarked from Aristotle) 'tis contrary; or as Pliny expresses it, Homini genua & Cubita contraria, item Ursis & Simiarum generi, obid minime pernicibus. But how Pliny comes to bring in the Bear here, I do not understand: for if with the Parisians (93) we should here understand by Genua, the Heel-bone, and by Cubita a Bone of the Carpus (which are often longer in Brutes than in Man) then this will be a Property not peculiar to Bears, but might be observed in other Quadrupeds too. I should rather own it as a Mistake in Pliny. Nor can I assent to the Parisians, That all Animals have these Parts turned after the same manner, whatever Aristotle may report thereof. I must confels I am of Aristotle's mind, and any Body may experience it in himself, and observe the flexure of the Cubit to be different from that of the Knee; and where 'tis fo, there the Motion upon all four, will be very awkward and unnatural, and as Pliny observes, it can't be swift.

I shall here further observe, that in Quadrupeds the make of the Thorax, the setting on of the Scapula, and the Articulation of the Humerus, or Shoulder-bone, are much different from what they are in Bipeds: for Quadrupeds are narrow Chested, and their Thorax not so round as in a Man, because in them the Scapula are to be placed more forward upon the Ribs, and not so backwards as in Men. And the Articulation of the

⁽⁹³⁾ Vide Their Anatomic Description of a Bear in their Memoirs, p.m. 44.

Shoulder with the Scapula in Quadrupeds lies nearer the Ribs; in Man 'tis extended farther from them. Now our Pygmie so exactly imitating Humane-kind in all these Circumstances, makes me think that Nature did not design it a Quadruped, but a Biped. For it had a full round Chest or Thorax, and it's Scapulæ placed backwards, not so forwards on the Ribs, and the Articulation of the Shoulder with the Scapula, stood off from the Ribs as it do's in Man. And from this very Confideration Galen (94) tells us, That a Man, if he would, could not walk upon all four, Δεόν Ιως εν άνθρωπ (faith he) οὐδ' εἰ βελη Ξείη βαλίζειν όπι τζί τετβάρων κώλων διωσιβάν, απηρώνων αυτώ πίρρω το θωεσκο τη κατά τας ωμαπλάτας άρθεων. i. e. Meritò itaque Homo ne, si volet, quidem ambulare quatuor artubus queat, quòd in ipso Scapularum Articuli longe à Thorace fint abducti. And Galen all along owns, that the Structure of the Scapula in the Ape, is the same as in a Man; and tells us that an Ape is exactly neither a Quadruped, nor a Biped, but amphibious between both. For in the same Chapter, speaking of the Ape, he saith, Τα ή και ώμοπλάτας η κλείς ανθεώπω, η μάλισα περσέοικεν, η τοί γ' έ δεόμεν ως εοίκελαι ταύτη τοῖς ανθεώποις εἰς ωνώτηλα βαδίσεως απαμφολεείζοι τοιγας εκαθέροις τοῖς γένησιν, ή έτε δίπεν εξίν απριβές, οὕτε τεθράπουν, αλλά ή ως δίπουν χωλόν, έ γδ απριβώς ερθον επναι δύναλα, ή ως τελεάπουν, ανάπης ον τε αμα, η βοαδύ, διά το πλείτον απηχθαι το δωρακω σώπο το και ώμου άρθοου, καθάπερ εἰ κὰ τζυ άλλων πνός ζώων δποποιοθέν 38 Sween S. chlòs δποχωρήσειεν: i. e. Quod verò ad Scapulas & Claves attinet, homini maxime est similis, quamquam ea parte homini similis esse non debebat, nam quod ad ambulationis celeritatem pertinet, simia inter genus utrumque ambigit, neque enim Bipes penitus est, neque Quadrupes; sed quatenus est Bipes, clauda est, non enim recte plane stare potest; & quatenus est Quadrupes, mutila simul est, ac tarda, quod Humeri articulus à Thorace plurimum sit abductus, quemadmodum si idem articulus in alio quopiam animante à Thorace divulsus extra secessisset. Now altho' Galen tells us here, that an Ape can scarce stand upright; yet in another place he declares quite the contrary; for, faith he (95), Έςι δ' ώμωιότα! Θι ἀνθεώπω πίθηκ.Θι, ώς ἄν ςεοχύλον τε μάλις' έχων το πεόσωπον, η τές κυνόδονίας μικεές, το εέρνον πλαίν, η τάς κλείς μαneolteas, η ημισα δασύς, η ορθος ισαλως, ως η βαδίζειν αμέμπίως, ng Beiv wnkwe dwwaday. i. e. Est autem simillima homini Simia, ut qua rotundam præcipue habet faciem, Dentes Caninos parvos, latum Pestus, Claviculas longiores, minimum Pilosa, qua recta etiam stat belle, ut & incedere sine errore, & currere velociter possit.

We have feen upon what accounts our *Pygmie* may be thought not to be a *Quadruped*, or that it's natural *Greffion* is not on all four, and how ill it is provided to go that way. We will now enquire, Whether there is not more reason to think that *Nature* designed it

⁽⁹⁴⁾ Galen de usu Partium, lib. 13. cap. 11. p. m. 627. (95) Galen de usu Partium, lib. 11. cap. 2.
M

to be a Biped, and to walk erect. And in the doing this, we may observe the largeness of the Heel-bone in the Foot, which being so much extended, fufficiently fecures the Body from falling backwards, as the length of the Toes do's it's being cast too forwards; and the Arms being so long, may easily give a poise either way, for the preferving the Equilibrium of the Body. And it may be, this is the Reason why the Pongos hold their hands behind their Necks, when they walk erect. If we consider the Articulation of the Os Femoris in the Acetabulum, there is no difference to be observed from a Man, nor indeed in any other [Circumstance that relates to this Matter. Tis true, in my first figure I represent him as weak and seeble and bending; for when I first saw him, he was dying; besides, being young, and ill, it had not that strength in it's Limbs, as in time and in health, it might have acquired; and I was willing to reprefent what, I faw my felf. But what very much fways with me, to think him a Biped, and to go erect, and that Nature did design it so, much more than any of the Ape and Monkey-kind besides, was my obferving the Peritonæum to be entire, and not perforated or protruded in the Groin, as it is in Apes and Dogs, and other Quadrupeds: as likewise, because I found the Pericardium in our Pygmie to be fastened to the Diaphragm, as 'tis in Man, and which is not so in Apes and Monkeys. Both which are fo remarkable differences, and (as I have already remarked) so particularly contrived for the advantage of an erect Posture of the Body, that, I think, the Inference is easie, and we may fafely conclude, that Nature intended it a Biped, and hath not been wanting in any thing, in forming the Organs, and all Parts accordingly; and if not altogether so exactly as in a Man, yet much more than in any other Brute besides: For I own it, as my constant Opinion, (notwithstanding the ill surmise and suggestion made by a forward Gentleman) that tho' our Pygmie has many Advantages above the rest of it's Species, yet I still think it but a fort of Ape and a meer Brute; and as the Proverb has it, midnice 20 6 midnice, nav yeure έγη σύμβολα, (96) An Ape is an Ape, tho finely clad.

This Proverb, perhaps, might have it's rife from some such occasion as Lucian mentions in another place; and the Story being pleasant, and relating to what we have been just now discoursing upon, viz. it's manner of Motion, we will insert it here, and then proceed to the Myology. Lucian (97) therefore saith, Arrelay Dir Bandole us Algoritos, monas work work work didzen, &c. i. e. Fertur Agyptius Rex quidam Simias ut tripudiarent instituisse, Animaliaque (nam admodum ad res humanas imitandas sunt apta) celerrime didicisse, ut Personata ac Purpurata saltarent: eratque admodum visu res digna, donce Spectator quispiam

⁽⁹⁶⁾ Lucian. adversus indoctum. Oper. p. m. 865. (97) Lucian. Piscator sive Reviviscentes. p. m. 214.

urbanus nuces è sinu depromptas in medium abjiceret : id simiæ videntes. tripudij oblita, id quod erat, simia pro saltatoribus evaserunt, Personas conterebant, vestitum discerpebant, invicemque pro fructibus depugnabant, ità ut Pyrriches ordo dissolveretur, à Theatroque ridebatur. And in another place (98) he tells the like Story of Cleopatra's Apes. So that they can. not only go erect, but can dance in a figure too, if taught to do fo. But this is not natural, but acquired by Art; and even Dogs have been taught to do the same. So Ælian (99) tells us, that an Ape is easily taught to perform any Action; if 'tis taught to Dance, 'twill Dance, or Play upon the Pipe; and that once he saw one supply the Place of a Coachman; holding the Reins; pulling them in, or letting them loofe, and using the Whip, as there was occasion. And that Story in Kercher (100), of the Embassie that the King of Bengal sent to the Great Mogul in the Year 1660, is very remarkable, where a great Ape richly adorned, did drive a Chariot magnificently gilded, and fet with Jewels; and did it with the greatest State and Pageantry in the World. and as skilfully as the best Coach-man could do.

It would be infinite to relate all the Stories that are told us of them; and I have been too tedious already. I shall therefore hasten now: But must inform the Reader, that I am obliged to my good Friend Mr. Comper, not only for designing all my figures; but obtained of him likewise to draw up this ensuing account of the Muscles; whose great Skill and Knowledge herein, is sufficiently made evident by his Myotomia Reformata, or, New Administration of all the Muscles in Humane Bodies, published sometime since: To which I refer my Reader, for a suller account of them, whenever its said, that such and such Muscles in the Pygmie resembled those in Humane Bodies. And for his greater Ease, there are References all along made, to the figures; where the first Number signifies the Figure, or Table; the second Number the Muscle exhibited or represented there.

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THE

⁽⁹⁸⁾ Lucian. pro Mercede condultis, p.m. 363. (99) Ælian. Hill. Animal. lib. 5. p.m. 26. (100) Kescher. China illustrata, Part. 4. cap. 7. p.m. 195.

THE

MYOTOMY

OR

DESCRIPTION

OFTHE

MUSCLES.

Of the Muscles of the Abdomen.

H E Obliquus Descendens (Fig. 3.38.) agreed in it's situation and progress, with that of a Humane Body, as the accurate Galen and Vesalius describe it, and did not partly spring from any of the Transverse Processes of the Vertebræ of the Loins; or their Ligaments and Membranes, as the later Writers would have it in Humane Bodies. Neither did any part of the Obliquus Ascendens (Fig. 3.39.) arise from the Lumbal Vertebra, as Vesalius describes it in Men: but agreed with the Description of Galen, and did not differ from the Humane. Drelincourt observes the like in Apes: The same Author takes notice, that the Pyramidales are wanting in those Animals; which were absent also in the Pygmie. The Rellus (Fig. 3. 40.) agreed with the Humane, and had no Connection with a Muscular Portion, springing either from the Clavicula or first Rib, as Vesalius has figured Galen's Description of it in Apes and Dogs. The Parisians say, In Monkeys it ascends to the top, passing under the Pectoralis and Little Serratus, it was Fleshy only to the half of the Sternum, the rest being but a meer Tendon. Drelincourt observes the Tendinous Inscriptions of these Muscles in Apes, appear'd only on their inside, and not on the out. The Transversalis in this, as in most Quadrupeds, did not differ from that in Man.

The

The Cremaster Muscles were very small by reason of the leanness of the Subject. The Accelerator Spermatis (Fig. 7. G.) Erector Penis (Fig.) ib. K.) and Transversalis Penis (ib. L.) agreed in their Situation and Figure with those of Men; the last of which only varied in it's Termination, as appears in the Figure.

The Detrusor Urina agreed with the Figure of the Bladder of Urina of this Animal. The Sphintler Vesica dister'd not from that in Men; and most, if not all Quadrupeds; it being placed in the Neck of the Bladder, beyond the Caruncula or Caput Gallinaginis, immediately above the Prostates. The Sphintler Ani dister'd not from the Humane; unless it might seem somewhat less. The Levatores Ani were longer and more divided from each other, than in Humane Bodies: The like may be observed in most, if not all Quadrupeds; by reason of the Length and differing Figure of the Bones, whence these Muscles take their rise.

I could find no Occipital nor Frontal Muscles in this Animal.

The Orbicularis Palpebrarum (Fig. 3. 2.) and Aperiens Palpebram Rectus agreed with the Humane, and those of most Quadrupeds. The Obliquus Superior, Inferior, Elevator, Depressor, Adductor, and Abductor Oculi, agreed with those of the Humane Eye and an Ape's, as Julius Casserius Placentinus Figures them Tab. 4. Organi Visus, Fig. XII. & XIII. Nor was there any Musculus Septimus Brutorum in this Animal. The Alæ Nasi of the Pygmie being small, those Muscles only appear'd, which from their Office are call'd Constrictores Alarum Nasi, ac Depressores Labij superioris.

The Quadratus Genæ, or Platusma Myoides, by reason of the Leanness of the Subject, (as I suspect) did not appear Fleshy. The Buccinator (Fig. 3.7.) was longer than that in Man. Nor was it any where intertext with various orders of Fibres, as Anatomists commonly represent it in Man; or seem'd to arise from any other Parts, but the Processus Corone; from whence it's Fibres had a strait progress to the Angle of the Lips; as in Men: This and the former Muscles, are counted Common Muscles to the Cheeks and Lips.

The Muscles Common to both Lips, are the Zygomaticus, (Fig. 3.3.) Elevator, Depressor, and Constrictor Labiorum, which were not so conspicuous, as in Men. The Proper Muscles of the upper and under Lip, were very distinct in this Animal, (viz.) the Elevator and Depressor Labij Superioris, (Fig. 3.4.) the last of which is mentioned above, and called Constrictor Alæ Nasi; the Depressor and Elevator Labij Superioris, (Fig. 3.5.)

Tho' the Auricula or Outward Ear of this Animal was as large, if not larger than that of a Man, yet I could not observe any Muscle, which ferv'd for it's Motion. I could not examine the Muscles of the Tympanum and Stapes, by reason the Bones were kept entire for a Sceleton.

The Sternohyoideus, Coracobyoideus, Mylobyoideus and Geniohyoideus, did not differ from those in Men; which Drelincourt has also observed of the former in the Female Ape. The Stylohyoideus did not arise from the Styliform Process; that Process being wanting in this Animal, or at least did not appear, by reason it was young; this Muscle therefore seem'd to arise from the Os Petrosum.

The Genioglossus, by reason of the length of the Lower Jaw, was longer than that in Man. The Ceratoglossus and Styloglossus differ'd not; except that the latter arises from the Os Petrosum, like the Stylohyoideus. The other Muscles appear'd in this Animal belonging to it's Tongue. The Sternothyroideus, Hyothyroideus, Cricothyroideus, Cricoarytanoideus, Posticus and Lateralis; the Thyroarytanoideus, and Arytanoideus varied not from those in Men. The Muscles of the Fances also, differ'd not from those in Man, (viz.) The Stylopharyngaus, Pterygopharyngaus, Oesophagaus and Vaginalis Gulæ. The following Muscles of the Gargareon were exacily like the Humane, (viz.) the Sphenostaphylinus and Pterygostaphylinus:

Now all the Muscles of the Lower Jaw may be seen without incommoding any hereafter mentioned. The Temporalis (Fig. 3. 1.) and Masseter (Fig. 3. 6.) feem'd somewhat larger than the Humane, and as they are commonly in Brutes, by reason their lower Jaw-bones are larger than those of Men; yet these Muscles were not so strong, as those of Monkeys, as the Parisians represent them. The Superior Salival Duct past over the Masseter, and entred the Musculus Buccinator of the Pygmie, as in Man. The Digastricus arose not from the Mammiform Process, as in Men; but sprang from the Occipital-bone; it's progress in this Animal agreed exactly with that in a Humane Body. Drelincourt describes it in Apes thus, Tendinem habet intermedium pollice longum, & gracilem, enascitur, autem non ab Apophyse Styloide, sed ab offe Basilari.

The Muscles of the Thorax which appear on the fore-part come next. The Intercostales externi and interni, (Fig. 4. 32.) Triangularis, Scalenus Privaus, Secundus and Tertius; Subclavius (Fig. 3. 34.) Serratus minor anticus, (Fig. 3. 35.) Serratus major anticus, (Fig. 3. 37.) All these were like the Humane. The Parisians tell us, That the Great Serratus did in in their Monkeys arise from the fourth, fifth, and sixth Vertebra of the Neck; but it was not so in the Pygmie: The like is taken notice of by Drelincourt in Apcs. The Diaphragma was larger in this Animal, than in Man, agreeable to the Capacity of its Thorax: The rest of the Muscles of the Thorax appear on it's Back-part, which we shall mention hereafter.

Before I pass to the Muscles on the Back-part of our Pygmie, I shall take notice of a Pair of Muscles, that do not appear in Humane Bodies; which from their Use may be call'd Elevatores Clavicularum, (Fig. 3. 12.) Either of them arises Fleshy from the Transverse Processes of the second and third Vertebra of the Neck; and descends obliquely outwards to it's broad Insertion at the upper part of the Clavicula; when it Acts, it draws up the Clavicle, affishing the Elevator Scapula, and upper part of the Cucularis, in raising the whole Shoulder. The situation of this Muscle, is not unlike the upper part of that represented by Vesalius in his sixth Table of the Muscles O. T. P. Q. which he says is found in Dags and Apes, and described by Galen in Humane Bodies, in whom it is not existent. Drelineourt calls it Levator Omoplata, (adding) ab Apophysibus transverses cervicalibus in Acromion & extremum clavicula extenditur.

The Muscles imploy'd in the Motion of the Scapula, are the Cucularis. (Fig. 4. 1.1.1.) Rhomboides (Fig. 4.6.) Levator Scapula (ib.5.) These also agreed with the Humane: The like being taken notice of by Drelincourt of the Cucularis, in the Female Ape. The rest of the Muscles of the Thorax, are the Serratus superior posticus, (Fig. 4.7.) the Serratus inserior posticus (Fig. 4.32.32.) These dister'd not from those in Men. The Sacrolumbalis (Fig. 4.29.) was not so thick as in Men, but was every way slenderer.

The Muscles imploy'd in the Motion of the Head of the Pygmie, differed very little from those in Man; as the Splenius; (Fig. 4. 2.) Complexus, (Fig. 4. 4.) Rectus major, Rectus minor, Obliquus Superior; and Obliquus Inferior, neither was this Inferior Oblique Muscle larger than in Man; as Vesalius, Lib. II. Cap. XXVIII. assures us, it is in Apes and Dogs. The Mastoideus (Fig. 3. 8. 8.) was chiefly inserted to the Occipital-bone, as the Parisians observe it in Monkeys. The Rectus internus major, not commonly described by Authors in Humane Bodies, tho' it is very plain and constant in all those, I have hitherto lookt for it; was also in the Pygmie. The Rectus internus minor, or Musculus Annuens, sometimes observed by me in Humane Bodies, was also in this Animal; and so was the Rectus Lateralis described by Falloppius in Men. Nor was any of those Muscles I have discovered in Humane Bodies, wanting in this Animal, but the Interspinales Collis

The Longi Colli of this Animal, appear'd to be longer and larger than those of Humane Bodies. The Spinalis Colli and Transversalis Colli were like those in Humane Bodies. The Interspinales Colli, which I have elsewhere described in Men, did not appear in this Animal. The Longissi-

mus Dorsi (Fig. 4. 28.) not unlike the Sacrolumbalis above noted, was not so thick and sleshy at it's Origin from the Os Ilium, Sacrum, and Vertebræ of the Loins; nor was it's external Surface in the Pygmie so tendinous, as in Humane Bodies; but was somewhat broader. The Quadratus Lumborum was longer than in Men, agreeable to the space between the Spine of the Os Ilium, and lower Rib of this Animal. See the Figure of the Sceleton. The Sacer, and Semispinatus, differ'd not from the Humane, as I have represented them in my Myotomia Reformata, pag. 135.

The Muscles of the Superior Parts and Trunk of the Body being dispatch't, we come next to those of the Limbs; and first of the Arm or Os Humeri. The Pectoralis (Fig. 3. 33.) was much broader at it's Original, from the Sternum, than in Man: it's Fibres were decussated near it's Insertion. Galen and Jacobus Sylvius take notice of another Muscle under the Pectoralis in Apes, which is implanted into the Arm near the Pectoral Muscle. The Deltoides (Fig. 2. 15. and 4. 12.) was also broader at it's Original. Jac. Sylvius tells us, this Muscle in Apes is like that of a Man. The Supraspinatus (Fig. 4. 8.) agreed with the Humane in it's situation; but was somewhat broader at it's Origin from the upper part of the Basis Scapula. The Infraspinatus, as the former Muscle was broader at it's Original from the Scapula, this on the contrary was there -narrower than the Humane. Sylvius and Drelincourt mention these Muscles in Apes; but whether they resemble those of Men, or this Animal, do's not appear by their Accounts. Teres minor, (Fig. 4. 10.) this is fometimes wanting in Men: it was somewhat shorter and thicker in this Animal. The Teres major, (Fig. 4. 11.) was very large in the Pygmie. The Latistimus Dorst agreed with the Humane in it's Original and Progress towards the Arm; but when it arrived at the Axilla, it parted with a fleshy Portion, which descended on the inside of the Arm, with the Musculus Biceps, and becoming a slender Tendon is inserted to the internal protuberance of the Os Humeri: (vide Fig. 8. C.) which reprefents the production of this Muscle. This Appendix or Accessory Muscle of the Latissimus Dorsi, is not peculiar to this Animal; the like being found in Apes according to Jacobus Sylvius, who, I am inclin'd to think is mistaken, in representing it's Insertion at the Olecranum of that Animal: This part of the Latifimus Dorsi seems a proper Instrument in turning the Os Humeri to a prone Polition, when these Animals go on all four, for the more advantagious stepping with the Fore-feet, by raising the Os Humeri, and turning it backwards. Galen in Lib. de Musculis, Cap.XIX. describes this Appendix of the Latissimus Dorsi, under the Title of a small Muscle found in the Articulation of the Shoulder. The Coracobrachialis was like that in Man, but had no division in it for any Merve to pass through. The Subscapularis was also like that in Man.

The Muscles employed in Bending and Extending the Cubit, differ'd very little from the Humane, viz. Biceps, (Fig. 3.16.16.) Brachiæus internus, (ib. 18.) Gemellus, (Fig. 4. 14.) Brachiæus externus, Anconæus, (Fig. 4. 15. 15.) The like is observed of these Muscles by Sylvius in Apes, who only adds that the Extenders are remarkably large in that Animal. The Biceps in the Pygmie, had the same double tendinous Termination, as in Man.

The Caro Musculosa Quadrata appear'd in the Palm of the Pygmie: nor was there any fleshy Belly, and long Tendon to the Palmaris; yet there was a Tendon or Ligament extended in the Palm; the like has been often taken notice of in Men, as Realdus Columbus also observes. The Parisians tell us, the Palmaris in Monkeys is extraordinary large.

The Muscles of the four Fingers were, the Perforatus, (Fig. 3. 24.) Perforans, (Fig. 3. 25.) Lumbricales; (ib. 31.) these agreed exactly with the Humane; but the Extensor Digitorum Communis (Fig. 4. 21.) was larger and distinct from the Extensor minimi Digiti, as in Men and Apes, which Drelincourt observes. The Extensor Indicis, Abdustor Indicis, (Fig. 3. 30.) Extensor minimi digiti, (Fig. 4. 20.) Abdustor minimi digitis (Fig. 4. 25.) and Interossij Manûs, dister'd not from those in Men. All the Muscles of the Thumb resembled those in Men, (viz.) the Flexor tertij internodij pollicis, Abdustor Pollicis, (Fig. 3. 28.) Flexor primi & secundi ossis pollicis, (ib. 29.) Addustor Pollicis, (Fig. 4. 27.) Extensor primi internodij Pollicis, (ib. 23.) Extensor secundi ossis Pollicis, and Extensor tertij ossis pollicis. The Muscles of the Wrist also agreed with those in Men; viz. the Flexor Carpi Radialis, (Fig. 3. 23.) and Ulnaris, (ib. 26.) the Extensor Carpi Radialis, (ib. 19.) and Ulnaris; (ib. 20.) The two last Drelincourt says, are also like the Humane in the Male-Ape.

The Muscles employ'd in the Pronation and Supination of the Radius in the Pygmie, were larger in proportion than those in Men. The Pronator Radij teres (Fig. 3. 20.) had a double Origin; the one from the internal Protuberance of the Os Humeri, the other from the upper part of the Ulna: the Pronator Radij Quadratus. The Supinator Radij Longus is taken notice of by Drelincourt in Apes to be like that of Men. The Supinator Radij brevis, (Fig. 4. 24.) agreed exactly with the Humane.

The Muscles of no part disagreed so much from those in Men, as those of the Thigh of this Animal: Here was no Glutaus minor; nor did the Glutaus maximus (Fig. 4.33.33.) resemble the Humane: It was meerly Tendinous at it's Origin, from the whole Spine of the Os Ilium; it was much longer, and not so thick as in Man; nor were it's stelly Fibres so divided: This Sylvius describes for the Membranosus in Apes. The Parisians give a very impersect account of the Musculi Glutai in Monkeys, where they tell us, The Muscles of the Buttock had a Figure differing from

those in Men; being shorter, by reason the Ossa Ilium in Apes are much straiter than in Man. The Glutaus medius was also longer than that in Man. The Pfoas magnus was also longer; which Sylvius (from it's Figure I Suppose) calls Lumbaris Biceps in Apes. The Psoas parvus was also longer and larger, than in Man. Besides this, the Parisians tell us of two other little Muscles in Monkeys, which have the same Origin as the Place: and were inferted into the upper and inward part of the Os Pubis. Iliacus Internus was long, conformable to the Figure of the Os Ilium of this Animal; (Vide Fig. 5. 28. 28.) The Pettineus was not very distinct. The Triceps (Fig. 4. 37.) had no Tendinous Termination at the lower Appendix of the Thigh-bone internally. Jacobus Sylvius says in Apes, Tricipitis pars longissima à Tubere in Condylum: altera portio insignis, à Tubere etiam nata, postico cruri propè toti affixa, ad usque Cavitatem inter duos condylos mediam : tertia minima & brevissima ossis pubis in medium & posticum Os Cruris. The Pyriformis (Fig. 4.35.) was like the Humane; nor did it appear less in proportion, as the Parisians represent it, in Monkeys, who say, This Muscle, instead of taking it's rise from the lower and external part of the Os Sacrum, it proceeded from the Ischium near the Cavitas Cotyloides. The Marsupialis had it's Marsupium much broader than in Men. The Quadratus Femoris was less than in Man. The Obturator extrorsum was much larger.

The Common Muscles of the Thigh and Leg, agreed in their Situation and Number, with those of Men. The Membranosus (Fig. 3. 41.) had not so strong a Tendon to cover the Muscles of the Thighs and Tibia, as in Man. The Sartorius (Fig. 3. 42.) agreed with the Humane. The Gracilis (Fig. 3. 48.) was thicker and larger near it's Origin. The Seminervosus (Fig. 4. 40.) and Semimembranosus, differ'd not from the Humane. The Biceps (Fig. 4. 41.) had it's second beginning, somewhat lower, than in Men: The Paristans tell us, The Biceps in Monkeys had not a double Origin as in Man, but proceeded intire, from the Knob of the Ischium, and was inserted to the upper part of the Perona. This single Head was in requital very thick and strong. The Restus had a double order of Fibres, as in Man. The Popliteus, I must consess escap't my notice. Sylvius tells us, in Apes, it agrees with Men. The rest of the Muscles of this part, which we esteem Proper to the Tibia, and arise from the Os Femoris, were much less than the Humane, as the Vastus Internus, (Fig. 3. 44.) Crureus, and Vastus externus.

The Muscles of the Tarsus or Foot, agreed in Number and Situation with the Humane; but varied in their Figure. The Gasterocnemius externus (Fig. 4. 43.) had not so large a Belly, nor were it's Fibres so variously disposed; but it continued sleshy much lower, than in Man. Sylvius tells us in Apes, Capita Gemellorum (meaning this Muscle) Ossa Sesamoidea habent, sirmantia in Condylis Crus cum Tibia. The Plantaris disserd not from that in Man. The Gasterocnemius internus, or soleus,

(Fig. 4. 44.) continued fleshy to the Os Calcis, as Sylvius observed it in Apes. The Tibialis Anticus (Fig. 3. 49.) was much larger, and continued fleshy much lower, than in Man. Sylvius observed an Os Sesamoides in the Tendon of this Muscle in Apes. The Peroneus primus (Fig. 3. 51.) differ'd very little from that in Man; it's Tendon having the same progress in the Bottom of the Foot, to the Bone of the Metatarsus of the Great Toe; which is nevertheless denied by Galen to be existent in Man; for which Vesalius, lib. 2. cap. 59. severely Censures him. I have more than once, seen a Boney body, placed in this Tendon at it's Flexure on the Os Cuboides in Humane Bodies: The like is taken notice of by Sylvius in an Ape. The Peroneus secundus differ'd not from that in Man. The Tibialis Posticus (Fig. 4. 45.) was not so large as in Man.

The Muscles of the Great Toe differ'd from the Humane. The Extensor Pollicis longus (Fig. 3. 52.) had a more Oblique progress, and was fleshy lower. The Extensor Pollicis brevis (Fig. 3. 53.) was much larger, and it's progress on the Foot almost transverse. The Flexor Pollicis longus was pretty large. The Flexor Pollicis brevis (Fig. 4. 47.) was very large, and inseparably joined with the Abdustor, which was very little. The Parisians tell us, The Great Toes of the Monkeys had Muscles like those of a Man's Thumb. The Extensor Digitorum Pedis longus (Fig. 3.53.) had no Tendon implanted on the Os Metatarsi of the Little Toe. The Perforatus (Fig. 4. 46.) Perforans, (ib. 48.) Lumbricales, and Abdustor minimi Digiti, differ'd very little from those in Men. The Musculus Extensor Digitorum brevis, and Transversalis Pedis did not appear in this Animal.

I shall not at present give the Reader the trouble of the Restections, that I intended, upon the Observations made in the Anatomy of this remarkable Creature; since I am conscious (having been so tedious already) that 'twill but farther tire him, and my self too. I shall therefore now conclude this Discourse, with a brief Recapitulation of the Instances I have given, wherein our Pygmie, more resembled the Humane kind, than Apes and Mankeys do: As likewise sum up those, wherein it differ'd from a Man, and imitated the Ape-kind. The Catalogues of both are so large, that they sufficiently evince, That our Pygmie is no Man, nor yet the Common Ape; but a sort of Animal between both; and tho' a Biped, yet of the Quadrumanus-kind; tho' some Men too, have been observed to use their Feet like Hands, as I have seen several.

The Orang-Outang or Pygmie more resembled a Man, than Apes and Monkeys do.

I. IN having the Hair of the Shoulder tending downwards; and that of the Arm, upwards.

2. In the Face 'twas liker a Man; having the Forehead larger, and the

Rostrum or Chin shorter.

3. In the outward Ear likewise; except as to it's Cartilage, which was thinner as in Apes.

4. In the Fingers; which were much thicker than in Apes.

5. In being in all respects designed by Nature, to walk erect; whereas Apes and Monkeys want a great many Advantages to do so.

6. The Nates or Buttocks larger than in the Ape-kind.

7. It had Calves in it's Legs.

8. The Shoulders and Breast were more spread.

9. The Heel was longer.

10. The Membrana Adiposa placed here, next to the Skin.

11. The Peritonæum in the Groin entire; and not perforated, or protruded, as in Apes and Monkeys.

12. The Intestines or Guts much longer.

13. The Intestines being very different in their bigness, or largeness of their Canalis.

14. In having a Cacum or Appendicula Vermiformis, which Apes and Monkeys have not: and in not having the beginning of the Colon so projected or extended, as Apes and Monkeys have.

15. The Insertion of the Ductus Bilarius and the Ductus Pancreaticus in a Man, the Pygmie, and an Ape was at the same Orifice. In a Monkey

there was two Inches distance.

16. The Colon was here longer.

- 17. The Liver not divided into Lobes, as in Apes and Monkeys; but entire, as in Man.
 - 18. The Biliary Vessels, the same as in Man.

19. The Spleen the same. 20. The Pancreas the same.

21. The Number of the Lobes of the Lungs, the same as a Man's.

22. The Pericardium fastened to the Diaphragm, as in Man; but is not so in Apes and Monkeys.

23. The Cone of the Heart, not so pointed, as in Apes.

24. It had not those *Pouches* in the *Chaps*, as *Apes* and *Monkeys* have. 25. The *Brain* was abundantly larger than in *Apes*; and all it's Parts exactly formed like the *Humane Brain*.

26. The *Cranium* more globous; and twice as big as an *Ape's* or *Monkey's*.

27. All the Sutures here, like the Humane: And in the Lambdoidal Suture were the Ossa triquetra Wormiana. In Apes and Monkeys 'tis otherwise.

28. It had an Os Cribriforme, and the Crista Galli; which Monkeys

have not.

29. The Sella Equina here, the same as in Man; in the Ape-kind 'tis more rising and eminent.

30. The Processus Pterygoides, as in Man: In Apes and Monkeys they

are wanting.

31. The Ossa Bregmatis and Temporum here the same as in Man. In Monkeys they are different.

32. The Os Zygomaticum in the Pygmie was small; in the Monkey and

Apes 'tis bigger.

and Monkeys are.

33. The Shape of the Teeth more resembled the Humane, especially the

Dentes Canini and Molares.

34. The Transverse Apophyses of the Vertebræ of the Neck, and the Sixth and Seventh Vertebra, were liker the Humane, than these Parts in Apes

35. The Vertebræ of the Neck had not those Foramina for transmitting

the Nerves; which Apes have and Man has not.

36. The Vertebræ of the Back, and their Apophyses Restælike the Humane: and in the lower Vertebræ but two Apophyses infernæ; not four, as in Apes.

37. There were but five Vertebræ of the Loins here, as in Man: in Apes

and Monkeys there are fix.

38. The Spines of the Lumbal Vertebræ strait, as in Man.

39. The Os Sacrum was composed of five Vertebræ, as in Man: in Apes and Monkeys there are but three Vertebræ.

40. The Os Coccygis had but four Bones, and these not perforated, as 'tis in Man: In Monkeys there are more Bones, and they are perforated.

41. In the Pygmie there were but seven Costa vera; and the Extreams of the Notha were Cartilaginous; and the Ribs were articulated to the body of the Vertebra. In Apes and Monkeys there are eight Costa vera; and the Extreams of the Notha are ossions; and the Articulation is in the Interstices of the Vertebra.

42. The Os Sterni in the Pygmie was broad, as in a Man: in the

Monkey 'tis narrow.

43. The Bones of the four Fingers much larger than in the Ape kind. 44. The Thigh-bone in it's Articulation, and all other respects, like the Humane.

45. The Patella round, not long; single, not double; as 'tis said to be in Apes.

46. In the Heel, the Tarsus, and Metatarsus, the Pygmie was like a

Man.

47. The middle Toe in the Pygmie was not the longest, as 'tis in the Ape-kind.

48. These

The Orang-Outang or Pygmie differ'd from a Man, and resembled more the Ape and Monkeykind.

1. IN the littleness of it's Stature.
2. In the flatness - Colored 2. In the flatness of the Nose, and the slit in the Ala Narium.

3. In having a rifing Ridge of the Cranium under the Eye-brows.

4. In being more hairy behind, than before.

5. In having the Thumb so little, tho' larger than in the Ape-kind.

6. In having the Palm of the Hand longer and narrower.

7. In the length of the Toes.

8. In having the Great Toe fet at a distance from the other, like a Thumb; and being Quadrumanus, like the Ape-kind.

9. In having the Shoulder and Thigh (horter.

10. In having the Arms longer.

11. In having no pendulous Scrotum. 12. In the largeness of the Omentum.

13. The Gall-Bladder long and slender.

14. The Kidneys rounder than in Men; and the Tubuli Urinarij different.

15. The Bladder of Urine longer.

16. In having no Franum to the Praputium.

17. In having the Bony Orbit of the Eye so much protruded inwards, towards the Brain.

18. It had not those two Cavities under the Sella Turcica, as in .Man.

19. The Processus Mastoides and Styloides very small, almost wanting.

20. The Bones of the Nose flat.

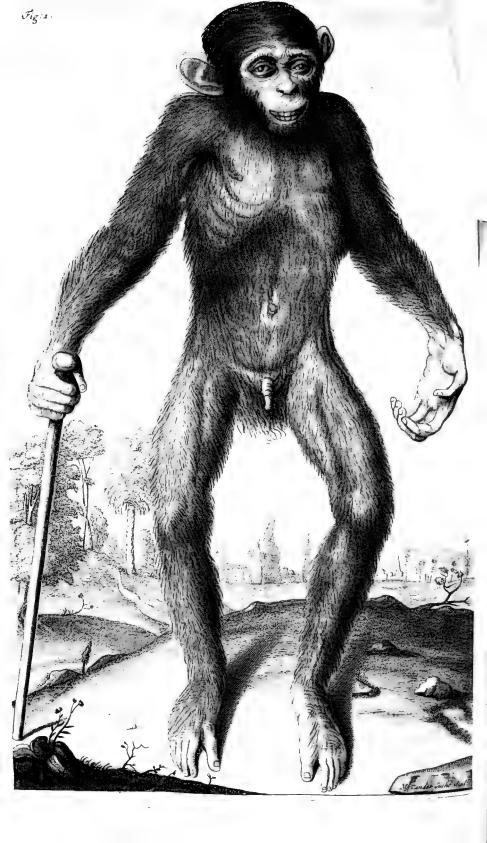
21. In the Number of the Teeth, it resembled the Ape-kind.

22. The Vertebræ of the Neck short as in the Ape-kind, and flat before, not round; and their Spines, not bifide, as in Man.

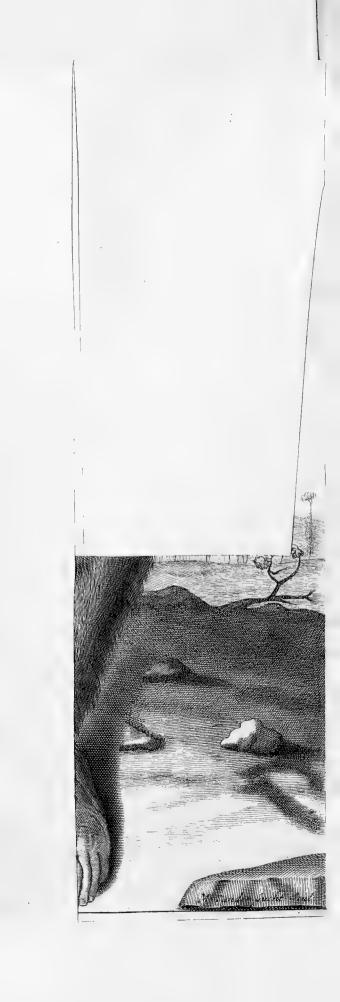
23. In the first Vertebra of the Neck there was no Spine.

24. In an Ape the Tenth Vertebra of the Back; in a Man the Twelfth; in the Pygmie the Thirteenth Vertebra, infra suprave suscipitur.





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25. The Os Sacrum altogether like the Ape-kind, only in the number of the Vertebra.

26. In having Thirteen Ribs on a side: a Man has but Twelve.

27. The Bone of the Thumb but small.

28. The Os Ilium perfectly like the Ape-kind; being longer, narrower, and not so Concave as in Man.

29. The Bones of the Toes in their length, and the Great Toe in it's

Structure imitated the Ape-kind.

30. These Muscles were wanting in the Pygmie, which are always found in Men; viz. Occipitales, Frontales, Dilatatores Alarum Nasi, seu Elevatores Labij Superioris, Interspinales Colli, Glutæi minimi, Extensor Digitorum Pedis brevis, and Transversalis Pedis.

31. These Muscles did not appear in the Pygmie, and are sometimes wanting too in Humane Bodies; viz. Pyramidales; Caro musculosa Quadrata; the long Tendon and sleshy Belly of the Palmaris; Attollens Au-

riculam; and Retrahens Auriculam.

32. The Elevatores Clavic Jarum are in the Pygmie and the Ape-kind,

and not in Man.

33. These Muscles resembled those in Apes and Monkeys, and differ'd from the Humane, viz. Longus Colli, Pectoralis, Latissimus Dorsi, Glutaus maximus & medius, Psoas magnus & parvus, Iliacus internus, and the Gasterocnemius internus.

34. These Muscles differ'd likewise from the Humane, viz. the Del-

toides; the Pronator Radij teres; the Extensor Pollicis brevis.

The Explanation of the Figures.

Figure the First

Epresents the Fore-parts of the Orang-Outang or Pygmie, in an Erect Posture: Where you may observe the largeness of the Head; and broadness of the Forehead; the jutting out of the Eye-brows; the Eyes somewhat sunk; the Nose slat; the Face without hair and wrinkled; the Teeth like the Humane; the Chin short; the Ears standing off from the Head; the Head hairy; the Shoulders spread and large; the Arms and Palms of the Hands long; the Nails like those in a Man; the Hair of the Shoulder inclining downwards, and that on the Arms, upwards; the Fingers large; the Thumb little; the Breast sull chested and spread; the Mammae or Teats placed as in Man; the Belly slat; the Navil as in Man; the Penis half-way covered with the Prepuce, which had no Franum; no pendulous Scrotum here; the Thighs a little divaricated; the Legs

Legs long and with Calves; the Foot like a Hand, having long Toes, and the Great Toe placed at a distance from the others, like a Thumb; the Feet, Hands, Face, Ears, and Penis without Hair; and all the Foreparts of the Body rather less hairy than here represented; and the Head is too much shrunk down between the Shoulders.

The Second Figure

Epresents the Hinder Parts of the Pygmie in an Erect Posture likewise; where may be observed the Globous Figure of the Head; the straitness of the Back; and that 'tis more hairy behind, than before; the Fingers of the right Hand are represented bending, to shew the Action, when it goes on all four; for then it places only the Knuckles, not the Palms of the Hands to the Ground. The Sole of the left Foot, by reason of the length of the Toes, and the letting on of the Great Toe, looks like the Palm of the Hand: but the right, having so long a Heel, and its Toes being hid, appears rather like a Foot, and upon occasion performs the Office of both, either of a Foot or Hand. A little above the Anus, there is a black Spot, which represents a small Protuberance of the Os Coccygis.

The Third Figure

Epresents the Muscles which appear on the Fore-part of the Body.

A. Part of the Coronary Suture.

B. The Division of the Cranium made by the Saw.

c. The Meatus Auditorius.

d. Part of the Os Jugale, or Zygomaticum.
e. The Parotid Gland. * The Salival Duct.

f. The Inferior Maxillary Gland.

g. g. The Clavicula.

h. Part of the Spina Scapulæ, as joyned to the Clavicle.
j. The Nerves, and Blood Vessels which pass to the Arm.

k. The Trunk of the Nerve in the left Arm, that goes to the Fingers.

1. A large Trunk of the Arterie, and a Nerve in the Cubit, as in Humane Bodies.

m. m. The Internal Protuberances of the Os Humeri.

n. The Radius of the left Arm made bare.

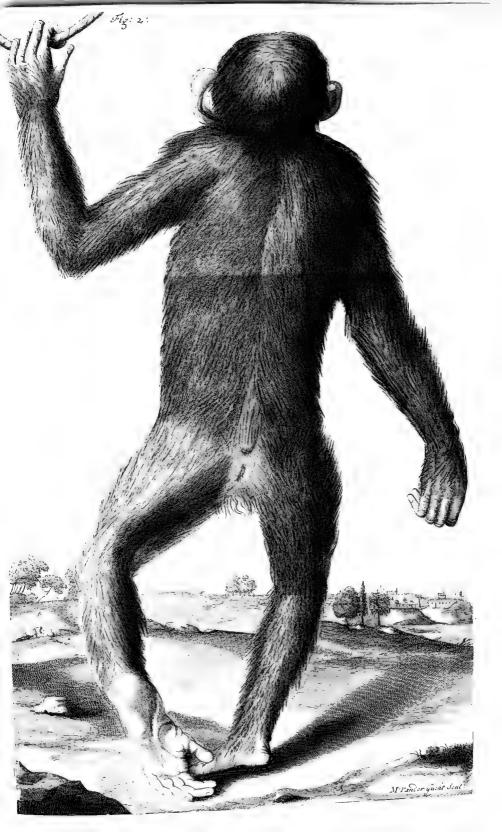
o. The Umbilicus, or Navil.

p. The Linea Alba.

q. q. The Tendons of the Oblique Muscles, call'd Linea Semilunaris.
r. r. The

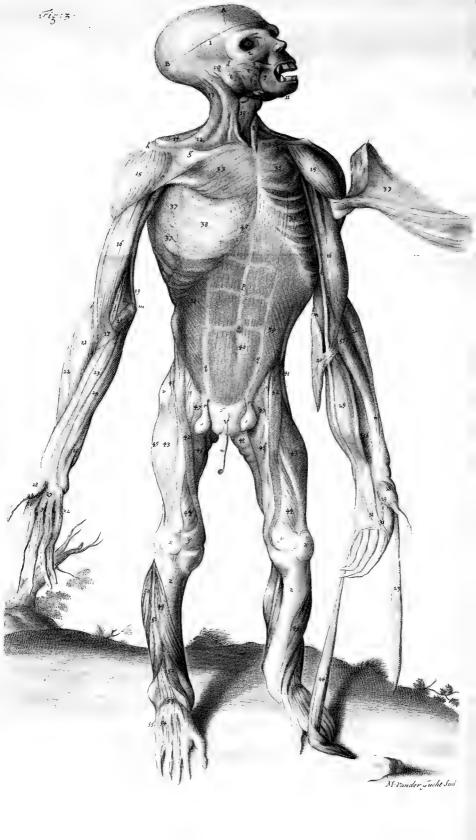








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r. r. The Tunica Vaginalis, containing the Vasa Praparantia, &c.

s. s. The Testes or Stones.

t. The Blood Vessels of the Thigh, as they pass under the Inguinal Glands.

T. The Os pubis.

V. The Ligamentum suspensorium Penis.

u. The Great Trochanter.

w. The Penis.

x. x. The two Patellæ.

y. y. The internal and lower Appendix of the Os Femoris.

z.z. The Tibia.

- No 1. The Musculus Temporalis.
- 2. The Orbicularis Palpebrarum.
- 3. Zygomaticus, seu distortor oris.
- 4. Elevator Labij superioris proprius.
 5. Elevator Labij inferioris proprius.
- 6. Masseter.
- 7. Buccinator.
- 8. 8. Mastoideus.
- 9. Sternobyoideus.

X. Part of the Corocobyoideus.

11. Part of the Digastricus, and it's Insertion into the Chin.

12. Elevator Claviculæ, which Muscle is not in Man, but in the Pygmie and Apes.

13. Part of the Complexus Capitis.

14. Part of the Cucularis.

15. 15. Deltoides.

15. 16. The Biceps.

17. The thin Tendinous Expansion of the Biceps, which involves the Muscles of the Cubit, as in Man.

18. Part of the Brachaus internus.

19. The Tendinous Elongation of the Latissimus Dorsi, which is found in the Pygmie, and in Apes and Monkeys; and not in Man; near it's Insertion into the Internal Protuberance of the Os Humeri.

20. 20. The *Pronator Radij teres*. That of the left fide, being diffected from it's Infertion, and left at it's two Originals.

21. 21. The Supinator Radij Longus.

22. Part of the Extensor Radialis.

- 23.23. The Flexor Radialis, that of the left Arm hanging at it's Infertion.
- 24. 24. The Perforatus; that of the left side hanging by its Tendons on the Palm of the Hand.

25. The Perforans; a little raised in the lest Arm.

26. The Tendon of the Flexor Ulnaris as it runs to the Carpus.

27. A Tendinous Expansion, like the Palmaris in Man; but here was no Muscle, which is often seen in Humane Bodies.

28. 28. The Abductor Pollicis.

98 Orang-Outang sive Homo Sylvestris: Or,

29. The Flexor Secundi internodij Pollicis.

30. Abductor Indicis,

31. 31. The Lumbricales.

32. The Abductor minimi digiti.

33. The Pedoralis; that of the left fide being raifed, to shew the decussation of it's Fibres, as in Man.

34. Part of the Musculus Subclavius.

35. Serratus minor anticus.

36. 36. The Intercostales externi.

37. 37. The Serratus major anticus; where 'tis indented with the Musculus obliquus descendens.

38. 38. The Obliquus descendens.

39. The Obliquus ascendens, as it appeared after the descendens was removed.

40.40. The Musculi Redi, with their Paragraphs or Inscriptions, as in Man

41. 41. The Musculus communis Membranosi.

42. 42. The Sartorius.

43. 43. The Rectus Femoris.

44. 44. The Vastus internus.

45. Part of the Vastus externus.

46. 46. Parts of the Triceps.

47. 47. The Pectinaus.

48. The Gracilis.

49.49. The Tibialis Anticus.

50. Part of the Gasterocnemius.

51. Parts of the Peronei.

52. The Extensor Pollicis longus.

- 53. The Extensor Pollicis brevis, which differ'd in this Animal, from that in Man.
- 54. The Tendons of the Extensor Communis digitorum, as they pass between the Interossis.

55. The Abductor minimi digiti. 56. The Pronator Radij Quadratus.

57. Part of the Supinator Radij brevis; at it's Insertion to the Radius.

Figure the Fourth

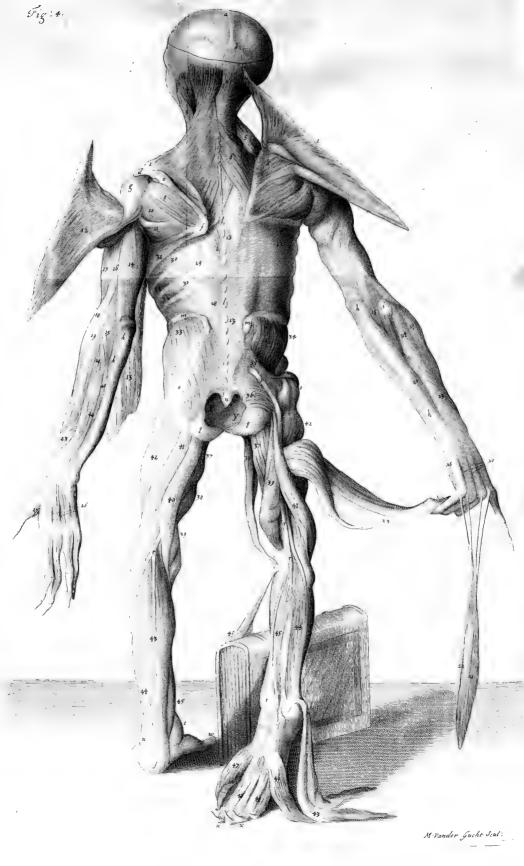
Shews the Muscles of the Back-part of the Body.

a. HE Sagittal Suture.
b. The Lambdoidal Suture.

c. c.c. The Spines of the Superior Vertebræ of the Thorax, and of one of the Inferior of the Neck.

d. The





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d. The Extremity of the Clavicle, where it is connected to the Spine of the Scapula.

e. The Spine of the Scapula.

f. The lower Angle of the Scapula.

g. The upper part of the Os Humeri, made bare, by raising the Deltoid Muscle.

h. h. The Acromion or Elbow.

i. The External Protuberance of the Os Humeri, where the upper part of the Radius, is Articulated.

k. The Ulna.

1. 1. The Spines of the Back and Loins.

m. m. The Spines of the Ossa Ilium.

n. The Os Coccygis.

o. The Great Trochanter.

p. The Trunk of the Great Crural Nerve.

q. q. The Ossa Ischij.

r.r. r. The Crural Nerves in the Hams.

S. S. The Os Calcis.

- t. t. The Malleolus Internus.
- u. The Malleolus externus.

w. w. The Great Toe.

x. x. The four little Toes.

y.y. The Pelvis left open, by taking out the Anus with the Rectum.

N° 1.1.1.1. The Musculus Cucularis, raised on the right side, and lest fastened to the Occiput, and to its Insertion at the Spine of the Scapule and Clavicle.

2. Part of the Splenius.

3. Part of the Mastoideus.

4. Part of the Complexus.

5. Part of the Levator Scapula.

6. Rhomboides.

7. Part of the Serratus Superior posticus.

8. Supraspinatus.

9. Infraspinatus.
X. The Teres minor, which is larger here than in Man.

II. The Teres major.

12. The Deltoides raised.

13. 13. 13. 13. The Latissimus Dorsi, on the right side in situ, in the left, freed from it's Original and hanging down.

14. The Biceps Externus seu Gemellus.

15. The Anchonaus.

- 16. Part of the Brachaus internus.
- 17. Part of the Biceps internus.
- 18. The Supinator Radij longus.

100 Orang-Outang sive Homo Sylvestris: Or,

20. 20. The Extensor Carpi Ulnaris.

- 21. 21. The Extensor Communis digitorum, on the right side hanging by its Tendons.
 - 22. 22. The Extensor minimi digiti, on the right side hanging down.

23. The Extensores Pollicis.

24. The Supinator Radij brevis.

25. The Abductor minimi digiti. 26. The Musculi interossei.

- 27. The Abductor Pollicis.
- 28. The Longiffimus Dorfi.

29. The Sacrolumbalis.

30. 30. The Intercostales.

31. Part of the Serratus major anticus.

32. The Serratus inferior posticus:

33. The Glutæus maximus on the left fide in situ, on the right freed from its Origin, and left at it's Insertion.

34. The Glutaus medius.

35. The Pyriformis.

36. The Marsupialis s. Obturator.

37. 37. Part of the Triceps.

38. 38. The Gracilis.

39. The Semimembranosus.

40. The Seminervosus.
41. The Biceps femoris.

42. Part of the Vastus externus.

43. 43. The Gasterocnemius externus, that of the right side hanging to its Insertion, at the Os Calcis.

44. The Gasterocnemius Internus.

45. Part of the flexor Digitorum perforans.

46. The fleshy part of the flexor Digitorum perforatus.

47. The flexor Offis Pollicis, together with the Abductor Pollicis, raised from it's Origin, and hanging down.

48. The Musculi Lumbricales.

The fifth Figure

Represents the Sceleton, or the Bones.

HE Os Frontis.

2. The Os Bregmatis.

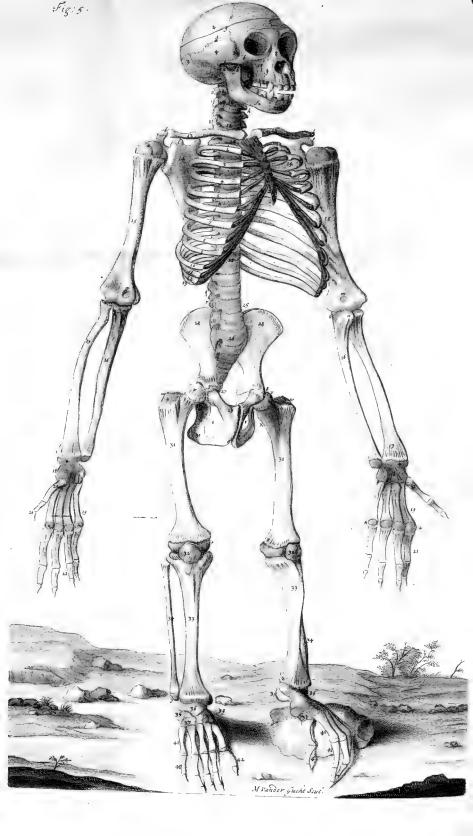
3. Part of the Os Occipitis.

Os Temporale, seu Squammosum.
 Os Jugale, seu Zygomaticum.

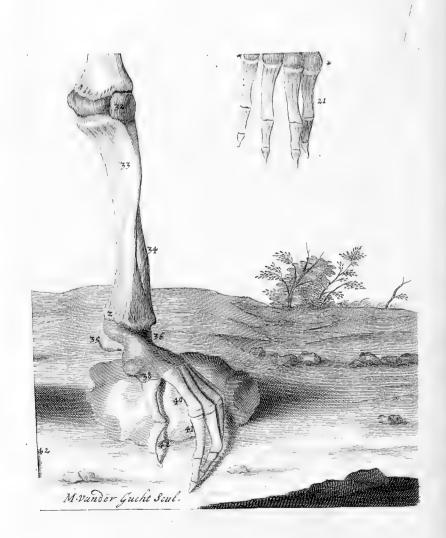
6. The first Bone of the Upper Jaw.

7. The Os Lachrymale.





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8. The Os Narium.

9. The fourth Bone of the Upper Jaw. 10. The upper part of the Os Sphanoides.

11. The lower faw.

a. The Processus Condyloides of the lower Jaw.

b. The Processus Corone.
c. The Coronal Suture.

d. The Sutura Offis Temporalis, seu Squammosi.

e. A Foramen for the passing the Nerves, and the Blood Vessels in the upper Jaw.

f. A like Foramen in the under 7aw.

- g. Where the Skull was fawed, to take out the Brain.
 h. The Transverse Processes of the Vertebræ of the Neck.
- j. j. The Oblique ascending and descending Processes of the Neck.

12.12. The Vertebræ of the Neck.

13.13. The Claviculæ, or Collar Bones.

K. K. The Connection of the Claviculæ, to the Spina Scapulæ.

14. 14. The Internal parts of the Scapula.

1. 1. The Processus Chorocoides Scapulæ.

15. 15. The Os Humeri.

†.†.A Sinus for receiving the External Tendon of the head of the Biceps. m. m. A Sinus for receiving the Prominence (n.n.) of the Ulna upon bending the Arm.

16. 16. The Ulna.

o. Part of the Olecranon of the Ulna of the left Arm.

17. 17. The Radius.

p. A Prominence of the Radius, to which the internal great Tendon of the Musculus Biceps is inserted.

18. 18. The Bones of the Carpus, which in a great measure were Cartilaginous.

19. 19. The Bones of the Metacarpus.

20. 20. The Bones of the Thumb.

21.21. The Bones of the Fingers.

22. 22. The Sternum or Os Pectoris.

23. The Cartilago Ensiformis.

1. 2. 3. 4. 5. 6. 7. 8. 9. 10.11. 12. 13. The Thirteen Ribs of each side.

24. The Vertebræ of the Back.
25. The Vertebræ of the Loins.

q. The Transverse Processes of the Vertebræ of the Loins.

r. The Foramina for the passage of the Nerves.

26. The Os Sacrum.

- 27. The Os Coccygis.
- 28.28. The Os Ilium.

29. The Os Pubis.

30. The Os Ischij.
s. s. The Cartilaginous Conjunction of the Os Ilium with the Os Pubis
and Ischij at the Acetabulum.
t. t. The

102 Orang-Outang sive Homo Sylvestris: Or,

t. t. The large Foramen of the Os Pubis and Ischij.

31. 31. The Os femoris.

v. v. The Head of the Os femoris in the Acetabulum. w.w. The Great Trochanter, which was Cartilaginous.

X. The leffer Trochanter.

32.32. The Patella, which was Cartilaginous.

33.33. The Tibia.

34. 34. The Fibula.

35. 35. The Os Calcis. 36. 36. The Aftragalus.

36. 36. The Astragalus. 37. The Os Cubiforme.

38. The Os Naviculare, seu Cuneiforme majus.

39. The Ossa Cuneiformia minora.

40. 40. The Ossa Metatarsi. 41. 41. The Ossa Digitorum.

42. 42. The Bones of the Great Toe.

y. The Malleolus externus. z. The Malleolus internus.

*** Signifie, that those Parts were Cartilaginous.

The fixth Figure

Represents the Stomach, Intestines, Pancreas, Spleen, Liver, &c.

A. A. HE back fide of the Stomach, it being turned upwards.

B. Part of the Oefopkagus. or Gullet, before it joyns with the upper or left Orifice of the Stomach.

C. The right Orifice of the Stomach, or Pylorus.

a. a. The Extremities of the Vasa Brevia, which pass between the Spleen and the Stomach.

b. b. &c. Divers Lymphatick Glands on the Stomach.

D. The Superior Coronary Arteries and Veins, and their Ramifications. E. E. The Inferior Coronary Blood Vessels of the Stomach, which sends Branches also to the Omentum.

F. F. The Omentum or Caul turned up, to shew it's lower Leaf.

G. G. The Liver, like the Humane; and not divided into Lobes, as tis in Apes.

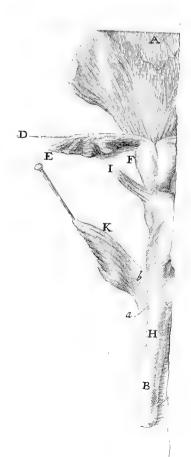
c. A small Lobe of the Liver at the entrance of the Vena Porta.

d The Fissure or Cleft in the Liver at the entrance of the Umbilical Vein.

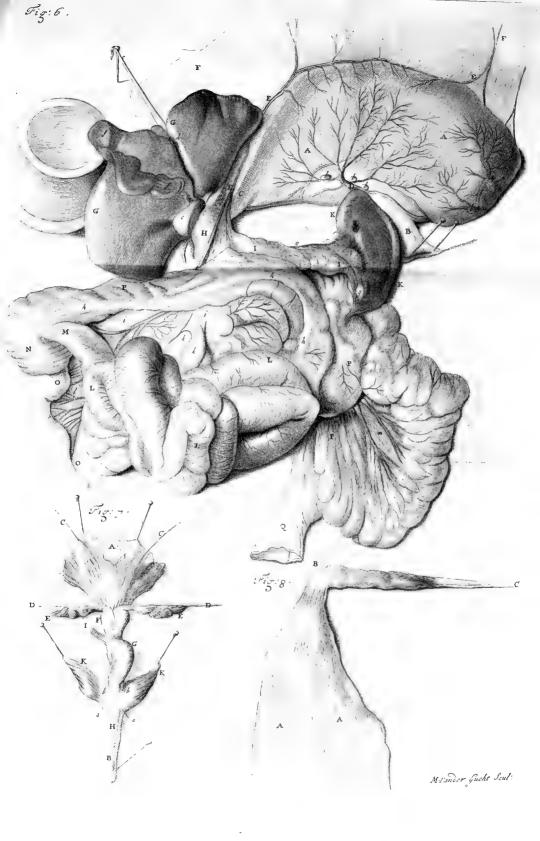
f. f. The Gall Bladder.

H. The beginning of the Duodenum.

I. I. The Pancreas.







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g. g. The Blood Vessels of the Spleen, especially a Branch of the Vena Porta.

K.K. The Spleen.

L. L. L. The Small Guts.

M. The Ilean just before it enters the Colon.

N. The beginning of the Colon.

h. h. One of the Ligaments of the Colon.

O.O. The Cacum, or Appendicula Vermiformis.

P. P. The Colon in its whole Progress, to the Rectum.

j. j. Part of the Mesenterie.

k. k. The Glands of the Mesenterie.

1. That part of the Mesenterie, which is connected to the Cacum, or the Mesocacum.

m. The Mesocolon, or that Part of the Mesenterie that is fastened to the

Colon.

2. The upper part of the Intestinum Rectum.

The Seventh Figure

Shews the Organs of GENER ATION.

A. HE back part of the Bladder of Urine, the greatest part of the Bladder being cut off.

B. The Penis.

C. C. The two Ureters.

D. D. The Vasa Deferentia. E.E. The Vesiculæ Seminales.

F. The Glandulæ Prostatæ, or Corpus Glandosum.

G. The Bulb of the Cavernous Body of the Urethra, covered with the

Musculus accelerator Urina seu Spermatis.

a. a. The two Productions of the last mentioned Muscle, which are inserted to the two Cavernous Bodies of the Penis, on each side the Urethra, by which means that part of the Urethra is comprest, and it's Contents forced out.

b. b. The beginning of the two Cavernous Bodies of the Penis.

H. The Cavernous Body of the Urethra.

j. One of the Transverse Muscles of the Penis, call'd the Third.

K. K. The Musculi Directores Penis.

The Eighth Figure

Exhibits part of the Musculus Latissimus Dorsi disseded.

A. A. THAT part of the Muscle that lies on the Back, as in Humane Bodies.

B. It's Tendon which is inserted to the Os Humeri, as in Men.

c. The Tendinous Extremity of a fleshy Production of this Muscle, which is implanted on the Internal Protuberance of the Os Humeri of this Animal; as 'tis also in Apes and Monkeys.

The ninth Figure

Represents the Vrinary Parts and Organs of Generation.

A. HE left Kidney entire.

a. a. The Membrana Adiposa, partly freed from the Kidney, and turned back.

B. The Right Kidney opened, to thew its Glandulous Substance, and

Urinary Tubes, and the Pelvis.

b The Tubuli Urinarij which arise from the Glandulous Substance, and like Lines drawn from a Circumference to a Center, pass to the Fimbria or Edge cc, in Man to the several Papilla, where their Orifices open and empty themselves into the Pelvis.

c. c. The faid Fimbria, of a Semicircular Figure, where the Extreams of the Urinary Tubes discharge the Urine into the Pelvis, or rather

Funnel of the Kidneys.

d. The Pelvis or Infundibulum: For being large here in the Kidney, and running into a long slender Stem in the Ureter, it more properly represents a Funnel, and serves for the Conveying the Urine thence into the Bladder.

C.C. The Glandula Renales.

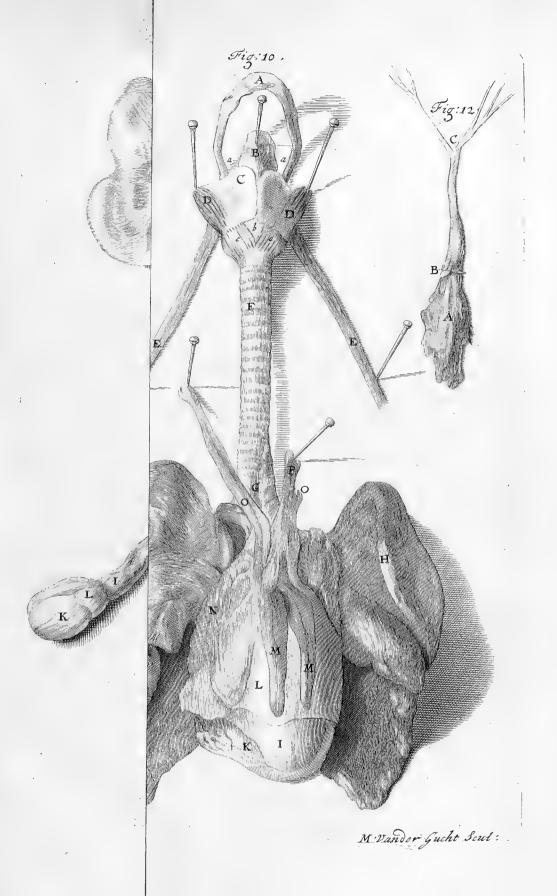
D. D. The Descending Trunk of the Arteria Magna or Aorta, below the Diaphragm.

d. The Caliac Arterie.

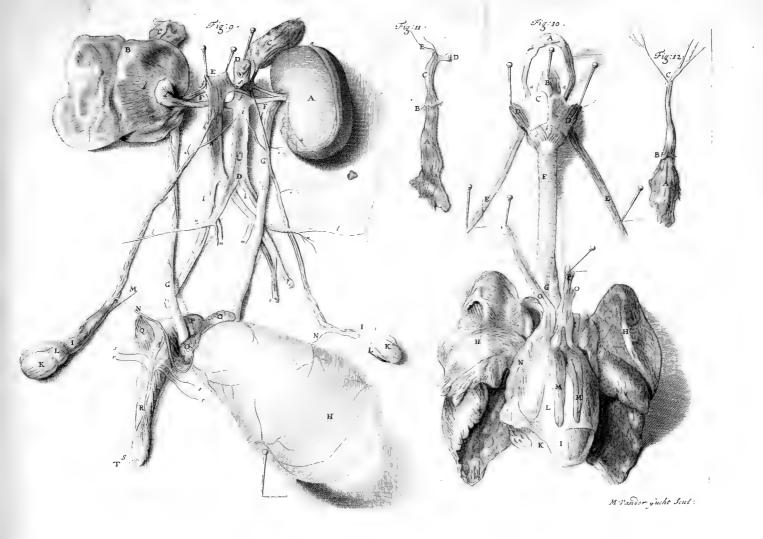
8. The Arteria Mesenterica superior. g The Arteria Mesenterica inferior.

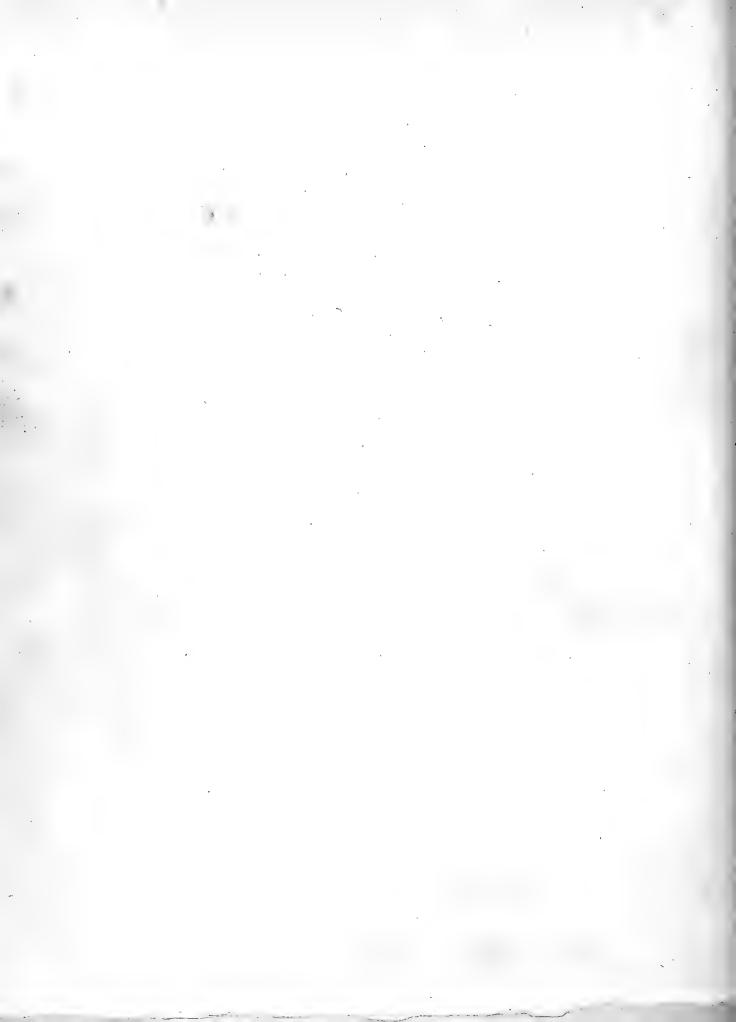
E. The Descending Trunk of the Vena Cava.

F. F. The Emulgent Arteries. f. f. The Emulgent Veins.



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G.G. The Ureters.

H. The Bladder of Urine.

b. b. The Spermatick Veins which discharge themselves into the Vena Cava, and the lest Emulgent, as in Man.

j. The Spermatick Arteries, as they arise from the fore-part of the

Trunk of the Aorta.

J. J. The Vasa Præparantia Pampini-formia, seu Corpora Pyramidalia.

K.K. The Testes or Stones, which appear here flaccid, having been kept some time, before the figure was taken.

L. L. The Epididymis, making several Convolutions on the body of

the Testes.

M. Part of the Cremaster Muscle.

N. N. The Vasa Deferentia.
O.O. The Vesicula Seminales.

P. The Proftates or Corpus Glandosum.

2. The Musculus Erector Penis of the right side.

R. The upper part or Dorsum Penis.

S. The Corpora Cavernosa Penis, cut transverse.

T. The Urethra.

k. k. The main Trunk of the Iliac Arterie and Vein:

1.1. The Umbilical Arteries.

m.m. The Arterie that goes to the Penis.

n. n. The Arterie that goes to the Bladder of Urine.

o. The internal Iliuc Vein and Arterie.

p. The external Iliac Vein and Arterie.

q. The Vena Pudenda seu Penis.

r. r. The Nerves of the Penis. f. f. The Arteries of the Penis.

The tenth Figure

Demonstrates the Parts of the Thorax with the Arteria Aspera and Larynx.

A. THE fore-part of the Os Hyoides.

a. a. Its two ends, that are connected to the two Superior long.

Processes of the Cartilago Scutiformis.

B. The Epiglottis.

C. The Cartilago Scutiformis.

b. The Prominent part of the Annulary Cartilage.

D. D. The Musculi Hyothyroidei. E. E. The Musculi Sternothyroidei. c. c. The Musculi Cricothyroidei.

F. The Arteria Aspera, or Wind-pipe.

G. It's division, where it passes to the right and left Lobes of the Lungs.

P

H. H. The Lungs.

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7.The

106 Orang-Outang sive Homo Sylvestris: Or,

7. The Cone of the Heart.

K. The right Ventricle of the Heart here opened, so that part of the Polypus contained there, came in view.

L. Part of the Pericardium, on the Basis or upper part of the Heart.

M. M. The Thymus, lying on the Pericardium.

N.The Mediastinum freed from the Sternum, and turn'd to the right side.

O.O. The two Subclavian Arteries.

P. The Carotid Arteries.

The eleventh Figure

Shews the Polypus or Coagulated Blood found in the left Venticle of the Heart.

A. THAT part contained in the Ventricle.

B. Three Impressions, formed by the Semilunary Valves.

C. That part, that lay in the Aorta.

D. That part that passed into the descending Trunk of the Aorta. E. Those Ramuli of it that lay in the ascendent Branches of the Aorta.

The twelfth Figure

The Polypus found in the right Ventricle of the Heart.

A. THAT part contained in the Ventricle.

B. The Impressions made by the Valvulæ sigmoides.

C. The Branches leading to the right and left Lobes of the Lungs.

The thirteenth Figure

Represents the Basis of the Brain with the Medulla Oblongata, and the Nerwes and Arteries cut off.

A. A. HE two anterior or fore Lobes of the Brain.
B. B. The two posterior or hinder Lobes of the Brain.

a.a. Two depressions in the fore Lobes caused by the rising of the Frontal bone, that composes the upper part of the Orbit of the Eye; which in this Animal, and in Monkeys, is more eminent than in Man.

b. b. The division of the right and left Hemisphere of the Brain, where the Falx is placed. This fore-part of the Brain in this Animal appeared somewhat flatter than in Man.

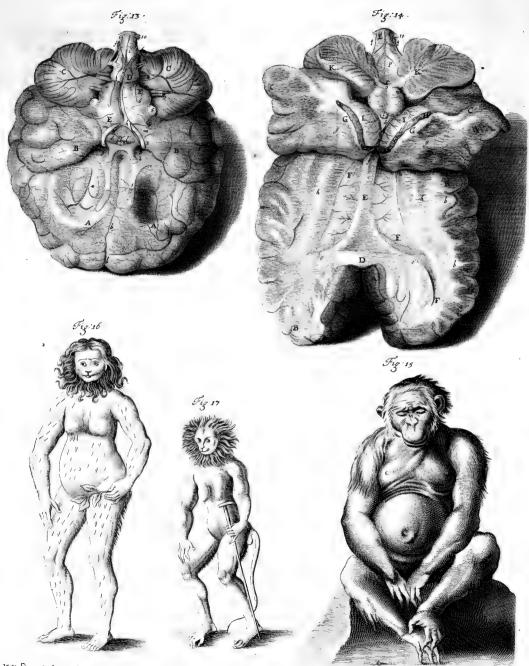
C. C. The Cerebellum.

D. The Principium Medulla Spinalis, or that part of the Caudex Medullaris,



M. Vander Gucht Soul:

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M. Vander Gudst Soul:



dullaris, where the Corpora Pyramidalia and Olivaria are placed, as in an Humane Brain.

E. E. The Protuberantia Annularis, or Pons Verolij.

e. e. The Carotid Arteries.

f. f. The Vertebral Arteries.

g. The Cervical Arterie.

h. The Communicant Branches between the Cervical and Carotid Arteries.

j. A small Arterie descending down the Spinal Marrow.

k. The Infundibulum.

l.l. The Glandula dua alba pone Infundibulum, , or rather two Medul-lary Protuberances there.

m. m. Parts of the Crura Medulla Oblongata before they unite under the Pons Verolij, or Annular Protuberance.

The Olfactory, or first pair of Nerves.
 The Optick, or second pair of Nerves.

3. The Nervi Oculorum motorij, or third pair of Nerves.

4. The Pathetick, or fourth pair of Nerves.

5. The fifth pair of Nerves.6. The fixth pair of Nerves.

7. The Auditory, or seventh pair of Nerves.8. The Par Vagum, or eighth pair of Nerves.

9. The ninth pair of Nerves.

10. The tenth pair of Nerves, which may be reckoned rather the first pair of the Neck.

* * The Nervus accessorius, that goes to the eighth pair, or Par Vagum.

The fourteenth Figure.

Represents the inward Parts of the Brain, as divided by an Horizontal Section; where the Basis of the Brain is reslected upwards.

A. A. Parts of the hinder Lobes of the Brain.

B. B. The upper part of the Brain next it's Hemispheres, divided from the lower.

C. C. The lower part next the Basis, reflected or turned up.

a. a. The Cortical or Cinericious part of the Brain, which is Glandulous. b. b. The Medullary part, that runs up between the Cortical, and is

Nervous.

D. The Corpus Transversale.

E. The Fornix.

e. e. The Crura Fornicis.

f. The two Roots of the Fornix.

F. F. The.

Orang-Outang sive Homo Sylvestris: Or, 108

- F. F. The two first Ventricles of the Brain.

G.G. Parts of the Corpora Striata, entire.

g. g. The Striæ as they appear in this Section in the Corpora Striata in the lower part of the Brain.

b. h. The same Striæ, in the upper part of the Brain.

H. H. The Plexus Choroides.

J. J. The Thalami Nervorum Opticorum. j. The Plexus Choroides continued.

K. K. The Cerebellum divided perpendicularly, to shew the ramifications of the Medullary part in the Cortical.

k. The Foramen anterius that leads to the Cavity under the Protuberan-

tiæ orbiculares.

1. The Glandula Pinealis.

m. The Nates.

n. The Testes. o. The Commissure of the Medullary Processes of the Cerebellum and Testes.

p. The fourth Ventricle opened.

g. q. The Accessory Nerves. 10. The tenth pair of Nerves.

r. The Foramen posterius or inferius, that leads to the Cavity under the Protuberantiæ orbiculares.

s. The Rima or Foramen, that leads to the Infundibulum.

The fifteenth Figure

Is a Copy of the Figure that Nicholaus Tulpius gives of the Orang-Outang that was brought to Holland from Angola.

The fixteenth Figure

Represents the Figure that Jacob. Bontius gives of the Orang-Outang in Pifo.

The seventeenth Figure.

Is taken out of Gesner, which he tells us, he met with in a German Book, wrote about the Holy Land.

FINIS.

A

PHILOLOGICAL ESSAY

Concerning the

PYGMIES,

THE

CYNOCEPHALL

THE

SATYRS and SPHINGES

OF THE

ANCIENTS,

Wherein it will appear that they were all either Apes or Monkeys; and not Men, as formerly pretended.

By Edward Tyson M. D.

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A

Philological Essay

Concerning the

PYGMIES

OF THE

ANCIENTS.

A VING had the Opportunity of Dissecting this remarkable Creature, which not only in the outward shape of the Body, but likewise in the structure of many of the Inward Parts, so nearly resembles a Man, as plainly appears by the Anatomy I have here given of it, it suggested the Thought to me, whether this sort of Animal, might not give the Foundation to the Stories of the Pygmies? and assort an occasion not only to the Poets, but Historians too, of inventing the many Fables and wonderful and merry Relations, that are transmitted down to us concerning them? I must consess, I could never before entertain any other Opinion about them, but that the whole was a Fiction: and as the first Account we have of them, was from a Poet, so that they were only a Creature of the Brain, produced by a warm and wanton Imagination, and that they never had any Existence or Habitation elsewhere.

In this Opinion I was the more confirmed, because the most diligent Enquiries of late into all the Parts of the inhabited World, could never discover any such Puny diminutive Race of Mankind. That they should be totally destroyed by the Cranes, their Enemies, and not a Straggler here and there lest remaining, was a Fate, that even those Animals that are constantly preyed upon by others, never undergo. Nothing therefore appeared to me more Fabulous and Romantick, than their History, and the Relations about them, that Antiquity has delivered to us. And

not only Strabo of old, but our greatest Men of Learning of late, have wholly exploded them, as a meer figment; invented only to amuse, and divert the Reader with the Comical Narration of their Atchievements, believing that there were never any such Creatures in Nature.

This Opinion had so fully obtained with me, that I never thought it worth the Enquiry, how they came to invent such Extravagant Stories: Nor should I now, but upon the Occasion of Dissecting this Animal: For observing that 'tis call'd even to this day in the Indian or Malabar Language, Orang-Outang, i.e. a Man of the Woods, or Wild-men; and being brought from Africa, that part of the World, where the Pygmies are faid to inhabit; and it's prefent Stature likewife tallying so well with that of the Pygmies of the Ancients; these Considerations put me upon the fearch, to inform my felf farther about them, and to examine, whether I could meet with any thing that might illustrate their History. For I thought it strange, that if the whole was but a meer Fiction, that so many succeeding Generations should be so fond of preserving a Story, that had no Foundation at all in Nature; and that the Ancients should trouble themselves so much about them. If therefore I can make out in this Essay, that there were such Animals as Pygmies; and that they were not a Race of Men, but Apes; and can discover the Authors, who have forged all, or most of the idle Stories concerning them; and shew, how the Cheat in after Ages has been carried on, by embalming the Bodies of Apes, then exposing them for the Men of the Country, from whence they brought them: if I can do this, I shall think my time not wholly lost, nor the trouble altogether useless, that I have had in this Enquiry.

My Design is not to justifie all the Relations that have been given of this Animal, even by Authors of reputed Credit; but, as far as I can, to distinguish Truth from Fable; and herein, if what I affert amounts to a Probability, it all I pretend to. I shall accordingly endeavour to make it appear, that not only the Pygmies of the Ancients, but also the Cynocephali, and Satyrs and Sphinges were only Apes or Monkeys, not Men, as they have been represented. But the Story of the Pygmies being the greatest Imposture, I shall chiefly concern my self about them, and shall be more concise on the others, since they will not need so strict an Examination.

We will begin with the Poet Homer, who is generally owned as the first Inventor of the Fable of the Pygmies, if it be a Fable, and not a true Story, as I believe will appear in the Account I shall give of them. Now Homer only mentions them in a Simile, wherein he compares the Shouts that the Trojans made, when they were going to joyn Battle with the Gracians, to the great Noise of the Cranes, going to fight the Pygmies: he saith (a),

⁽a) Homer. Iliad. lib. 3. ver. 4.

"Αι τ' έπεὶ εν γειμώνα φύγον, κὶ αθέσφαθον ὅμβεον Κλαίγη ται γε πέτον αμ έτο άκεανοῖο βοάων 'Aνδ εάσι πυγμαίοισι φόνον η κίπεα φέρεσαμ. i. e.

Quæ simul ac fugere Imbres, Hyememque Nivalem Cum magno Oceani clangore ferantur ad undas Pygmais pugnamque Viris, cadesque ferentes.

Or as Helius Eobanus Hessus paraphrases the whole (b).

Postquam sub Ducibus digesta per agmina stabant Quaque suis, Equitum turma, Peditumque Cohortes, Obvia torquentes Danais vestigia Troës Ibant, sublato Campum clamore replentes: Non secus ac cuneata Gruum sublime volantum Agmina, dum fugiunt Imbres, ac frigora Brumæ, Per Cælum matutino clangore feruntur, Oceanumque petunt, mortem exitiumque cruentum Irrita Pigmæis moturis arma ferentes.

By and ean mil maion therefore, which is the Passage upon which they have grounded all their fabulous Relations of the Pygmies, why may not Homer mean only Pygmies or Apes like Men. Such an Expression is very allowable in a Poet, and is elegant and fignificant, especially since there is so good a Foundation in Nature for him to use it, as we have already seen, in the Anatomy of the Orang-Outang. Nor is a Poet tied to that strictness of Expression, as an Historian or Philosopher; he has the liberty of pleasing the Reader's Phancy, by Pictures and Representations of his own. If there be a becoming likeness, 'tis all that he is accountable for. I might therefore here make the same Apology for him, as Strabo (c) do's on another account for his Geography, ຮັ້ ກີ ກູຂໃ ຜູ້ ນາວເຂນ των ποπικών λέγελαι, άλλ' ήδονης η τερίεως χάριν, That he said it, not thro' Ignorance, but to please and delight: Or, as in another place he expresses himself (d), & 20 nal azvoiav of isoplas worknown zever ay romanda τεφιρωδίας χάριν. Homer did not make this slip thro' Ignorance of the true History, but for the Beauty of his Poem. So that they he calls them Men Pygmies, yet he may mean no more by it, than that they were like Men. As to his Purpose, 'twill serve altogether as well, whether this bloody Battle be fought between the Cranes and Pygmaan Men, or the Cranes and Apes, which from their Stature he calls Pygmies, and from their shape Men; provided that when the Cranes go to engage, they make a mighty terrible noise, and clang enough to fright these little Wights their mortal Enemies. To have called them only Apes, had been

⁽b) Homeri Ilias Latino Carmine reddita ab Helio Ecbano Hesso. (c) Strabo Geograph. lib.1.p.m.25. (d) Strabo ibid. p. m. 30.

flat and low, and lessened the grandieur of the Battle. But this Periphrafis of them, and furprises the Reader's Phancy, and surprises him, and is more becoming the Language of an Heroic Poem.

But how came the Cranes and Pygmies to fall out? What may be the Cause of this Mortal Feud, and constant War between them? For Brutes, like Men, don't war upon one another, to raise and encrease their Glory, or to enlarge their Empire. Unless I can acquit my self herein, and assign some probable Cause hereof, I may incur the same Censure as Strabo (e) passed on several of the Indian Historians, executivary in the Open Lake The Indian Historians, executivary in the Strabo (e) passed on several of the Indian Historians, executivary in the Strabo (e) passed on several of the Indian Historians, executivary in the Strabo (e) passed on several of the Indian Historians, executivary in the Strabo (e) passed on several of the Indian Historians, executivary in the Strabo (e) passed on several of the Indian Historians, executivary in the Strabo (e) passed on several of the Indian Historians, executivary in the Strabo (e) passed on several of the Indian Historians, executivary in the several of the Indian Historians, executivary in the Strabo (e) passed on several of the Indian Historians, executivary in the same Censure of Strabo (e) passed on several of the Indian Historians, executivary in the same Censure of Strabo (e) passed on several of the Indian Historians, executive in the same Censure of Strabo (e) passed on several of the Indian Historians, executive in the same Censure of Strabo (e) passed on the Indian Historians, executive in the same Censure of Strabo (e) passed on the Indian Historians, executive in the same Censure of Strabo (e) passed on the Indian Historians, executive in the Indian Historians, executive

Athenœus (f) out of Philochorus, and so likewise Ælian (g), tell us a Story, That in the Nation of the Pygmies the Male-line failing, one Gerana was their Queen; a Woman of an admired Beauty, and whom the Citizens worshipped as a Goddess; but she became so vain and proud, as to prefer her own, before the Beauty of all the other Goddess, at which they grew enraged; and to punish her for her Insolence, Atheneus tells us that 'twas Diana, but Ælian saith 'twas Juno that transformed her into a Crane, and made her an Enemy to the Pygmies that worshipped her before. But since they are not agreed which Goddess 'twas, I shall let this pass.

Pomponius Mela will have it, and I think some others, that these cruel Engagements use to happen, upon the Cranes coming to devour the Corn the Pygmics had sowed; and that at last they became so victorious, as not only to destroy their Corn, but them also: For he tells us: (†), Fuere interius Pygmei, minutum genus, & quod pro satis srugibus contra Grues dimicando, desecit. This may seem a reasonable Cause of a Quarrel; but it not being certain that the Pygmies used to sow Corn, I will not insist on this neither.

Now what seems most likely to me, is the account that *Pliny* out of *Megasthenes*, and *Strabo* from *Onesicritus* give us; and, provided I be not obliged to believe or justifie all that they say, I could rest satisfied in great part of their Relation: For *Pliny* (h) tells us, *Veris tempore universo*

⁽e) Strabo Geograph. lib. 2. p. m. 48. (f) Athenzi Deipnosoph. lib. 9. p. m. 393. (g) Ælian. Hist. Animal. lib. 15. cap. 29. (f) Pomp. Mela de situ Orbis, lib. 3. cap. 8. (h) Plinij Hist. Nat. lib. 7. cap. 2. p. m. 13

agmine ad mare descendere, & Ova, Pullosque earung Alitum consumere: That in the Spring-time the whole drove of the Pygmies go down to the Sea side, to devour the Cranes Eggs and their young Ones. So likewise Onesicritus (i), Πεος ή τες τριαπθάμες πόλεμον εί) ταις Γεράνοις (δυ κλ "Ομης ου δηλούν) η τοις Περλίζιν, ές χηνομεγέθεις εί) τέτες δ' οπλέγειν αὐτίν τις ώα, ελ φθείρειν. ζυεί λο φοροκείν τις Γεράνες. διρπες μπορείνες πωρ, φα επίρσκεωσι Γεράνων, μηθ εν νεότλια i.e. That there is a fight between the Pygmies and the Cranes (as Homer relates) and the Partridges, which are as big as Geese; for these Pygmies gather up their Eggs, and destroy them; the Cranes laying their Eggs there; and neither their Eggs, nor their Nests, being to be found any where else. 'Tis plain therefore from them, that the Quarrel is not out of any Antipathy the Pygmies have to the Cranes, but out of love to their own Bellies. But the Cranes finding their Nests to be robb'd, and their young Ones prey'd on by these Invaders, no wonder that they should so sharply engage them; and the least they could do, was to fight to the utmost so mortal an Enemy. Hence, no doubt, many a bloody Battle happens, with various fuccess to the Combatants; sometimes with great flaughter of the long-necked Squadron; sometimes with great effusion of Pygmaan blood. And this may well enough, in a Poet's phancy, be magnified, and represented as a dreadful War; and no doubt of it, were one a Spectator of it, 'twould be diverting enough.

> Si videas hoc Gentibus in nostris, risu quatiere: sed illic, Quanquam eadem assiduè spestantur Prælia, ridet Nemo, ubitota cohors pede non est altior uno (k).

This Account therefore of these Campaigns renewed every year on this Provocation between the Cranes and the Pygmies, contains nothing but what a cautious Man may believe; and Homer's Simile in likening the great shouts of the Trojans to the Noise of the Cranes, and the Silence of the Greeks to that of the Pygmies, is very admirable and delightful. For Aristotle (1) tells us, That the Cranes, to avoid the hardships of the Winter, take a Flight out of Scythia to the Lakes about the Nile, where the Pygmies live, and where 'tis very likely the Cranes may lay their Eggs and breed, before they return. But these rude Pygmies making too bold with them, what could the *Cranes* do less for preserving their Off-spring than fight them; or at least by their mighty Noise, make a shew as if they would. This is but what we may observe in all other Birds. And thus far I think our Geranomachia or Pygmaomachia looks like a true Story; and there is nothing in Homer about it, but what is credible. He only expresses himself, as a Poet should do; and if Readers will mistake his meaning, 'tis not his fault.

⁽i) Strab. Geograph. lib. 15. pag. 489. Animal. lib. 8. cap. 15. Edit. Scalig.

⁽k) Juvenal. Satyr. 13. vers. 170. (1) Aristotle. Hisl.

'Tis not therefore the Poet that is to be blamed, tho' they would father it all on him; but the fabulous Historians in after Ages, who have so odly drest up this Story by their fantastical Inventions, that there is no knowing the truth, till one hath pull'd off those Masks and Visages, wherewith they have disguised it. For tho' I can believe Homer, that there is a fight between the Cranes and Pygmies, yet I think I am no ways obliged to imagine, that when the Pygmies go to these Campaigns to fight the Cranes, that they ride upon Partridges, as Athenaus from Bafilis an Indian Historian tells us; for, faith he (m), Biondis je on Tol Solπέρω τη Ινδικών, οι μικεοί, φησίν, ανδρες οι παις Γεράνοις διαπολεμενίες Πέρδιξιν For presently afterwards he tells us from Menecles, δχήμα], χεωνία. that the Pygmies not only fight the Cranes, but the Partridges too, Meveκλης ή εν σρώτη της συυαγωγής οι πυίμαιοι, φήσι, τοίς περδίζι, κη ταίς Γεράνοις πολέμεπ. This I could more readily agree to, because Onesicritus, as I have quoted him already confirms it; and gives us the same reason for this, as for fighting the Cranes, because they rob their Nests. But whether these Partridges are as big as Geese, I leave as a Quare.

Megasthenes methinks in Pliny mounts the Pygmies for this Expedition much better, for he sets them not on a Pegasus or Partridges, but on Rams and Goats: Fama est (saith Pliny (n)) insedentes Arietum Caprarumque dorsis, armatis sagittis, veris tempore universo agmine ad mare descendere. And Onesicritus in Strabo tells us, That a Crane has been often observed to fly from those parts with a brass Sword fixt in him, whereaus δ' ἀκπίπθειν γρανον χακλιώ έχεσαν ἀκίδα δπό τζο ἀκείθεν πληθμάτων (0). But whether the Pygmies do wear Swords, may be doubted. 'Tis true, Ctesias tells us (p), That the King of India every fifth year sends fifty Thousand Swords, besides abundance of other Weapons, to the Nation of the Cynocephali, (a fort of Monkeys, as I shall shew) that live in those Countreys, but higher up in the Mountains: But he makes no mention of any fuch Presents to the poor Pygmies; tho' he assures us, that no less than three Thousand of these Pygmies are the King's constant Guards: But withal tells us, that they are excellent Archers, and so perhaps by dispatching their Enemies at a distance, they may have no need of such Weapons to lye dangling by their sides. I may therefore be mistaken in rendering anda a Sword; it may be any other sharp pointed Instrument or Weapon, and upon second Thoughts, shall suppose it a fort of Arrow these cunning Archers use in these Engagements.

These, and a hundred such ridiculous Fables, have the Historians invented of the Pygmies, that I can't but be of Strabo's mind (q), Pablov δ' ἄν τις Ἡπωδω, ιζ Ὁμήρω πις δύσειεν ἡρωολογεσι, ιζ τοῖς τραγμιοῖς ποιπλαῖς, ἢ Κλησία τε ιζ Ἡροδότω, ιζ Ἑλλανίαω, ιζ ἄλλοις τοιέτοις i. e. That one may sooner believe Hesiod, and Homer, and the Tragick Poets speaking of their

⁽m) Athenai Diepnosoph. lib. p. 9. m. 300. (n) Plinij Nat. Hist. lib. 7. cap. 2. p. 13. (o) Straho Geograph. lib. 15. p. 489. (p) Vide Photij Biblioth. (q) Straho Geograph. lib. 11. p. m. 350. Hero's,

Hero's, than Ctesias and Herodotus and Hellanicus, and such like. So ill an Opinion had Strabo of the Indian Historians in general, that he censures them all as fabulous (r); Απανίες μὰν τοίνον οἱ περὶ τ΄ Ἰνδικῆς γρά ζανίες ὡς ὁπὶ τὸ Φολύ ὑδιδολόγοι γεγόνασι, καθὶ ὑδιβολίω ἢ Δηίμαχ Φ. τὰ ἢ διότερα λέγει Μεγαθένης, 'Ονησικρίδς τε ιὰ Νέαρχ Φ., ιὰ ἄλλοι ποιθτοι' i. e. All who have wrote of India, for the most part, are fabulous, but in the highest degree Daimachus; then Megasthenes, Onesicritus, and Nearchus, and such like. And as if it had been their greatest Ambition to excel herein, Strabo (s) brings in Theopompus, as bragging, 'Οπ ιὰ μύθες ἐν ταῖς Ἱσορίαις ἐρεῖ κρεῖτον, ἢ ὡς Ἡρόδο Φ., ιὰ Κίνοιας, ιὰ ἙλλανικΦ., ιὰ οῖ τὰ Ἰνδικὰ συγραί ψανίες Τhat he could foist in Fables into History, better than Herodotus and Ctesias and Hellanicus, and all that have wrote of India. The Satyrist therefore had reason to say,

Audet in Historia (t).

Aristotle (u), 'tis true, tells us, "Olws j ta mir aypia aypiate en the 'Aoia, ard penáteca j tarila ta en the Eugenth, wolumppotala j tarila the tip lift in liftin namber i. e. That generally the Beasts are wilder in Asia, stronger in Europe, and of greater variety of shapes in Africa; for as the Proverb saith, Africa always produces something new. Pliny (w) indeed ascribes it to the Heat of the Climate, Animalium, Hominumque efficies monstriferas, circa extremitates ejus gigni, minime mirum, artisici ad formanda Corpora, essignique calandas mobilitate igneà. But Nature never formed a whole Species of Monsters; and 'tis not the heat of the Country, but the warm and fertile Imagination of these Historians, that has been more productive of them, than Africa it self; as will farther appear by what I shall produce out of them, and particularly from the Relation that Ctesias makes of the Pygmies.

I am the more willing to instance in Ctessas, because he tells his Story roundly; he no ways minces it; his Invention is strong and fruitful; and that you may not in the least mistrust him, he pawns his word, that all that he writes, is certainly true: And so successful he has been, how Romantick soever his Stories may appear, that they have been handed down to us by a great many other Authors, and of Note too; tho some at the same time have look'd upon them as meer Fables. So that for the present, till I am better informed, and I am not over curious in it, I shall make Ctessas, and the other Indian Historians, the Inventors of the extravagant Relations we at present have of the Pygmies, and not old Homer. He calls them, 'tis frue, from something of Resemblance of their shape, Žvopes: But these Historians make them to speak the Indian Language; to use the same Laws; and to be so considerable a Nation,

⁽r) Strabo ibid. lib. 2. p. m. 48. (s) Strabo ibid. lib. 1. p. m. 29. (t) Juvenal. Satyr. X. verf. 174. (u) Aristotle Hist. Animal. lib. 8. cap. 28. (w) Plin. Nat. Hist. lib. 6. cap. 30. p. m. 741.

and so valiant, as that the King of India makes choice of them for his Corps de Guards; which utterly spoils Homer's Simile, in making them so little, as only to fight Cranes.

Ctestas's Account therefore of the Pygmies (as I find it in Photius's Bibliotheca (x), and at the latter end of some Editions of Herodotus) is this:

"On en mean माँ शिमिम वैग किए का લેન μέλανες, η καλούνται πυζιιαίοι, Tois athors Susy houses Irobis pune 91 Si ein Niav of puene gralos auris mn. γέων δύο, οἱ నే మాడ్కుοι, ένὸς గ్రుట్రంత్రం మాగχεως, πόμιω 🖰 έχεσι μακεστάτιω, μέχει iz 6मां म्ये γοναία, iz हम मझीळ-Τερον, η σεώγωνα μέγισον πάντων άνθρώπων επειδάν έν τον συσμανα μέγα φύσωσιν, έκέπ αμφιέννιωλα έδεν εμά-गाण: विभिन्ने म्बेड महाप्रवड, म्बेड प्रहेंग टेंग में περαλής, ζπιδεν καθίεν αμ σολύ κάτω ત્રી γουάτων τας 🖰 હેમ τદે જાર્જા yww ઉપ, έμπες δεν μέχει σοδών έλκομένας. Επειπα περιπυμασάμενοι πας τρίχας περί άπαν το σώμα, ζώννιωλα, χρώμενοι αὐταῖς ἀντὶ [μαλίε. αἰδοῖον 🕽 μεγα έγεσιν, ώς ε Ιαύειν την σχυρών αὐτήν, η παχύ. αὐτοί ε σιμοί τε η αίχροί. τα స్త్రీ జాగ్రంప్ బిడ్డ బుక్కో క్లు క్లిక్ ప్రాంత్ర్మ్ మీ క్రిక్లక్ల મે, οί ονοι, χεδον οσον μειοί. મે, οί ίπωσοι αύτβο τὸ οἱ ἡμίονοι, τὸ τὰ ἀλλα πάνλα ζῶα, ἐδὲν μείζω κοιῶν. ἔπονίαμ 🗒 τῷ βαπλεί τω Ίνδων, τέτων τω πυζμαίων άνδρες τειχίλιοι. σφόδεσε γαρ είσι ποξόται δικαισταίοι δέ είσι και νόκοισι χεώνται ώσσες καὶ οί Ίνδοί. Λαγωές τε μαι άλωπειας Αμρό Βοιν, έ τοις κυσίν, वैभिवे महिल्यों मुन्नी रिम्मेंडा मुन्नी महिल्लायाड मको वहरागड़.

Narrat præter ista, in media India homines reperiri nigros, qui Pygmæi appellentur. Eadem hos, qua Inda reliqui, lingua uti, sed valde esse parvos, ut maximi duorum cubitorum, & plerique unius duntaxat cubiti cum dimidio altitudinem non excedant. Comam alere longissimam, ad ipsa usque genua demissam, atque etiam infra, cum barba longiore, quàm apud ullos hominum. Que quidem ubi illis promissior esse caperit, nulla deinceps veste uti: sed capillos multo infra genua à tergo demissos, barbámque præter pectus ad pedes usque defluentem, per totum corpus in orbem constipare S cingere, atque ita pilos iplis suos vestimenti loco esse. Veretrum illis esse crassum ac longum, quod ad ipsos quoque pedum malleolos pertingat. Pygmeos hosce simis esse naribus, & deformes. Ipsorum item oves agnorum nostrorum instar esse ; boves & asinos, arietum ferè magnitudine, equos item multosque & cætera jumenta omnia nihilo esse nostris arietibus majora. Tria horum Pygmæorum millia Indorum regem in suo comitatu habere, quòd sagittarij sint peritissimi. Summos esse justitiæ cultores, iisdémque quibus Indi reliqui, legibus parere.

Venari quoque lepores vulpésque, non canibus, sed corvis, milvis, cornicibus, aquilis adhibitis.

'In the middle of *India* (saith Ctesias) there are black Men, they are call'd Pygmies, using the same Language, as the other *Indians*; they

⁽x) Photij Bibliothec. Cod. 72. p. m. 145.

'are very little, the tallest of them being but two Cubits, and most of them but a Cubit and a half high. They have very long hair, reaching down to their Knees and lower; and a Beard larger than any Man's. After their Beards are grown long, they wear no Cleaths, but the Hair of their Head falls behind a great deal below their Hams; and that of their Beards before comes down to their Feet: then laying their Hair thick all about their Body, they afterwards gird themselves, making use of their Hair for Cloaths. They have a Penis so long, that it reaches to the Ancle, and the thickness is proportionable. They are flat nosed, and ill favoured. Their Sheep are like Lambs; and their Oxen and Assess sand their Cattle not bigger. Three thousand Men of these Pygmies do attend the King of India. They are good Archers; they are very just, and use the same Lams as the Indians do. They kill Hares and Foxes, not with Dogs, but with Ravens, Kites, Crows, and Eagles.

Well, if they are so good Sports-men, as to kill Hares and Foxes with Ravens, Kites, Crows and Eagles, I can't see how I can bring off Homer, for making them fight the Cranes-themselves. Why did they not fly their Eagles against them? these would make greater Slaughter and Execution, without hazarding themselves. The only Excuse I have is, that Homer's Pygmies were real Apes like Men; but those of Ctessas were neither Men nor Pygmies; only a Creature begot in his own Brain, and to be found no where else.

Ctesias was Physician to Artaxerxes Mnemon as Diodorus Siculus (y) and Strabo (z) inform us. He was contemporary with Xenophon, a little later than Herodotus; and Helvicus in his Chronology places him three hundred eighty three years before *Christ*: He is an ancient Author, 'tis true, and it may be upon that score valued by some. We are beholden to him, not only for his Improvements on the Story of the Pygmies, but for his Remarks likewise on several other parts of Natural History; which for the most part are all of the same stamp, very wonderful and incredible; as his Mantichora, his Gryphins, the horrible Indian Worm, a Fountain of Liquid Gold, a Fountain of Honey, a Fountain whose Water will make a Man confess all that ever he did, a Root he calls zaign Cov, that will attract Lambs and Birds, as the Loadstone does filings of Steel; and a great many other Wonders he tells us: all which are copied from him by Ælian, Pliny, Solinus, Mela, Philostratus and others. And Photius concludes Ctesias's Account of India with this passage; Tauta yestown nat μωθολογών Κτησίας. λέγει τ' άληθές αλα γράφειν' έπτίγων ώς τὰ μεν σύτος ίδων पृथ्वद्भ, म्ये हैं म्यह वर्धनी padav नी किर्निया. कात्रिये हैं महत्त्वण स्वी वैत्रिय रियाμασιώπερα παραλιπείν, δια το μή δόξαι τοῖς μή ταῦτα Θεασαμένοις ἄπιςα συγράφοιν i. e. These things (saith he) Ctesias writes and feigns, but he

⁽y) Diodor. Siculi Bibliothec. lib. 2. p. m. 118. (z) Strabo Geograph. lib. 14. p. 451.

himself says all he has wrote is very true. Adding, that some things which he describes, he had seen himself; and the others, he had learn'd from those that had seen them: That he had omitted a great many other things more wonderful, because he would not seem to those that have not seen them, to write incredibilities. But notwithstanding all this, Lucian (a) will not believe a word he faith; for he tells us that Ctesias has wrote of India, A μήτε αὐτὸς είθε, μήτε ἄλλε εἰπόνΙΦ ἤκεσεν, What he neither saw himself nor ever heard from any Body else. And Aristotle tells us plainly, he is not fit to be believed: "Ev 🖰 Tỹ Tvớing Les quoi Kludas, sư Ủu để tómis 🕟 (b). the same Opinion A. Gellius (c) seems to have of him, as he had likewise of feveral other old Greek Historians which happened to fall into his hands at Brundussum, in his return from Greece into Italy; he gives this Character of them and their performance: Erant autem isti omnes libri Græci, miraculorum fabularumque pleni: res inauditæ, incredulæ, Scriptores veteres non parva authoritatis, Aristeas Proconnessus, & Isagonus, & Nicæensis, & Ctesias, & Onesicritus, & Polystephanus, & Hegesias. Not that I think all that Ctesias has wrote is fabulous; For tho' I cannot believe his speaking Pygmies, yet what he writes of the Bird he calls Binause, that it would speak Greek and the Indian Language, no doubt is very true; and as H. Stephens (d) observes in his Apology for Ctesias, such a Relation would feem very furprifing to one, that had never feen nor heard of a Parrot.

But this Story of Ctesias's speaking Pygmies, seems to be confirm'd by the Account that Nonnosus, the Emperour Justinian's Ambassador into IEthiopia, gives of his Travels. I will transcribe the Passage, as I find it in Photius (e), and 'tis as follows:

"OTI อิรริง รังฉลองลิง สิกิย์องใน ราช Novνόσω, 6 તેરા મેં દેજૂ ત્રંમીય મું પ્રમાન્ય મુદ્રીયા ૧κόπ τοίον δε τι σιωέξη, θαῦμα κ, ἀκέσαι. ενέτυκε γάς ποι μοςρίω μεν η ίδεαν έγεσιν ανθρωπίνίω, βραχυθάτοις ή τος μέχεθ Β., ε) μέλαπ τ χείαν. σου ή τειχών δεδασυημένοις δια πανίδς τέ कां प्रवी कि. सम्मार है नहींड़ वार्वे खेल भे βરવપૂર્વતારવ, ત્રીમેં જાવશે વ્યાંત્રાદિ વેષ્ઠે રહેંષ. Jumioi à hoar aravles whin Sequali જારે μામલું જે બોઠેલે જાદભાદમું મેગર્જીજ, હાં πε οδεδηκότες δριοίως ανδ ρες τε καί γυ-ของแรง. อ้าอเอง ๆ ซื้อยิง ฮิสสิอ ตามขยยใด ซื้อยิ ἀνήμες ον άλλα και φωνίω είχον μέν ล้ายิอุเกล่งใย, ส้โทพรวท 🕽 พลทใสพลธเ ริ

Naviganti à Pharsa Nonnoso, & ad extremam usque insularum delato, tale quid occurrit, vel ipso auditu admirandum. Incidit enim in quosdam forma quidem & figura humana, sed brevissimos, & cutem nigros, totumque pilosos corpus. Sequebantur viros æquales fæminæ, & pueri adhuc breviores. Nudi omnes agunt, pelletantum brevi adultiores verenda tecti, viri pariter ac fæminæ: agreste nibil, neque efferum quid præ se ferentes. Quin & vox illis humana, sed omnibus, etiam accolis, prorsus ignotalingua, multoque amplius Nonnosi sociis. Vivunt marinis ostreis. & piscibus è

⁽a) Lucian lib. i.vera Histor.p.m.373. (b) Arist. Hist. Animal. lib. 8. cap. 28. (c) A. Gellij Nolles Attic. lib. 9. cap. 4. (d) Henr. Stephani de Ctesia Historico antiquissimo disquisitio, ad sinem Herodoti. (e) Photis Eibliothec. cod. 3. p. m. 7.

διάλεκθον τοῖς τὲ περιοίκοις ἄπασι, καὶ πολλῶ πλέον τοῖς περὶ το Νοννοσον, διέξων ης ἀπαδιαλατίων δερείων, κρὶχθύων, το ἀπο ὁ Βαλάστης εἰς το νῆσον ἀπορριπτομένων Βάρσος ἡ εἶχον ἐδὲν. ἀλλὰ κρ

è mari ad insulam projectis. Audaces minime sunt, ut nostris conspectis hominibus, quemadmodum nos visa ingenti fera, metu perculsi suerint.

δρών ες της καθ' ημάς ανθρώπης υπέπ Ινσαν, ωωτες ημείς τὰ μείσω τη βηρίων.

'That Nonnosus sailing from Pharsa, when he came to the farthermost of the Islands, a thing, very strange to be heard of, happened to him; for he lighted on some (Animals) in shape and appearance like Men, but little of stature, and of a black colour, and thick covered with hair all over their Bodies. The Women, who were of the same stature, followed the Men: They were all naked, only the Elder of them, both Men and Women, covered their Privy Parts with a small Skin. They seemed not at all sterce or wild; they had a Humane Voice, but their Dialest was altogether unknown to every Body that lived about them; much more to those that were with Nonnosus. They lived upon Sea Oysters, and Fish that were cast out of the Sea, upon the Island. They had no Courage; for seeing our Men, they were frighted, as we are at the sight of the greatest wild Beast.

Φωνίω είχου μεν ανθρωπίνιω I render here, they had a Humane Voice, not Speech: for had they spoke any Language, tho' their Dialect might be somewhat different, yet no doubt but some of the Neighbourhood would have understood something of it, and not have been such utter Strangers to it. Now 'twas observed of the Orang-Outang, that it's Voice was like the Humane, and it would make a Noise like a Child, but never was obferved to speak, tho' it had the Organs of Speech exactly formed as they are in Man; and no Account that ever has been given of this Animal do's pretend that ever it did. I should rather agree to what Pliny(f) mentions, Quibusdam pro Sermone nutus motusque Membrorum est; and that they had no more a Speech, than Ctesias his Cynocephali which could only bark, as the same Pliny (g) remarks; where he saith, In multis autem Montibus Genus Hominum Capitibus Caninis, ferarum pellibus velari, pro voce latratum edere, unguibus armatum venatu & Aucupio vesci, horum supra Centum viginti Millia fuisse prodente se Ctesias scribit. But in Photius I find, that Ctesias's Cynocephali did speak the Indian Language as well as the Pygmies. Those therefore in Nonnosus since they did not speak the Indian, I doubt, spoke no Language at all; or at least, no more than other Brutes do.

Ctesias I find is the only Author that ever understood what Language twas that the Pygmies spake: For Herodotus (h) owns that they use a sort of Tongue like to no other, but screech like Bats. He saith, Os Γα-egimarles ετοι τες τεωγλοδύτας Αιθοπας Απεθίεια το το τεθεία ποισ. Ος γδ

⁽f) Plinij Nat. Hist. lib. 6. cap. 30. p. m. 741. (g) Plinij Nat. Hist. lib. 7. cap. 2. p. m. 11. (h) Herodot. in Melpomene. pag. 283.

Τρωγλοδύται αἰδιοπες πόδας, τάχιςοι ἀνθρώπων πάντων εἰσὶ, την ἡμεῖς πέρι λόγες ἀπορερομένες ἀπέομεν. Σιθονίαι βοί Τρωγλοδύται ὅρις, η Σαύρες, η τὰ τοιαῦτα την Ερπείων. Γλώσσαν β ἐδεμιῆ ἄλλη παρομοίω νενομίκασι, ἀλλὰ τεθρύγασι καθάπερ αἱ νυκθερίδες i.e. These Garamantes hunt the Troglodyte Æthiopians in Chariots with four Horses. The Troglodyte Æthiopians are the swiftest of foot of all Men that ever he heard of by any Report. The Troglodytes eat Serpents and Lizards, and such sort of Reptiles. They use a Language like to no other Tongue, but screech like Bats.

Now that the Pygmies are Troglodytes, or do live in Caves, is plain from Aristotle (i), who saith, Tewy rodutay of eight Blov. And so Philostratus (k), Tes j mol maies oineir mer woreies. And methinks Le Compte's Relation concerning the wild or favage Man in Borneo, agrees so well with this, that I shall transcribe it: for he tells us, (1) That in Borneo this wild or favage Man is indued with extraordinary strength; and notwithstanding he walks but upon two Legs, yet he is so swift of foot, that they have much ado to outrun him. People of Quality course him, as me do Stags. here: and this fort of hunting is the King's usual divertisement. And Gassendus in the Life of Peiresky, tells us they commonly hunt them too in Angola in Africa, as I have already mentioned. So that very likely Herodotus's Troglodyte Æthiopians may be no other than our Orang-Outang or wild Man. And the rather, because I fancy their Language is much the same: for an Ape will chatter, and make a noise like a Bat, as his Troglodytes did: And they undergo to this day the same Fate of being hunted, as formerly the Troglodytes used to be by the Garamantes.

Whether those ἄνδεας μιαρες μεθείων ἐλάσσονας ἀνδεῶν which the Nafamones met with (as Herodotus (m) relates) in their Travels to discover Libya, were the Pygmies; I will not determine: It seems the Nafamones nes neither understood their Language, nor they that of the Nafamones. However, they were so kind to the Nafamones as to be their Guides along the Lakes, and afterwards brought them to a City, ἐν τῆ πάνλας ἐξ τοῦσι ἀγεσι τὸ μέγεθω ἔσες, χεωμα ζ μέλανας, i.e. in which all were of the same stature with the Guides, and black. Now since they were all little black Men, and their Language could not be understood, I do suspect they may be a Colony of the Pygmies: And that they were no farther Guides to the Nasamones, than that being frighted at the sight of them, they ran home, and the Nasamones followed them.

I do not find therefore any good Authority, unless you will reckon Ctestas as such, that the Pygmies ever used a Language or Speech, any

⁽i) Arist. Hist. Animal. lib. 8. cap. 15. p. m. 913. (k) Philostrat. in vita Apollon. Tyansi, lib. 3. cap. 14. p. m. 152. (l) Lewis le Compte Memoirs and Observations on China, p. m. 510. (m) Herodotus in Euterpe seu lib. 2. p. m. 102.

more than other Brutes of the same Species do among themselves, and what we know nothing of, whatever Democritus and Melampodes in Pliny (n), or Apollonius Tyanaus in Porphyry (o) might formerly have done. Had the Pygmies ever spoke any Language intelligible by Mankind, this might have furnished our Historians with notable Subjects for their Novels; and no doubt but we should have had plenty of them.

But Albertus Magnus, who was so lucky as to guess that the P_{yg} mies were a fort of Apes; that he should afterwards make these Apes to speak, was very unfortunate, and spoiled all; and he do's it, methinks, so very awkardly, that it is as difficult almost to understand his Language as his Apes; if the Reader has a mind to attempt it, he will find it in the Margin (p).

Had Albertus only afferted, that the Pygmies were a fort of Apes, his Opinion possibly might have obtained with less difficulty unless he could have produced some Body that had heard them talk. But Ulysses Aldrovandus (q) is so far from believing his Ape Pygmies ever spoke, that he utterly denys, that there were ever any such Creatures in being, as the Pygmies, at all; or that they ever fought the Cranes. Cum itaque Pygmæos (saith he) dari negemus, Grues etiam cum iis Bellum gerere, ut fabulantur, negabimus, & tam pertinaciter id negabimus, ut ne jurantibus credemus.

I find a great many very Learned Men are of this Opinion: And in the first place, Strabo (r) is very positive; Eugana's min 3 soleis Ingertag των πίσεως άξίων άνδρων i.e. No Man worthy of belief did ever see them. And upon all occasions he declares the same. So Julius Casar Scaliger (s) makes them to be only a Fiction of the Ancients, At hac omnia (faith he) Antiquorum figmenta & meræ Nugæ, si exstarent, reperirentur. At cum universus Orbis nunc nobis cognitus sit, nullibi hæc Naturæ Excrementæ reperiri certissimum est. And Isaac Casaubon (t) ridicules such as pretend to justifie them: Sic nostra ætate (saith he) non desunt, qui eandem de Pygmæis lepidam fabellam renovent ; ut qui etiam è Sacris Literis, si Deo placet, fidem illis conentur astruere. Legi etiam Bergei cujusdam Galli Scripta, qui se vidisse diceret. At non ego credulus illi, illi inquam Omnium Bipedum mendacissimo. I shall add one Authority more, and that is of

Nota & Castigat. in lib. 1. Strabonis Geograph. p. m. 38. Adrian

⁽n) Plnij Nat. Hist. lib. 10. cap. 49. (0) Porphyrius de Abstinentia, lib. 3.pag. m. 103. (p) Si qui Homines sunt Silvestres, sicut Pygmeus, non secundum unam rationem nobiscum disti sunt Homines, sed aliquod habent Hominis in quadam deliberatione of Loquela, &c. A little after adds, Voces quadam (sc. Animalia) formant ad diversos conceptus quos habent, sicut Homo of Pygmaus; of quadam non faciunt hoc, sicut multitudo fere tota aliorum Animalium. Adhuc autem corum qua ex ratione cogitativa formant voces, quadam sunt succumbentia, quadam autem non succumbentia. Dico autem succumbentia, à conceptu Anima cadentia de mota ad Natura Instinctum, sicut Pygmeus, qui non, sequitur rationem Loquela sed Natura Instinctum; Hono autem non succumbit sed sequitur rationem. Albert, Magn. de Animal. lib. 1. cap. 3. p. m. 3. (9) Vlys. Aldrovandi Ornitholog. lib. 20. p. m. 344. (r) Strabo Geograph. lib. 17. p. m. 565. (s) Jul. Cas. Scaliger. Comment. in Arist. Hist. Animal. lib. 8. S. 126. p. m. 914. (t) Isaac Causabor.

Adrian Spigelius, who produces a Witness that had examined the very place, where the Pygmies were said to be; yet upon a diligent enquiry, he could neither find them, nor hear any tidings of them. Spigelius (u) therefore tells us, Hoc loco de Pygmæis dicendum erat, qui nage πόρων. dicti à statura, quæ ulnam non excedunt. Verùm ego Poetarum fabulas esse crediderim, pro quibus tamen Aristoteles minime haberi vult, sed veram esse Historiam. 8. Hist. Animal. 12. asseverat. Ego quo minùs hoc statuam, tum Authoritate primùm Doctissimi Strabonis 1. Geograph. coactus sum, tum potissimùm nunc moveor, quod nostro tempore, quo nulla Mundi pars est, quam Nautarum Industria non perlustrarit, nihil tamen unquam simile aut visum est, aut auditum. Accedit quod Franciscus Alvarez Lusitanus, qui ea ipsa loca peragravit, circa quæ Aristoteles Pygmæos esse scribit, nullibit tamen tam parvam Gentem à se conspectam tradidit, sed Populum esse Mediocris staturæ, & Æthiopes tradit.

I think my self therefore here obliged to make out, that there were such Creatures as Pygmies, before I determine what they were, since the very being of them is called in question, and utterly denied by so great Men, and by others too that might be here produced. Now in the doing this, Aristotle's Assertion of them is so very positive, that I think there needs not a greater or better Proof; and it is so remarkable a one, that I find the very Enemies to this Opinion at a loss, how to shift it oss. To lessen it's Authority they have interpolated the Text, by so sisting into the Translation what is not in the Original; or by not translating at all the most material passage, that makes against them; or by miserably glossing it, to make him speak what he never intended: Such unsair dealings plainly argue, that at any rate they are willing to get rid of a Proof, that otherwise they can neither deny, or answer.

Aristotle's Text is this, which I shall give with Theodorus Gaza's Translation: for discoursing of the Migration of Birds, according to the Season of the Year, from one Country to another, he saith (w):

Μελα μεν των φθινοπωρινων Ισημερίαν, όπ τε Πόν ε τη τη ψυχρών φού γονλα τον όπι όν α χειμώνα μελα ή των εαρινών, όπος τες τόπες τες ψυχρες, φοδεμενα τα καύ μαλα τα μεν, τη όπο τη εγύς τόπων ποι εμενα τας μελαδολάς, τα ή, τη όπο τη εχάτων, ώς είπειν, όζ αι γερανοι ποιεσι. Μελαβάλλεσι γδ όπο τη Σπωδικών εἰς τα ελη τα άνω της Αλγύπες, όξεν ὁ Νείλος ρεί. Εςι ή δ τόπος ετος περ δυν οι πυί μαῖ-

Jam ab Autumnali Æquinoctio ex Ponto, Locisque frigidis fugiunt Hyemem futuram. A Verno autem ex tepida Regione ad frigidam sese conferunt, astûs metu futuri: S alia de locis vicinis discedunt, alia de ultimis, prope dixerim, ut Grues faciunt, qua ex Scythicis Campis ad Paludes Ægypto superiores, unde Nilus profluit, veniunt, quo in loco pugnare cum Pygmæis dicuntur. Non enim id

⁽u) Adrian. Spigelij de Corporis Humani fabrica, lib. 1. cap. 7. p. m. 15. (w) Aristotel. Hist. Animalib. 8. cap. 12.

οι μαλοικέσιν έ γάς εξι τέτο μῶδῶ, ἀλλ εξι μαλὰ τίω ἀλήθειαν. Γένῶ. μικεὸν μεν, ὥαπες λέγελαι, κὶ αὐτοὶ κὶ εί ἔωποι Τεωγλο δύται δι εἰσὶ τὸν βίον. fabula est, sed certè, genus tum hominum, tum etiam Equorum pusillum (ut dicitur) est, deguntque in Cavernis, unde Nomen Troglodytæ à subeundis Cavernis accepere.

In English 'tis thus: 'At the Autumnal Æquinox they go out of Pontus' and the cold Countreys to avoid the Winter that is coming on. At the 'Vernal Æquinox they pass from hot Countreys into cold ones, for fear of 'the ensuing Heat; some making their Migrations from nearer places; others from the most remote (as I may say) as the Cranes do: for they come out of Scythia to the Lakes above Ægypt, whence the Nile do's flow. This is the place, whereabout the Pygmies dwell: For this is no Fable, but a Truth. Both they and the Horses, as 'tis said, are a small kind. They are Troglodytes, or live in Caves.

We may here observe how positive the Philosopher is, that there are Pygmies; he tells us where they dwell, and that 'tis no Fable, but a Truth. But Theodorus Gaza has been unjust in translating him, by foisting in Quo in loco pugnare cum Pygmæis dicuntur, whereas there is nothing in the Text that warrants it: As likewise, where he expresses the little Stature of the Pygmies and the Horses, there Gaza has rendered it, Sed certe Genus tum Hominum, tum etiam Equorum pufilium. Aristotle only saith, Tevol pune do μεν, ωστες λέγελα, η αυτοί, η οί ισποι. He neither makes his Pygmies Men. nor faith any thing of their fighting the Cranes; tho' here he had a fair occasion, discoursing of the Migration of the Cranes out of Scythia to the Lakes above \mathcal{H}_{gypt} , where he tells us the Pygmies are. Cardan (x) therefore must certainly be out in his guess, that Aristotle only afferted the Pygmies out of Complement to his Friend Homer; for furely then he would not have forgot their fight with the Cranes; upon which occasion only Homer mentions them (*). I should rather think that Aristotle, being sensible of the many Fables that had been raised on this occasion, studiously avoided the mentioning this fight, that he might not give. countenance to the Extravagant Relations that had been made of it.

But I wonder that neither Casaubon nor Duvall in their Editions of Aristotle's Works, should have taken notice of these Mistakes of Gaza, and corrected them. And Gesner, and Aldrovandus, and several other Learned Men, in quoting this place of Aristotle, do make use of this faulty Translation, which must necessarily lead them into Mistakes. Sam. Bochartus (y) tho' he gives Aristotle's Text in Greek, and adds a new

Translation

⁽x) Cardan de Rerum varietate, lib.8. cap. 40. p. m. 153. (*) Apparet ergo (saith Cardan) Pygmeorum Historiam esse fabulosam, quod & Strabo sentit, & nostra atas, cum omnia nunc serme orbis mirabilia innotuerint, declarat. Sed quod tantum Philosophum decepit, suit Homeri Austoritas non apud illum levis.

(y) Bocharti Hierozoic. S. de Animalib. S. Script. part. Posterior. lib. 1. cap. 11. p.m. 76.

Translation of it, he leaves out indeed the Cranes fighting with the Pygmies, yet makes them Men, which Aristotle do's not; and by anti-placing, ut aiunt, he renders Aristotle's Assertion more dubious; Neque enim (saith he in the Translation) id est fabula, sed revera, ut aiunt, Genus ibi parvum est tam Hominum quam Equorum. Julius Casar Scaliger in translating this Text of Aristotle, omits both these Interpretations of Gaza; but on the other hand, is no less to be blamed in not translating at all the most remarkable passage, and where the Philosopher seems to be so much in earnest; as, & 28 ε'ςι τέτο μύθω, αλλ' ε'ςι καλά των αλήθειαν, this he leaves wholly out, without giving us his reason for it, if he had any: And Scaliger's (z) infinuation in his Comment, viz. Negat effe fabulanz de his (sc. Pygmeis) Herodotus, at Philosophus semper moderatus & prudens etiam addidit, ware herelay, is not to be allowed. Nor can I asfent to Sir Thomas Brown's (a) remark upon this place; Where indeed (faith he) Aristotle plays the Aristotle; that is, the wary and evading Afsertor; for the with non est fabula he seems at first to confirm it, yet at last he claps in, sicut aiunt, and shakes the belief he placed before upon it. therefore Scaliger (faith he) hath not translated the first, perhaps supposing it surreptitious, or unworthy so great an Assertor. But had Scaliger known it to be furreptitious, no doubt but he would have remarked it; and then there had been some Colour for the Gloss. But 'tis unworthy to be believed of Aristotle, who was so wary and cautious, that he should in fo short a passage, contradict himself; and after he had so positively affirmed the Truth of it, presently doubt it. His wate refore must have a Reference to what follows, Pusillum genus, ut aiunt, ipsi atque etiam Equi, as Scaliger himself translates it.

I do not here find Aristotle afferting or confirming any thing of the fabulous Narrations that had been made about the Pygmies. He does not say that they were ανδρες, or ανθρωποι μικερί, or μέλανες; he only calls them Toynaio. And discoursing of the Pygmies in a place, where he is only treating about Brutes, 'tis reasonable to think, that he looked upon them only as such. This is the place where the Pygmies are; this is no fable; faith Aristotle, as 'tis that they are a Dwarfish Race of Men; that they speak the Indian Language; that they are excellent Archers; that they are very Just; and abundance of other Things that are fabulously reported of them; and because he thought them Fables, he does not take the least notice of them, but only saith, This is no Fable, but a Truth, that about the Lakes of Nile such Animals, as are called Pygmies, do live. And, as if he had foreseen, that the abundance of Fables that Ctesias (whom he faith is not to be believed) and the *Indian Historians* had invented about them, would make the whole Story to appear as a Figment, and render it doubtful, whether there were ever fuch Creatures as Pyg-

⁽z) Scaliger. Comment. in Arift. Hist. Animal. lib.8.p. m. 914. (b) Sir Thomas Brown's Pseudodoxia, or, Enquiries into Vulgar Errors, lib.4. cap. 11.

mies in Nature; he more zealously afferts the Being of them, and assures us, That this is no Fable, but a Truth.

I shall therefore now enquire what fort of Creatures these Pygmies were; and hope, so to manage the Matter, as in a great measure, to abate the Passion these Great Men have had against them: for, no doubt, what has incensed them the most, was, the fabulous Historians making them a part of Mankind, and then inventing a hundred ridiculous Stories about them, which they would impose upon the World as real Truths. If therefore they have Satisfaction given them in these two Points, I do not see, but that the Business may be accommodated very fairly; and that they may be allowed to be Pygmies, tho' we do not make them Men.

For I am not of Gesner's mind, Sed veterum nullus (saith he (b)) aliter de Pygmæis scripsit, quam Homunciones esse. Had they been a Race of Men, no doubt but Aristotle would have informed himself farther about them. Such a Curiosity could not but have excited his Inquisitive Genius, to a stricter Enquiry and Examination; and we might easily have expected from him a larger Account of them. But finding them, it may be, a sort of Apes, he only tells us, that in such a place these Pygmies live.

Herodotus (c) plainly makes them Brutes: For reckoning up the Animals of Libya, he tells us, Kai Dos Joses of Josephera Gees, if of reorder rala τક્ષ્મક કોનો, મે, οો કે λεφαντές τε મે, α enlow, મે, a and es τε મે, જેνοι οો τα negata έχον les મે, οί κυνοκέραλοι (in the Margin 'tis ακέραλοι) οι εν τοισι ςήθεσι τες οφθαλμές έχονες (ર્બંડ ઈપ્તે ત્રેક્ટ્રિકીય) જે ર્સ્જાઇ ત્રાઉપેબર) મે, વૈભિરા વૈષ્ઠ ફિક્ડ,મે, ગુલ્લાવામક વૈજીનાવા મે, વૈજીવ જાખેપીકાં พอฟิล โทคโล ล้มลูใส่โรบระ i.e. That there are here prodigious large Serpents, and Lions, and Elephants, and Bears, and Asps, and Asses that have horns, and Cynocephali, (in the Margin 'tis Acephali) that have Eyes in their Breast, (as is reported by the Libyans) and wild Men, and wild Women, and a great many other wild Beafts that are not fabilious. 'Tis evident therefore that Herodotus his άγειοι ανδρες, η γυναίνες άγεια are only Suela or wild Beafts; and tho' they are call'd and feet, they are no more Men than our Orang-Outang, or Homo Sylvestris, or wild Man, which has exactly the same Name, and I must confess I can't but shink is the same Animal: and that the same Name has been continued down to us, from his Time, and it may be from Homer's.

So Philostratus speaking of Æthiopia and Ægypt, tells us (d), Βόσιεσι Β΄ ὶς ઝાટ્રીય οἶα ἐχ ἐπρωθι τὰ ἀνθρώπες μέλανας, δ μὰ ἄλλαμ ἄπαιρςι. Πυσμαίων τὰ ἐν αὐταις ἔθνη, τὰ ὑλακθέντων ἄλλο ἄλλη i.e. Here are bred mild Beasts that are not in other places; and black Men, which no other Country affords:

⁽b) Gesner. Histor. Quadruped. p. m. 885. (c) Herodot. Melpomene seu lib.4. p. m. 285. (d) Philostranus in vita Apollon. Tyanai, lib. 6. cap. 1. p. m. 258.

and amongst them is the Nation of the Pygmies, and the BARKERS, that is, the Cynocephali. For tho' Philostratus is pleased here only to call them Barkers, and to reckon them, as he does the Black Men and the Pygmies amongst the wild Beasts of those Countreys; yet Ctesias, from whom Philostratus has borrowed a great deal of his Natural History, stiles them Men, and makes them speak, and to perform most notable Feats in Merchandising. But not being in a merry Humour it may be now, before he was aware, he speaks Truth: For Calius Rhodiginus's (e) Character of him is, Philostratus omnium qui unquam Historiam conscripserunt, mendacissimus.

Since the Pygmies therefore are some of the Brute Beasts that naturally breed in these Countries, and they are pleased to let us know as much, I can easily excuse them a Name. "And pas äyeld, or Orang-Outang, is alike to me; and I am better pleased with Homer's and easy major, than if he had called mismon. Had this been the only Instance where they had misapplied the Name of Man, methinks I could be so good natur'd, as in some measure to make an Apology for them. But sinding them so extravagantly loose, so wretchedly whimsical, in abusing the Dignity of Mankind, by giving the Name of Man to such monstrous Productions of their idle Imaginations, as the Indian Historians have done, I do not wonder that wise Men have suspected all that comes out of their Mint, to be false and counterfeit.

Such are their 'Apolives or 'Applives, that want Noses, and have only two holes above their Mouth; they eat all things, but they must be raw; they are short lived; the upper part of their Mouths is very pro-The Evotonestay, whose Ears reach down to their Heels, on which they lye and fleep. The "Asomo, that have no Mouths, a civil fort of People, that dwell about the Head of the Ganges; and live upon smelling to boil'd Meats and the Odours of Fruits and Flowers; they can bear no ill scent, and therefore can't live in a Camp. The Morouμαλοι or Μονόρθαλμιοι, that have but one Eye, and that in the middle of their Foreheads; they have Dogs Ears; their Hair stands an end, but smooth on the Breasts. The Στερνόςθαλμω, that have Eyes in their Breasts. The Πάναι σφηνοκέραλοι with Heads like Wedges. The Μακροκέρωλοι, with great Heads. The Ερβόρεοι, who live a Thousand years. The whomodes, so swift, that they will out-run a Horse. Tuxos, that go with their Heels forward, and their Toes backwards. The Μακε σπελείς, The Στεγανόποδες, The Μονοσκελείς, who have one Leg, but will jump a great way, and are call'd Sciapodes, because when they lye on their Backs, with this Leg they can keep off the Sun from their Bodies.

⁽e) Calij Rhodigini Lestion. Antiq. lib. 17. cap. 13.

Now Strabo (f), from whom I have collected the Description of these Monstrous forts of Men, and they are mentioned too by Pliny, Solinus, Mela, Philostratus, and others; and Munster in his Cosmography (g) has given a figure of some of them; Strabo, I say, who was an Enemy to all fuch fabulous Relations, no doubt was prejudiced likewise against the Pygmies, because these Historians had made them a Puny Race of Men, and invented so many Romances about them. I can no ways therefore blame him for denying, that there were ever any fuch Men Pygmies; and do readily agree with him, that no Man ever faw them: and am so far from dissenting from those Great Men, who have denied them on this account, that I think they have all the reason in the World on their side. And to shew how ready I am to close with them in this Point, I will here examine the contrary Opinion, and what Reafons they give for the supporting it: For there have been some Moderns, as well as the Ancients, that have maintained that these Pygmies were real Men. And this they pretend to prove, both from Humane Authority and Divine.

Now by Men Pygmies we are by no means to understand Dwarfs. all Countries, and in all Ages, there has been now and then observed fuch Miniture of Mankind, or under-fized Men. Cardan (b) tells us he faw one carried about in a Parrot's Cage, that was but a Cubit high. Nicephorus (i) tells us, that in Theodosius the Emperour's time, there was one in Ægypt that was no bigger than a Partridge; yet what was to be admired, he was very Prudent, had a sweet clear Voice, and a generous Mind; and lived Twenty Years. So likewise a King of Portugal fent to a Duke of Savor, when he married his Daughter to him, an Æthiopian Dwarf but three Palms high (k). And Thevenot (1) tells us of the Present made by the King of the Aby Jins, to the Grand Seignior, of several little black Slaves out of Nubia, and the Countries near Æthiopia, which being made Eunuchs, were to guard the Ladies of the Seraglio. And a great many such like Relations there are. But these being only Dwarfs, they must not be esteemed the Pygmies we are enquiring about, which are represented as a Nation, and the whole Race of them to be of the like stature. Dari tamen integras Pumilionum Gentes, tame falsum est, quam quod falsissimum, saith Harduin (m).

Neither likewise must it be granted, that tho' in some Climates there might be Men generally of less stature, than what are to be met with in other Countries, that they are presently Pygmies. Nature has not fixed the same standard to the growth of Mankind in all Places alike, no more

⁽f) Strabo Geograph.lib.15.p.m.489. & lib.2.p.48. & alibi. (g) Munster Cosmograph.lib.6.p.1151. (h) Cardan de subtilitate, lib. 11. p.458. (i) Nicephor. Histor. Ecclesiast. lib.12. cap. 37. (k) Happelius in Relat. curiosis, N°. 85. p. 677. (l) Thevenot. Voyage de Levant. lib.2.c.68. (m) 30. Harduini Nota in Plinij Nat. Hist. lib. 6. cap. 22. p. 688.

than to Brutes or Plants. The Dimensions of them all, according to the Climate, may differ. If we consult the Original, viz. Homer that first mentioned the Pygmies, there are only these two Characteristics he gives of them. That they are Tuymasos seu Cubitales; and that the Cranes did use to fight them. Tis true, as a Poet, he calls them and second such Men as are Cubitales, that the Cranes might probably fight with, notwithstanding all the Romances of the Indian Historians, I cannot think these Pygmies to be Men, but they must be some other Animals, or the whole must be a Fistion.

Having premised this, we will now enquire into their Assertion that maintain the Pygmies to be a Race of Men. Now because there have been Giants formerly, that have so much exceeded the usual Stature of Man, that there must be likewise Pygmies as defective in the other extream from this Standard, I think is no conclusive Argument, tho' made use of by some. Old Caspar Bartholine (n) tells us, that because J. Cassanius and others had wrote de Gygantibus, since no Body else had undertaken it, he would give us a Book de Pygmais; and since he makes it his design to prove the Existence of Pygmies, and that the Pygmies were Men, I must confess I expected great Matters from him.

But I do not find he has informed us of any thing more of them, than what Jo. Talentonius, a Professor formerly at Parma, had told us betore in his Variarum & Reconditarum Rerum Thesaurus (o), from whom he has borrowed most of this Tract. He has made it a little more formal indeed, by dividing it into Chapters; of which I will give you the Titles; and as I see occasion, some Remarks thereon: They will not be many, because I have prevented my self already. The first Chapter is, De Homuncionibus & Pumilionibus seu Nanis à Pygmæis distinctis. second Chapter, De Pygmæi nominibus & Etymologia. The third Chapter, Duplex esse Pygmæorum Genus ; & primum Genus aliquando dari. He means Dwarfs, that are no Pygmies at all. The fourth Chapter is, Alterum Genus, nempe Gentem Pygmæorum esse, aut saltem aliquando fuisse Autoritatibus Humanis, fide tamen dignorum afferitur. 'Tis as I find it printed; and no doubt an Error in the printing. The Authorities he gives, are, Homer, Ctesias, Aristotle, Philostratus, Pliny, Juvenal, Oppian, Baptista Mantuan, St. Austin and his Scholiast. Ludovic. Vives, Jo. Laurentius Anania, Joh. Cassanius, Joh. Talentonius, Gellius, Pomp. Mela, and Olaus Magnus. I have taken notice of most of them already, as I shall of St. Austin and Ludovicus Vives by and by. Jo. Laurentius Anania (p) ex Mercatorum relatione tradit (saith Bartholine) eos (sc. Pygmxos) in Septentrionali Thraciæ Parte reperiri, (quæ Scythiæ est proxima) atque ibi cum Gruibus pugnare. And Joh. Cassanius (q) (as he is here quoted) saith,

De

⁽n) Caspar. Bartholim Opusculum de Pygmæis. (0) Jo. Talentonij Variar. Grecondit. Rerum Thesaurus, lib. 3. cap. 21. (p) Joh. Laurent. Anania prope sinem traslatus primi sua Geograph. (q) Joh. Cassanius libello de Gygantibus, p. 73.

De Pygmæis fabulosa quidem esse omnia, quæ de iis narrari solent, aliquando existimavi. Verum cum videam non unum vel alterum, sed complures Classicos & probatos Autores de his Homunculis multa in candem fere Sententiam tradidisse; eò adducor ut Pygmæos fuisse inficiari non ausm. He next brings in fo. Talentonius, to whom he is so much beholden, and quotes his Opinion, which is full and home, Constare arbitror (saith Talentonius) (r) debere concedi, Pygmæos non solum olim fuisse, sed nunc etiam esse, & homines esse, nec parvitatem illis impedimento esse quo minus sint & homines fint. But were there such Men Pygmies now in being, no doubt but we must have heard of them; some or other of our Saylors, in their Voyages, would have lighted on them. Tho' Aristotle is here quoted. yet he does not make them Men; So neither does Anania: And I must own, tho' Talentonius be of this Opinion, yet he takes notice of the faulty Translation of this Text of Aristotle by Gaza: and tho' the parvity or lowness of Stature, be no Impediment, because we have frequently seen such Dwarf-Men, yet we did never see a Nation of them: For then there would be no need of that Talmudical Precept which Job. Ludolphus (s) mentions, Nanus ne ducat Nanam, ne forte oriatur ex iis Digitalis (in Bechor. fol. 45.)

I had almost forgotten Olaus Magnus, whom Bartholine mentions in the close of this Chapter, but lays no great stress upon his Authority, because he tells us, he is fabulous in a great many other Relations, and he writes but by hear-say, that the Greenlanders fight the Cranes; Tandem (saith Bartholine) neque ideo Pygmæi sunt, si fortè sagittis 🔗 hastis, sicut alij homines, Grues conficiunt & occidunt. This I think is great Partiality: For Ctesias, an Author whom upon all turns Bartholine makes use of as an Evidence, is very positive, that the Pygmies were excellent Archers: fo that he himself owns, that their being such, illustrates very much that Text in Ezekiel, on which he spends good part of the next Chapter, whose Title is, Pygmæorum Gens ex Ezekiele, atque rationibus probabilibus adstruitur; which we will consider by and by. And tho' Olaus Magnus may write some things by hear-say, yet he cannot be so fabulous as Ctesias, who (as Lucian tells us) writes what he neither saw himself, or heard from any Body else. Not that I think Olaus Magnus his Greenlanders were real Pygmies, no more than Ctesias his Pygmies were real Men; tho' he vouches very notably for them. And if all that have copied this Fable from Ctestas, must be look'd upon as the same Evidence with himself; the number of the Testimonies produced need not much concern us, fince they must all stand or fall with him.

The probable Reasons that Bartholine gives in the fifth Chapter, are taken from other Animals, as Sheep, Oxen, Horses, Dogs, the Indian Formica and Plants: For observing in the same Species some excessive large,

⁽r) Jo. Talentonius Variar. de recondit. Rerum Thesaurus, lib 3. cap. 21. p. m. 515. (s) Job Ludolphi Comment. in Historiam Æthiopic. p. m. 71.

and others extreamly little, he infers, Que certe cum in Animalibus & Vegetabilibus fiant; cur in Humana specie non sit probabile, haud video: imprimis cum detur magnitudinis excessus Gigantaus; cur non etiam dabitur Defectus? Quia ergo dantur Gigantes, dabuntur & Pygmæi. Quam consequentiam ut firmam, admittit Cardanus, (t) licet de Pygmæis hoc tantum concedat, qui pro miraculo, non pro Gente. Now Cardan, tho' he allows this Consequence, yet in the same place he gives several Reasons why the Pygmies could not be Men, and looks upon the whole Story as fabu-Ious. Bartholine concludes this Chapter thus: Ulterius ut Probabilitatem fulciamus, addendum Sceleton Pygmæi, quod Dresdæ vidimus inter alia plurima, servatum in Arce sereniss. Electoris Saxoniæ, altitudine infra Cubitum, Ossium soliditate, proportioneque tum Capitis, tum aliorum; ut Embrionem, aut Artificiale quid Nemo rerum peritus suspicari possit. Addita insuper est Inscriptio Veri Pygmæi. I hereupon looked into Dr. Brown's Travels into those Parts, who has given us a large Catalogue of the Curiosities, the Elector of Saxony had at Dresden, but did not find amongst them this Sceleton; which, by the largeness of the Head, I suspect to be the Sceleton of an Orang-Outang, or our wild Man. But had he given us either a Figure of it, or a more particular Description, it had been a far greater Satisfaction.

The Title of Bartholine's fixth Chapter is, Pygmæos esse aut fuisse ex variis eorum adjunctis, accidentibus, &c. ab Authoribus descriptis ostenditur. As first, their Magnitude: which he mentions from Ctesias, Pliny, Gellias and Juvenal; and tho' they do not all agree exactly, 'tis nothing. Autorum hic dissensus nullus est (saith Bartholine) etenim sicut in nostris hominibus, ita indubiè in Pygmæis non omnes ejusdem magnitudinis. Place and Country: As Ctesias (he saith) places them in the middle of India; Aristotle and Pliny at the Lakes above Ægypt; Homer's Scholiast in the middle of \mathcal{H}_{gypt} ; Pliny at another time faith they are at the Head of the Ganges, and sometimes at Gerania, which is in Thracia, which being near Scythia, confirms (he faith) Anania's Relation. Mela places them at the Arabian Gulf; and Paulus Jovius docet Pygmæos ultra Japonem esse; and adds, has Autorum dissensiones facile fuerit conciliare; nec mirum diversas relationes à Plinio auditas. For (saith he) as the Tartars often change their Seats, fince they do not live in Houses, but in Tents, fo 'tis no wonder that the Pygmies often change theirs, fince instead of Houses they live in Caves or Huts, built of Mud, Feathers, and Egg-And this mutation of their Habitations he thinks is very plain from Pliny, where speaking of Gerania, he saith, Pygmaorum Gens suisse (non jam esse) proditur, creduntque à Gruibus fugatos. Which passage (saith Bartholine) had Adrian Spigelius considered, he would not so soon have left Aristotle's Opinion, because Franc. Alvares the Portuguese did not find them in the place where Aristotle left them; for the Cranes, it

⁽t) Cardan de Rerum varietate, lib. 8. cap. 40

may be, had driven them thence. His third Article is, their Habitation, which Aristotle saith is in Caves; hence they are Troglodytes. Pliny tells us they build Huts with Mud, Feathers, and Egg-shells. But what Bartholine adds, Eò quod Terræ Cavernas inhabitent, non injurià dicti sunt olim Pygmai, Terra filii, is wholly new to me, and I have not met with it in any Author before: tho' he gives us here feveral other fignifications of the word Terræ filij from a great many Authors, which I will not trouble you at present with. 4. The Form, being flat nosed and ugly, as Ctesias. 5. Their Speech, which was the same as the Indians, as Ctesias; and for this I find he has no other Author. 6. Their Hair; where he quotes Ctesias again, that they make use of it for Clothes. 7. Their Vertues and Arts; as that they use the same Laws as the Indians, are very just, excellent Archers, and that the King of India has Three thousand of them in his Guards. All from Ctesias. 8. Their Animals, as in Ctesias; and here are mentioned their Sheep, Oxen, Asses, Mules, and Horses. 9. Their various Actions; as what Ctesias relates of their killing Hares and Foxes with Crows, Eagles, &c. and fighting the Cranes, as Homer, Pliny, Tuvenal.

The seventh Chapter in Bartholine has a promising Title, An Pygmai fint homines, and I expected here fomething more to our purpose; but I find he rather endeavours to answer the Reasons of those that would make them Apes, than to lay down any of his own to prove them Men. And Albertus Magnus's Opinion he thinks absurd, that makes them part Men part Beasts; they must be either one or the other, not a Medium between both; and to make out this, he gives us a large Quotation out: of Cardan. But Cardan (u) in the same place argues that they are not Men. As to Suessanus (w) his Argument, that they want Reason, this he will not grant; but if they use it less, or more imperfectly than others (which yet, he saith, is not certain) by the same parity of Reason, Children, the Baotians, Cumani and Naturals may not be reckoned Men; and he thinks, what he has mentioned in the preceding Chapter. out of Ctesias, &c. shews that they have no small use of Reason. As to Suessanus's next Argument, that they want Religion, Justice, &c. this, he faith, is not confirmed by any grave Writer; and if it was, yet it would not prove that they are not Men. For this defect (he saith) might hence happen, because they are forced to live in Caves for fear of the Cranes; and others besides them, are herein faulty. For this Opinion, that the Pygmies were Apes and not Men, he quotes likewise Benedictus Varchius (x), and Joh. Tinnulus (y), and Paulus Jovius (z), and several others of the Moderns, he tells us, are of the same mind. Geographici quos non puduit in Mappis Geographicis loco Pygmæorum simias cum Gruibus pugnantes ridicule dipinxisse.

⁽u) Cardan. de Rerum varietate, lib. 8. cap. 40. (w) Suessaus Comment. in Arist. de Histor. Animal. lib. 8. cap. 12. (x) Benedict. Varchius de Monstris. lingua vernacula. (y) Joh. Tinnulus in Glotto. Chrysio. (z) Paulus Jovius lib. de Muscovit. Legatione.

The Title of Bartholine's eighth and last Chapter is, Argumenta corum qui Pygmæorum Historiam fabulosam censent, recitantur & refutantur. Where he tells us, the only Person amongst the Ancients that thought the Story of the Pygmies to be fabulous was Strabo; but amongst the Moderns there are several, as Cardan, Budaus, Aldrovandus, Fullerus and others. The first Objection (he saith) is that of Spigelius and others; that since the whole World is now discovered, how happens it, that these Pygmies are not to be met with? He has seven Answers to this Objection; how satisfactory they are, the Reader may judge, if he pleases, by perusing them amongst the Quotations (a). Cardan's second Objection (he faith) is, that they live but eight years, whence several Inconveniences would happen, as Cardan shews; he answers that no good Author asferts this; and if there was, yet what Cardan urges would not follow; and instances out of Artemidorus in Pliny (b), as a Parallel in the Calingæ a Nation of India, where the Women conceive when five years old, and do not live above eight. Gesner speaking of the Pygmies, saith, Vita autem longitudo anni arciter octo ut Albertus refert. Cardan perhaps had his Authority from Albertus, or it may be both took it from this passage in Pliny, which I think would better agree to Apes than Men. But Artemidorns being an Indian Historian, and in the same place telling other Romances, the less Credit is to be given to him. The third Objection, he faith, is of Cornelius à Lapide, who denies the Pygmies, because Homer was the first Author of them. The fourth Objection he saith is, because Authors differ about the Place where they should be: This, he tells us. he has answered already in the fifth Chapter. The fifth and last Objection he mentions is, that but few have seen them. He answers, there are a great many Wonders in Sacred and Profane History that we have not feen, yet must not deny. And he instances in three; As the Formicae Indice, which are as bigs as great Dogs: The Cornu Plantabile in the Island Goa, which when cut off from the Beast, and flung upon the Ground, will take root like a Cabbage: And the Scotland Geese that grow upon Trees, for which he quotes a great many Authors, and fo concludes.

Now how far Bartholine in this Treatise has made out that the Pygmies of the Ancients were real Men, either from the Authorities he has quoted, or his Reasonings upon them, I submit to the Reader. I shall proceed now (as I promised) to consider the Proof they pretend from Ho-

⁽a) Responded 1. Contrarium testari Mercatorum Relationem apud Ananiam supra Cap. 4. 2. Et licet non inventi essent vivi à quolibet, pari jure Monocerota of alia negare liceret. 3. Qui maria pernavigant, vix oras paucas maritimas lustrant, adeò non terras omnes à mari dissitas. 4. Neque in Oris illos habitare maritimis ex Capite quinto manifestum est. 5. Quis testatum se omnem adhibuisse diligentiam in inquirendo eos ut inveniret. 6 Ita in terra habitant, ut in Antris vitam tolerare dicantur. 7. Si vel maxime omni abomnibus diligentia questit sussent, nec inventi; sieri potest, ut instar Gigantum jam desierint nec sint ampliks.

(b) Plinis Hist. Nat. lib. 7. cap. 2. p. M. 14.

ly Writ: For Bartholine and others insist upon that Text in Ezekiel (Cap. 27. Vers. 11.) where the Vulgar Translation has it thus; Filij Arvad cum Exercitu tuo supra Muros tuos per circuitum, & Pygmæi in Turribus tuis suerunt; Scuta sua suspenderunt supra Muros tuos per circuitum. Now Talentonius and Bartholine think that what Ctesias relates of the Pygmies, as their being good Archers, very well illustrates this Text of Ezekiel: I shall here transcribe what Sir Thomas Brown (c) remarks upon it; and if any one requires farther Satisfaction, they may consult Job Ludolphus's Comment on his Ethiopic History (d).

The second Testimony (saith Sir Thomas Brown) is deduced from Holy Scripture; thus rendered in the Vulgar Translation, Sed & Pygmæi qui erant in turribus tuis, pharetras suas suspenderunt in muris tuis per gyrum: from whence notwithstanding we cannot infer this Assertion, for first the Translators accord not, and the Hebrew word Gammadim is very variously rendered. Though Aquila, Vatablus and Lyra will have it Pygmæi, yet in the Septuagint, it is no more then Watchmen; and so in the Arabick and High-Dutch. In the Chalde, Cappadocians, in Symmachus, Medes, and in the French, those of Gamed. Theodotian of old, and Tremellius of late, have retained the Textuary word; and so have the Italian, Low Dutch and English Translators, that is, the Men of Arvad were upon thy Walls round about, and the Gammadims were in thy Towers.

Nor do Men only diffent in the Translation of the word, but in the Exposition of the Sense and Meaning thereof; for some by Gammadims understand a People of Syria, so called from the City of Gamala; some hereby understand. the Cappadocians, many the Medes: and hereof Forerius hath a singular Exposition, conceiving the Watchmen of Tyre, might well be called Pygmies, the Towers of that City being so high, that unto Men below, they appeared in a Cubital Stature. Others expound it quite contrary to common Acception, that is not Men of the least, but of the largest fize; so doth Cornelius construe Pygmæi, or Viri Cubitales, that is, not Men of a Cubit high, but of the largest Stature, whose height like that of Giants, is rather to be taken by the Cubit than the Foot; in which phrase we read the measure of Goliah. whose height is said to be six Cubits and a span. Of affinity hereto is also the Exposition of Jerom; not taking Pygmies for Dwarfs, but stout and valiant Champions; not taking the sense of ruyun, which signifies the Cubit mea-Sure, but that which expresseth Pugils; that is, Men fit for Combat and the Exercise of the Fist. Thus can there be no satisfying illation from this Text, the diversity, or rather contrariety of Expositions and Interpretations distracting more than confirming the Truth of the Story.

But why Aldrovandus or Caspar Bartholine should bring in St. Austin as a Favourer of this Opinion of Men Pygmies, I see no Reason. To me

⁽c) Sir Thomas Brown's Enquiries into Vulgar Errors, lib. 4. cap. 11. p. 242. (d) Comment. in Hyt. Æthiopic. p. 73.

he seems to assert quite the contrary: For proposing this Question, An ex propagine Adam vel filiorum Noe, quædam genera Hominum Monstrosa prodierunt? He mentions a great many monstrous Nations of Men, as they are described by the Indian Historians, and amongst the rest, the Pygmies, the Sciopodes, &c. And adds, Quid dicam de Cynocephalis, quorum Canina Capita atque ipse Latratus magis Bestias quam Homines consitentur? Sed omnia Genera Hominum, quæ dicuntur esse, esse credere, non est necesse. And afterwards so fully expresses himself in savour of the Hypothesis I am here maintaining, that I think it a great Confirmation of it. Nam & Simias (saith he) & Cercopithecos, & Sphingas, sinesciremus non Homines esse, sed Bestias, possent isti Historici de sua Curiositate gloriantes velut Gentes aliquas Hominum nobis impunità vanitate mentiri. At last he concludes and determines the Question thus, Aut illa, quæ talia de quibusdam Gentibus scripta sunt, omnino nulla sunt, aut si sunt, Homines non sunt, aut ex Adam sunt si homines sunt.

There is nothing therefore in St. Austin that justifies the being of Men Pygmies, or that the Pygmies were Men; he rather makes them Apes. And there is nothing in his Scholiast Ludovicus Vives that tends this way, he only quotes from other Authors, what might illustrate the Text he is commenting upon, and no way afferts their being Men. I shall therefore next enquire into Bochartus's Opinion, who would have them to be the Nubæ or Nobæ. Hos Nubas Troglodyticos (faith (e) he) ad Avalitem Sinum esse Pygmæos Veterum multa probant. He gives us five Reafons to prove this. As, 1. The Authority of Hesychius, who saith 2. Because Homer places the Pygmies near the Ocean, Νωδα Πυγμαΐοι. where the Nuba were. 3. Aristotle places them at the Lakes of the Nile. Now by the Nile Bochartus tells us, we must understand the Astaboras, which the Ancients thought to be a Branch of the Nile, as he proves from Pliny, Solinus and Æthicus. And Ptolomy (he tells us) places the Nubæ hereabout 4.Because Aristotle makes the Pygmies to be Troglodytes, and so were the Nubæ. 5. He urges that Story of Nonnosus which I have already mentioned, and thinks that those that Nonnosus met with, were a Colony of the Nuba; but afterwards adds, Quos tamen absit ut putemus Statura fuisse Cubitali, prout Poeta fingunt, qui omnia in majus augent. But this methinks spoils them from being Pygmies; several other Nations at this rate may be Pygmies as well as these Nubæ. Besides, he does not inform us, that these Nubæ used to fight the Granes; and if they do not, and were not Cubitales, they can't be Homer's Pygmies, which we are enquiring after. But the Notion of their being Men, had so posfessed him, that it put him upon fancying they must be the Nubæ; but 'tis plain that those in Nonnosus could not be a Colony of the Nubx; for then the Nubx must have understood their Language, which the

⁽e) Sam. Bochart. Geograph. Sacra, Part. 1. lib. 2. cap. 23. p. m. 142.

Text saith, none of the Neighbourhood did. And because the Nuba are Troglodytes, that therefore they must be Pygmies, is no Argument at all. For Troglodytes here is used as an Adjective; and there is a fort of Sparrow which is called Passer Troglodytes. Not but that in Africa there was a Nation of Men called Troglodytes, but quite different from our Promies. How far Bochartus may be in the right, in guesting the Lakes of the Nile (whereabout Aristotle places the Pygmies) to be the Fountains of the River Astaboras, which in his description, and likewise the Map, he places in the Country of the Avalita, near the Mossylon Emporium; I shall not enquire. This I am certain of, he misrepresents Aristotle where he tells us (f), Quamvis in ea fabula hoc saltem verum esse asserat Philosophus, Pufillos Homines in its locis degere: for as I have already observed; Aristotle in that Text saith nothing at all of their being Men: the contrary rather might be thence inferred, that they were Brutes. And Bochart's Translation, as well as Gaza's is faulty here, and by no means to be allowed, viz. Ut aiunt, genus ibi parvum est tam Hominum, quam Equorum; which had Bochartus considered, he would not have been so fond it may be of his Nuba. And if the Nacon Tuy pecifor in Hesychius are such Pygmies as Bochartus makes his Nubæ; Quos tamen absit ut putemus staturå fuisse Cubitali, it will not do our business at all; and neither Homer's Authority, nor Aristotle's does him any Service.

But this Fable of Men Pygmies has not only obtained amongst the Greeks and Indian Historians: the Arabians likewise tell much such Stories of them, as the same learned Bochartus informs us. I will give his Latin Translation of one of them, which he has printed in Arabick also: Arabes idem (saith (g) Bochartus) referunt ex cujusdam Graculiside, qui Jacobo Isaaci filio, Sigariensi fertur ita narrasse. Navigabam aliquando in mari Zingitano, & impulit me ventus in quandam Insulam. In cujus Oppidum cum devenissem, reperi Incolas Cubitalis esse staturæ, & plerosque Coclites. Quorum multitudo in me congregata me deduxit ad Regem suum. Julit is, ut Captivus detinerer; & in quandam Caveæ speciem conjectus sum; eos autem aliquando ad bellum instrui cum viderem, dixerunt Hostem imminere, & fore ut propediem ingrueret. Nec multo post Gruum exercitus in eos insurrexit. Atque ideo erant Coclites, quod eorum oculos hæ confodissent. Atque Ego, virgà assumptà, in cas impetum feci, & illæ avolarunt atque aufugerunt; ob quod facinus in honore fui apud illos. This Author, it seems, represents them under the same Misfortune with the Poet, who first mentioned them, as being blind, by having their Eyes peck'd out by their cruel Enemies. Such an Accident possibly might happen now and then, in these bloody Engagements, tho' I wonder the Indian Historians have not taken notice of it. However the Pygmies shewed themselves grateful to their Deliverer, in heaping Honours on him. One would guess,

⁽f) Bocharti Hierozoici pars Posterior, lib. 1. cap. 11. p. 76. (g) Bochartus ibid. p. m. 77.

for their own sakes, they could not do less than make him their Generalissimo; but our Author is modest in not declaring what they were.

Isaac Vossius seems to unsettle all, and endeavours utterly to ruine the whole Story: for he tells us, If you travel all over Africa, you shall not meet with either a Crane or Pygmie: Se mirari (saith (h) Isaac Vossius) Aristotelem, quod tam seriò affirmet non esse fabellam, qua de Pygmais & Bello, quod cum Gruibus gerant, narrantur. Si quis totam pervadat Africam, nullas vel Grues vel Pygmæos inveniet. Now one would wonder more at Vollius, that he should affert this of Aristotle, which he never said. And fince Vossius is so mistaken in what he relates of Aristotle; where he might so easily have been in the right, 'tis not improbable, but he may be out in the rest too: For who has travelled all Africa over, that could inform him? And why should he be so peremptory in the Negative, when he had so positive an Affirmation of Aristotle to the contrary? or if he would not believe Aristotle's Authority, methinks he should Aristophanes's, who tells us (i), Σπείρειν δταν μέν Γίραν. πρωίζων ίς τίω λιδυίω μεία χωρή. 'Tis time to sow when the noisy Cranes take their flight into Libya. Which Observation is likewise made by Hesiod, Theognis, Aratus, and others. And Maximus Tyrius (as I find him quoted in Bochartus) faith, As yiegνοι Εξ Αιγύπε ώρα Θερες αφιτάμεναι, έκ ανεχόμεναι το Θάλπω, τείνασαι περυγας ωστες ίςία, φές grlay δια το άερω ευθύ τη Σιωθών γης. i.e. Grues per æstatem ex Ægypto abscedentes, quia Calorem pati non possunt, alis velorum instar expansis, per aerem ad Scythicam plagam restà feruntur. Which fully confirms that Migration of the Cranes that Aristotle mentions.

But Vossius I find, tho' he will not allow the Cranes, yet upon second Thoughts did admit of Pygmies here: For this Story of the Pygmies and the Cranes having made so much noise, he thinks there may be something of truth in it; and then gives us his Conjecture, how that the Pygmies may be those Dwarfs, that are to be met with beyond the Fountains of the Nile; but that they do not fight Cranes but Elephants, and kill a great many of them, and drive a confiderable Traffick for their Teeth with the Jagi, who sell them to those of Congo and the Portuguese. I will give you Vossius's own words; Attamen (faith (k) he) ut solent fabella non de nihilo fingi & aliquod plerunque continent veri, id ipsum quoque hic factum esse existimo. Certum quippe est ultra Nili fontes multos reperiri Nanos, qui tamen non cum Gruibus, sed cum Elephantis perpetuum ge-Præcipuum quippe Eboris commercium in regno magni Macoki rant bellum. per istos transigitur Homunciones; habitant in Sylvis, & mira dexteritate Elephantos sagittis conficiunt. Carnibus vescuntur, Dentes verò Jagis divendunt, illi autem Congentibus & Lusitanis.

⁽h) Isaac Vossius de Nili aliorumque fluminum Origine, Cap. 18. (i) Aristophanes in Nubibus. (k) Isaac Vossius ibid.

Job Ludolphus (1) in his Commentary on his Æthiopick History remarks. That there was never known a Nation all of Dwarfs. Nani quippe (faith Ludolphus) Naturæ quodam errore ex aliis justæ staturæ hominibus generantur. Qualis verò ea Gens sit, ex qua ista Natura Ludibria tantà copià proveniant, Vossium docere oportebat, quia Pumiliones Pumiles alios non gignunt, sed plerunque steriles sunt, experientia teste; ut plane non opus habnerunt Doctores Talmudici Nanorum matrimonia prohibere, ne Digitales ex iis nascerentur. Ludolphus it may be is a little too strict with Vossius for calling them Nani; he may only mean a fort of Men in that Country of less Stature than ordinary. And Dapper in his History of Africa, from whom Volsius takes this Account, describes such in the Kingdom of Mokoko, he calls Mimos, and tells us that they kill Elephants. But I fee no reason why Vossius should take these Men for the Pygmies of the Ancients. or think that they gave any occasion or ground for the inventing this Fable, if there was no other reason, this was sufficient, because they were able to kill the Elephants. The Pygmies were scarce a Match for the Cranes; and for them to have encountred an Elephant, were as vain an Attempt, as the Premies were guilty of in Philostratus (m), 'who to revenge the Death of Antaus, having found Hercules napping in Libya, " mustered up all their Forces against him. One Phalanx (he tells us) as-' faulted his left hand; but against his right hand, that being the stron-'ger, two Phalanges were appointed. The Archers and Slingers besieged his feet admiring the hugeness of his Thighs: But against his Head, 'as the Arfenal, they raised Batteries, the King himself taking his Post They set fire to his Hair, put Reaping-hooks in his Eyes; and 'that he might not breath, clapp'd Doors to his Mouth and Nostrils; but all the Execution that they could do, was only to awake him, which when done, deriding their folly, he gather'd them all up into his Lion's Skin, and carried them (Philostratus thinks) to Euristhenes. Antaus was as remarkable for his height, as the Pygmies were for their lowness of Stature: For Plutarch (n) tells us, that Q. Sertorius not being willing to trust Common Fame, when he came to Tingis (now Tangier) he caused Antaus's Sepulchre to be opened, and found his Corps full threefcore Cubits long. But Sertorius knew well enough how to impose upon the Credulity of the People, as is evident from the Story of his white Hind, which Plutarch likewise relates.

But to return to our *Pygmies*; tho' most of the great and learned Men would seem to decry this Story as a Fistion and meer Fable, yet there is something of Truth, they think, must have given the first rise to it, and that it was not wholly the product of Phancy, but had some real foundation, tho' disguised according to the different Imagination and Genius

⁽¹⁾ Job Ludolphus in Comment. in Historiam Æthiopicam, p. m. 71. (m) Philostratus. Icon. lib. 2. p. m. 817. (n) Plutarch. in vita Q. Sertorij.

of the Relator: 'Tis this that has incited them to give their several Conjectures about it. Job Ludolphus finding what has been offered at in Relation to the Pygmies, not to satisfie, he thinks he can better account for this Story, by leaving out the Cranes, and placing in their stead, another sort of Bird he calls the Condor. I will give you his own words: Sed ad Pygmæos (saith (o) Ludolphus) revertamur; sabula de Geranomachia Pygmæorum seu pugna cum Gruibus etiam aliquid de vero trahere videtur, se pro Gruibus Condoras intelligas, Aves in interiore Africa maximas, ut sidem penè excedat; aiunt enim quod Ales ista vitulum Elephanti in Aerem extollere possit; ut infra docebimus. Cum his Pygmæos pugnare, ne pecora sua rapiant, incredibile non est. Error ex eo natus videtur, quod primus Relator, alio vocabulo destitutus, Grues pro Condoris nominârit, sicuti Plautus Picos pro Gryphibus, & Romani Boves lucas pro Elephantis dixere.

'Tis true, if what Juvenal only in ridicule mentions, was to be admitted as a thing really done, that the Cranes could fly away with a Pygmie, as our Kites can with a Chicken, there might be some pretence for Indovicus's Condor or Cunctor: For he mentions afterwards (p) out of P. Joh. dos Santos the Portuguese, that 'twas observed that one of these Condors once flew away with an Ape, Chain, Clog and all, about ten or twelve pounds weight, which he carried to a neighbouring Wood, and there devoured him. And Garcilasso de la Vega (q) relates that they will seize and fly away with a Child ten or twelve years old. But Juvenal (r) only mentions this in ridicule and merriment, where he saith,

Ad subitas Thracum volucres, nubemque sonoram Pygmæos parvis currit Bellator in armis: Mox impar hosti, raptusque per aera curvis Unguibus à sævå fertur Grue.

Besides, were the Condors to be taken for the Cranes, it would utterly spoil the Pygmæomachia; for where the Match is so very unequal, 'tis impossible for the Pygmies to make the least shew of a fight. Ludolphus puts as great hardships on them, to fight these Condors, as Vossius did, in making them fight Elephants, but not with equal Success; for Vossius's Pygmies made great Slaughters of the Elephants; but Ludolphus his Cranes sweep away the Pygmies, as easily as an Owl would a Monse, and eat them up into the bargain; now I never heard the Cranes were so gruel and barbarous to their Enemies, tho' there are some Nations in the World that are reported to do so.

Moreover, these Condor's I find are very rare to be met with; and

 ⁽a) Job Ludolphus Comment. in Historiam Juam Æthiopic. p. 73.
 (b) Job Ludolphus ibid. pag. 164.
 (c) Garcilasso de la Vega Royal Comment. of Peru.
 (d) Job Ludolphus ibid. pag. 164.
 (e) Juvenal Satyr. 13. vers. 167.

when they are, they often appear fingle, or but a few. Now Homer's, and the Cranes of the Ancients, are always represented in Flocks. Thus Oppian (s) as I find him translated into Latin Verse:

Et velut Æthiopum veniunt, Nilique fluenta Turmatim Palamedis Aves, celsæque per altum Aera labentes fugiunt Athlanta nivosum, Pygmæos imbelle Genus, parvumque fatigant, Non perturbato procedunt ordine densæ Instructis volucres obscurant aëra Turmis.

To imagine these Grues a single Gigantick Bird, would much lessen the Beauty of Homer's Simile, and would not have served his turn; and there are none who have borrowed Homer's fancy, but have thought so. I will only farther instance in Baptista Mantuan:

Pygmæi breve vulgus, iners Plebecula, quando Convenere Grues longis in prælia rostris, Sublato clamore fremunt, dumque agmine magno Hostibus occurrit, tellus tremit Indica, clamant Littora, arenarum nimbis absconditur aër; Omnis & involvit Pulvis solemque, Polumque, Et Genus hoc Hominum natura imbelle, quietum, Mite, facit Mavors pugnax, immane Cruentum.

Having now considered and examined the various Opinions of these learned Men concerning this Pygmæomachia; and represented the Reafons they give for maintaining their Conjectures; I shall beg leave to subjoyn my own: and if what at present I offer, may seem more probable, or account for this Story with more likelyhood, than what hath hitherto been advanced, I shall not think my time altogether mispent: But if this will not do, I shall never trouble my head more about them, nor think my self any ways concerned to write on this Argument again. And I had not done it now, but upon the occasion of Dissecting this Orang-Outang, or wild Man, which being a Native of Africa, and brought from Angola, tho' first taken higher up in the Country, as I was informed by the Relation given me; and observing so great a Resemblance, both in the outward shape, and, what surprized me more, in the Structure likewise of the inward Parts, to a Man; this Thought was easily suggested to me, That very probably this Animal, or some other such of the same Species, might give the first rise and occasion to the Stories of the Pygmies. What has been the mown follow, and rendered this Story so difficult to be believed, I find hath been the Opinion that has generally obtained, that these Pygmies were really a Race of little Men. And tho' they are only Brutes, yet being at first call'd mild Men, no doubt from the Resemblance they bear to Men; there have not been wanting those especially amongst the Ancients, who have invented a hundred ridiculous Stories concerning them; and have attributed those things to them, were they to be believed in what they say, that necessarily conclude them real Men.

To sum up therefore what I have already discoursed, I think I have proved, that the Pygmies were not an Humane Species or Men. tho' Homer, who first mentioned them, calls them arders muyuasos, yet we need not understand by this Expression any thing more than Apes: And tho' his Geranomachia hath been look'd upon by most only as a Poetical Fiction; yet by affigning what might be the true Cause of this Ouarrel between the Cranes and Pygmies, and by divesting it of the many fabulous Relations that the Indian Historians, and others, have loaded it with, I have endeavoured to render it a true, at least a probable Story. I have instanced in Ctesias and the Indian Historians, as the Authors and Inventors of the many Fables we have had concerning them: Particularly, I have Examined those Relations, where Speech or Language is attributed to them; and shewn, that there is no reason to believe, that they ever spake any Language at all. But these Indian Historians having related so many extravagant Romances of the Pygmies, as to render their whole History suspected, nay to be utterly denied, that there were ever any such Creatures as Pygmies in Nature, both by Strabo of old, and most of our Learned Men of late, I have endeavoured to affert the Truth of their being, from a Text in Aristotle; which being so positive in affirming their Existence, creates a difficulty, that can no ways be got over by such as are of the contrary Opinion. This Text I have vindicated from the false Interpretations and Glosses of several Great Men, who had their Minds so prepossessed and prejudiced with the Notion of Men Pygmies, that they often would quote it, and misapply it, tho' it contain'd nothing that any ways favoured their Opinion; but the contrary rather, that they were Brutes, and not Men.

And that the Pygmies were really Brutes, I think I have plainly proved out of Herodotus and Philostratus, who reckon them amongst the mild Beasts that breed in those Countries: For tho' by Herodotus they are call'd ard per are and Philostratus calls them are proved or wild Beasts. And I might here add what Pausanias (t) relates from Euphemus Car, who by contrary Winds was driven upon some Islands, where he tells us, end taken are since are si

that they had Tails on their Rumps; and were very lascivious toward the Women in the Ship. But of these more, when we come to discourse of Satyrs.

And we may the less wonder to find that they call Brutes Men, fince 'twas common for these Historians to give the Title of Men, not only to Brutes, but they were grown so wanton in their Inventions, as to describe several Nations of Monstrous Men, that had never any Being, but in their own Imagination, as I have instanced in several. I therefore excuse Strabo for denying the Pygmies, since he could not but be convinced, they could not be such Men, as these Historians have described them. And the better to judge of the Reasons that some of the Moderns have given to prove the Being of Men Pygmies, I have laid down as Postulata's, that hereby we must not understand Dwarfs, nor yet a Nation of Men, tho' somewhat of a lesser size and stature than ordinary; but we must observe those two Characteristicks that Homer gives of them, that they are Cubitales, and sight Cranes.

Having premifed this, I have taken into confideration Caspar Bartholine Senior his Opusculum de Pygmais, and Jo. Talentonius's Differtation about them; and upon examination do find, that neither the Humane Authorities, nor Divine that they alledge, do any ways prove, as they pretend, the Being of Men Pygmies. St. Austin, who is likewise quoted on their fide, is so far from favouring this Opinion, that he doubts whether any fuch Creatures exist, and if they do, concludes them to be Apes or Monkeys; and censures those Indian Historians for imposing such Beasts upon us, as distinct Races of Men. Julius Casar Scaliger, and Isaac Ca-Saubon, and Adrian Spigelius utterly deny the Being of Pygmies, and look upon them as a Figment only of the Ancients, because such little Menas they describe them to be, are no where to be met with in all the World. The Learned Bochartus, tho' he esteems the Geranomachia to be a Fable. and flights it, yet thinks that what might give the occasion to the Story of the Pygmies, might be the Nubæ or Nobæ; as Isaac Vossius conjectures that it was those Dwarfs beyond the Fountains of the Nile, that Dapper calls the Mimos, and tells us, they kill Elephants for to make a Traffick with their Teeth. But Job Ludolphus alters the Scene, and instead of Cranes, substitutes his Condors, who do not fight the Pygmies, but fly away with them, and then devour them.

Now all these Conjectures do no ways account for Homer's Pygmies and Cranes, they are too much forced and strain'd. Truth is always easie and plain. In our present Case therefore I think the Orang-Outang, or wild Man, may exactly supply the place of the Pygmies, and without any violence or injury to the Story, sufficiently account for the whole-History of the Pygmies, but what is most apparently fabulous; for what has been the greatest difficulty to be solved or satisfied, was their being Men.

Men; for as Gesner remarks (as I have already quoted him) Sed veterum nullus aliter de Pygmæis scripsit, qu'am Homunciones esse. And the Moderns too, being byassed and misguided by this Notion, have either wholly denied them, or contented themselves in offering their Conjecures what might give the first rise to the inventing this Fable. And tho' Alberius, as I find him frequently quoted, thought that the Pygmies might be only a fort of Apes, and he is placed in the Head of those that espoused this Opinion, yet he spoils all, by his way of reasoning, and by making them speak; which was more than he needed to do.

I cannot see therefore any thing that will so fairly solve this doubt, that will reconcile all, that will so easily and plainly make out this Story, as by making the Orang-Outang to be the Pygmie of the Ancients; for 'tis the same Name that Antiquity gave them. For Herodotus's and pes ayelo, what can they be else, than Homines Sylvestres, or wild Men? as they are now called. And Homer's and per muyuaion, are no more an Humane Kind, or Men, than Herodotus's and pes ayelos, which he makes to be Ingla, or wild Beafts: And the ard pes μικε gl or μέλανες (as they are often called) were just the same. Because this sort of Apes had so great a resemblance to Men, more than other Apes or Monkeys; and they going naturally erect, and being designed by Nature to go to, (as I have shewn in the Anatomy) the Ancients had a very plaulible ground for giving them this denomination of and per or and gwm, but commonly they added an Epithet; as άγειοι, μικερί, πυγμαΐοι, μέλανες, or some fuch like. Now the Ancient Greek and Indian Historians, tho' they might know these Pygmies to be only Apes like Men, and not to be real Men, yet being so extreamly addicted to Mythology, or making Fables, and finding this so fit a Subject to engraft upon, and invent Stories about, they have not been wanting in furnishing us with a great many very Romantick ones on this occasion. And the Moderns being imposed upon by them, and misguided by the Name of and pes or anθρωποι, as if thereby must be always understood an Humane Kind, or real Men, they have altogether mistaken the Truth of the Story, and have either wholly denied it, or rendered it as improbable by their own Conjectures.

This difficulty therefore of their being called Men, I think, may fairly enough be accounted for by what I have faid. But it may be objected that the Orang-Outang, or these wild or savage Men are not requesto, or Trispithami, that is, but two Foot and a quarter high, because by some Relations that have been given, it appears they have been observed to be of a higher stature, and as tall as ordinary Men. Now tho' this may be allowed as to these wild Men that are bred in other places; and probably enough likewise, there are such in some Parts of the Continent of Africa; yet 'tis sufficient to our business if there are any there, that will come within our Dimensions; for our Scene lies in Africa; where Strabo observes, that generally the Beasts are of a less size than ordinary; and

this he thinks might give the rife to the Story of the Pygmies. For, faith he (u), Τά ή βοσκήμα α αὐτοῖς ες ι μικεά, πεόβα α κι άιγες, κ κύνες μικεοί, τεαχείς ή η μάχιμοι (οἰκενίες μικερί ονίες) τάχα ή η τες πυγμαίες δοπο ο τέτων μικο ορυίας ἐπενόνοαν, η ανεπλασαν. i.e. That their Beasts are small. as their Sheep, Goats and Oxen, and their Dogs are small, but hairy and fierce: and it may be (faith he) from the punecoula or littleness of the stature of these Animals, they have invented and imposed on us the Pygmies. And then adds, That no body fit to be believed ever faw them; because he fancied, as a great many others have done, that these Pygmies must be real Men, and not a fort of Brutes. Now fince the other Brutes in this Country are generally of a less size than in other Parts, why may not this fort of Ape, the Orang-Outang, or wild Man, be so likewise. Aristotle speaking of the Pygmies, saith, who mune or mir it awood, it of strong That both they and the Horses there are but small. He does not say their Horses, for they were never mounted upon Horses, but only upon Partridges, Goats and Rams. And as the Horses, and other Beasts are naturally less in Africa than in other Parts, so likewise may the Orang-This that I dissected, which was brought from Angola (as I have often mentioned) wanted fomething of the just stature of the P_{yg} mies; but it was young, and I am therefore uncertain to what tallness it might grow, when at full Age: And neither Tulpius, nor Gassendus, nor any that I have hitherto met with, have adjusted the full stature of this Animal that is found in those Parts from whence ours was brought: But 'tis most certain, that there are sorts of Apes that are much less than the Pygmies are described to be. And, as other Brutes, so the Ape-kind, in different Climates, may be of different Dimensions; and because the other Brutes here are generally small, why may not they be so likewise. Or if the difference should be but little, I see no great reason in this case, why we should be over-nice, or scrupulous.

As to our Ape Pygmies or Orang-Outang fighting the Cranes, this, I think, may be easily enough made out, by what I have already observed; for this wild Man I dissected was Carnivorous, and it may be Omnivorous, at least as much as Man is; for it would eat any thing that was brought to the Table. And if it was not their Hunger that drove them to it, their Wantonness, it may be, would make them apt enough to rob the Cranes Nests; and if they did so, no doubt but the Cranes would make noise enough about it, and endeavour what they could to beat them off, which a Poet might easily make a Fight: Tho' Homer only makes use of it, as a Simile, in comparing the great Shouts of the Trojans to the Noise of the Cranes, and the Silence of the Greeks to that of the Pygmies when they are going to Engage, which is natural enough, and very just, and contains nothing, but what may easily be believed; tho'

⁽u) Strabo Geograph. lib. 17. p. m. 565.

upon this account he is commonly exposed, and derided, as the Inventor of this Fable; and that there was nothing of Truth in it, but that 'twas wholly a Fiction of his own.

Those Pygmies that Paulus Jovius (w) describes, tho' they dwell at a great distance from Africa, and he calls them Men, yet are so like Apes, that I cannot think them any thing elle. I will give you his own words: Ultra Lapones (saith he) in Regione inter Corum & Aquilonem perpetua oppressa Caligine Pygmæos reperiri, aliqui eximiæ sidei testes retulerunt; qui postqu'am ad summum adoleverint, nostratis Pueri denum annorum Mensuram vix excedunt. Meticulosum genus hominum, & garritu Sermonem exprimens, adeo ut tam Simiæ propingui, quàm staturà ac sensibus ab justa Proceritatis homine remoti videantur. Now there is this Advantage in our Hypothesis, it will take in all the Pygmies, in any part of the World, or wherever they are to be met with, without suppofing, as some have done, that 'twas the Cranes that forced them to quit their Quarters; and upon this account several Authors have described them in different places: For unless we suppose the Cranes so kind to them, as to wast them over, how came we to find them often in Islands? But this is more than can be reasonably expected from so great Enemies.

I shall conclude by observing to you, that this having been the Common Error of the Age, in believing the Pygmies to be a fort of little Men, and it having been handed down from so great Antiquity, what might contribute farther to the confirming this Mistake, might be, the Imposture of the Navigators, who failing to these Parts where these Apes are, they have embalmed their Bodies, and brought them home, and then made the People believe that they were the Men of those Countries from whence they came. This M. P. Venetus assures us to have been done; and 'tis not unlikely: For, saith he (†), Abundat quoque Regio ipsa (sc. Basman in Java majori) diversis Simis magnis & parvis, hominibus simillimis, hos capiunt Venatores & totos depilant, nisi quòd in barba & in loco secreto Pilos relinquunt, & occisos speciebus Aromaticis condiunt, & postea desiceant, venduntque Negociatoribus, qui per diversas Orbis Partes Corpora illa deferentes, homines persuadent Tales Homunciones in Maris In-Joh. Jonston (x) relates the same thing, but without sulis reperiri. quoting the Author; and as he is very apt to do, commits a great mistake, in telling us, pro Homunculis marinis venditant.

I shall only add, That the Servile Offices that these Creatures are obferved to perform, might formerly, as it does to this very day, impose upon Mankind to believe, that they were of the same Species with them-

⁽w) Paul. Jovij de Legatione Muschovitar. lib.p. m.489. (†) M.Pauli Veneti de Regionibus Orieneal. lib. 3. cap. 15. p. m. 390. (x) Jo. Jonston. Hist. Nat. de Quadruped. p. m. 139.

felves; but that only out of sullenness or cunning, they think they will not speak, for fear of being made Slaves. Philostratus (y) tells us, That the Indians make use of the Apes in gathering the Pepper; and for this Reason they do defend and preserve them from the Lions, who are very greedy of preying upon them: And altho' he calls them Apes, yet he speaks of them as Men, and as if they were the Husbandmen of the Pepper Trees, is no devoted as mines ides, we reward nithman. And he calls them the People of Apes; & λέγελαι πιθήκων οἰκεῖν δημ. Θυ μυχοῖς το όμος. Dapper (z) tells us, That the Indians take the Baris when young, and make them so tame, that they will do almost the work of a Slave; for they commonly go erect as Men do. They will beat Rice in a Mortar, carry Water in a Pitcher, &c. And Gassendus (a) in the Life of Pieresky. tells us, That they will play upon a Pipe or Cittern, or the like Musick, they will sweep the House, turn the Spit, beat in a Mortar, and do other Offices in a Family. And Acosta, as I find him quoted by Garcilasso de la Vega (b) tells us of a Monkey he saw at the Governour's House at Cartagena, whom they sent often to the Tavern for Wine, with Money in one 'hand, and a Bottle in the other; and that when he came to the Ta-' vern, he would not deliver his Money, until he had received his "Wine. If the Boys met with him by the way, or made a houting or noise after him, he would set down his Bottle, and throw Stones 'at them; and having cleared the way, he would take up his Bottle, 'and hasten home. And tho' he loved Wine excessively, yet he would 'not dare to touch it, unless his Master gave him License. A great many Instances of this Nature might be given that are very surprising. And in another place tells us, That the Natives think that they can speak, but will not, for fear of being made to work. And Bontius (c) mentions that the Javans had the same Opinion concerning the Orang-Outang, Loqui verò eos, easque Javani aiunt, sed non velle, ne ad labores cogerentur.

⁽y) Philostratus in vita Apollonij Tyanai, lib. 2. cap. 1. p. m. 110, & 111. (z) Dapper Description de l'Afrique, p. m. 249. (a) Gassendus in vita Pierskij, lib. 5. p. m. 169. (b) Garcilasso de la Vega Royal Commentaries of Peru, lib. 8. cap. 18. p. 1333. (c) Jac. Bontij Hist. Nat. & Med. lib. 5. cap. 32. p. m. 85.

A Philological Essay

Concerning the

CYNOCEPHALI

OF THE

ANCIENTS.

Of the Cynocephali of the Ancients.

IS not that I think there are any at present so mistaken, as to believe the Cynocephali to be a Race of Men, that I write this Essay: 'tis so notoriously known that they are Monkeys, or rather Baboons, that 'tis needless to go about to prove it, 'tis what even the Ancients themselves have fufficiently confessed. That which induces me to mention them, is to thew how fond the Ancients were of inventing Fables; and Cteffas, who hath told us such fine Stories of the Pygmies, whom he makes to be litile Men, tho' indeed they are only a fort of Apes; when he comes to discourse of the Cynocephali, which are a fort of Baboons, and far less like Men than the Pygmies are, to perswade us that these likewise are a Race of Men; he is obliged to exercise his Inventive Faculty with more force, to use much bolder strokes, and by roundly afferting so many incredible Things, to amuse our Imaginations, he hopes at least to give the Reader Entertainment, tho' he misses his Design of gaining our belief.

I will give you Ctestas's own words, that you may see I do not abuse him,

him, as he hath done Mankind, in most of the Natural History that he hath left us; for as (a) Photius informs us, Ctesias tells us

Εν τοῖς 🕽 τοῖς όρεσι φησίν ανθρώπες Βιοίδύειν, πιευδς έχονίας περάλιω. Έρθητας ή φορέσιν όπ την άγριων Энείων: φωνίω ή διαλέγονη έδεμίαν, αλλ' ώρύονη ώσσες κύνες η έτω συ-ນເຂື່ອນ ຂມ່າໃນ 🕆 ອຸພ່ນໄພ. **Οδύν**ίας 👸 μείζες έχεσι κινώς, η τες δνυχας διλοίως, κινών, μακερίερες ή κή 500χυλοθέρες. Οἰκεση ζεν τοῖς έρεση, μέχει 78 'Ινδέ πολαμέ. Μέλανες δε είσι η δικαιοι πάνυ, ώσος η οι άλλοι 'Ivooi, ois [ນີ້] ອີການທ່ານແມ່ງ. Kai σແມເລືອ μεν τὰ πας ἐκείνων λεγόμενα, αὐτοί 🕽 έ δύναν Το διαλέγεσας: άλλα τῆ ορυγή η ταίς χεροί, η τοίς δακθύλοις σημαίνουση, ώσσες οί κωροί η άλαλοι. καλοιίθ ή του τρο Ινδών καλύτε κοι, όπες Ένν έλλωις παυοκέραλοι. Τό Didra Biv, Ews dudera puerá-Swy.

que gentis capita numerari ad centum & viginti millia. And a little afterwards he adds,

Όποι κιωοκέραλοι οἰκοιώτες ἐν τοῖς ὅρεσιν, ἐκ ἐργάζονλαι: ἀπὸ λήρας ἢ ζῶσον. "Οτ' ἀν [ðὲ] ἀποκλείνωσην αὐπὰ, ἀπῶσι πρὸς ἢ ἤλιον. Τρέφεσι ἢ ἢ πρόβαπα πολλά, ἢ αῖγας, ἢ ὅῖς. Πίνεσι ἢ γάλα ἢ ὁξύγαλα την προβάτων. "Εθίεσι ἢ ἢ παρπὸν τε σιπαχόρε, ἀρ' ε τὸ ἤλεκλεον: γλυχύς γδ ὅςι ἢ ξυραίνοντες αὐτες, συρίδας συρβάπησην, ώσες ἐν τοῖς ἐλλησι τιὰ ποιησάμενοι, καὶ ὅπιθένλες, ἀπάγεσ φόρλον τετε. Καὶ τῆς πορφύρας τὸ ἀνθος καθαρον ποιήσανλες, ἢ τε ἡλέκλρε ξ' ἢ σ' πάλανλα τε ἐνιαυτε' ἢ ἔτω

Degere iisdem hisce in montibus homines memorat canino capite, qui ferarum pellibus vestiantur. Sermone hos nullo uti, canum tantum more latratum edere, atque ita mutuo sese Dentes illis esse quam intelligere. canibus majores, & caninos similiter ungues, sed longiores, ac rotundiores. Montes incolere ad Indum fluvium usque, & colore esse nigro, insignésque justitiæ cultores, ceterorum Indorum more, inter quos versentur. Intelligere quoque quæ ab Indis dicantur, licet ipsi loqui minimė possint, ut propterea latratu, manibus, atque digitis signa dent, quemadmodum ferè surdi ac muti solent. Vocari hos ab Indis Calystrios, quod Græci dicerent newonipalist, id est, Canicipites, [carnibus eosdem vesci crudis] totiús-

Narrat insuper hos Cynocephalos in montibus habitantes nullum exercere opificium; sed de venatione vivere, ferásque quas occiderint ad solem torrere. Magnam nihilominus pecoris copiam alere, caprarúmque & ovium: quarum quidem ovium lac atque oxygala pro potu illis sit. Vesci tamen etiam Sipachoræ fructuzė qua, uti dictum est, arbore succinum emanat. dulcem enim illum esse. Hunc item illos fructum arefactum in corbes constipare, ad. eum modum quo uvas passas Graci. Eosdem illos Cynocephalos ratem quoq: extemporariam construere, qua impositum bujus fructus onus, ut O purpura (Sed purgato prius ejus flore) itémque electri, ad ducenta & sexaginta talenTO DOIVINION BATTE) TE DAGMANE, ETEGO ποσεώτα. Καὶ ἡλέκδρε χίλια πάλαντα α πάγεπ και ενιαυτον τω Ίνδων Βασι-ત્રેલે. Καὶ દંત્રદેવ છે καλαγονίες πωλέσι τοις Ινθείς, πρός άρτες η άλριλα ή ξύλινα ιμάπα. Πωλεσι ή κλξίρη, οίς xpar) neds + The Inelian ayean, is τόξα εξ απόνλια. Πάνυ γο εξ δεινοί εἰ-σιν αποντίζειν εξ τοξεθείν Απολέμη-का है होने, हार्य के ग्रेसिंग क्यों के वैद्य के δατα η ύληλα. Δίδωσι ή αυτοίς διά πέμπε έτους δώρα ο Βασιλους, λ' μέν μυρ κάδας τόξων, η, ακοντίων το ταίτας, אבא אינו בן לשלבונשי על בולח בו אבמונוסμόζια. Τέτοις τοῖς κιμιοκεράλοις έκ લેને ગોમાં જા, જેમે જ જમ મેલાગાડ કોલામાં છે. Onpstison है नके Suela, मार्डिशियम्बर में αποντίζοντες, η διώποντες καταλαμβάγιωώνες αὐτζο άπαξ το μηνός, όταν τα καταμένια αὐτῆς ἔλθη άλλοτε δί ể. O; ἢ ἄνδρες ἐ λέον) μεν, πας δὲ χείσας δπονίζου). Έλαίω δε χρών) πελς τε μίωος, τω δοπί τε γάλακίω γινομένω, η ελείβου θέριασι. Τίω δε έωθητα έγεσιν έ δασείαν, άλλα βιλών τη μαθλημάτων, ώς λεπω-नवं रका, में वर्ण को में वा प्राण्यों सह वर्ण ही. Οί δε πλεσιώπατοι αὐτήν, λίνα φορεσιν έτοι δε είσιν όλίγοι. Κλίναι δε αὐτοῖς ἐκ εἰοίν, ἀλλὰ ϛιδάδας ποιθύ). Qป๊างรู ปี สบาน การาชาสาด ของประวา દા), & જેમ જાતેલાંકજ માલ્યું કેજાજા માં : મેં જે α້າλη ຮິດເຂ , παραπλησία. Ουραν δε हैं ४८०। मर्चणस्द में वंग्रेश्टर में पृथावीसहर, อา าน ใหม่อง อใลง πες หม่อง μείζονα δε η δασυπεραν. Και μισγού उद्यों प्रत्यायाद्दी नही ट्यमाण्यादी, किंकाह की मर्थνες. άλλως δε μιζήναι αὐτοῖς, όξιν αίgeov. Diraioi de cioi, is maxegoioτατοι πάντων άνθρώπων: ζώσι γδέτη p n, o. Evioi de autil n, T.

ta quotannis avelunt; additis talentis totidem illius Pigmenti, quo infectores puniceum colorem inducunt. Electri praterea mille talenta quotannis ad Indorum regem advehere. Immò & alia plura devehere ad Indos venalia, pro quibus vicissim panes, farinam. & xylinas vestes accipiant. Habere quoque enses venales, quibus ipsi ad venatum utuntur, cum arcubus & jaculis. Peritissimos enim esse jaculandi atque sagittandi: & præterca etiam, quid montes habitent altos atque inaccessos, bello insuperabiles. Regem ipsis pro munere quinto quoque anno præbere trecenta arcuum, totidemque jaculorum millia; jam peltarum centum viginti, & gladiorum quinquaginta millia. Nullas item apud hos esse domos, sed in antris degere. In venatione jaculis potissimum feras, vel sagittis petere; easdemque persequendo, quod cursus velocitate præstent, etiam assequi. Horum uxores semel duntaxat per mensem, cum menstrua patiuntur, lavare; alias nunquam: Neque viros unquam omnino lavare, sed manus tantummodo abluere. Oleo tamen ex lacte confecto ter Saltem mensibus singulis ungi, 🔗 pellibus deinde abstergi. Veste ad hæc uti, non villosa, sed è glabris maceratisa; pellibus quam tenuissimis, ipsos æquê atque uxores. Exceptis forte ditissimis inter eos, & iis quidem paucis, qui lineos gestent amictus. Nec item lectorum novisse usum eos, qui extemporaneos sibi toros exstruant. Hunc apud eos ditissimum haberi, qui plurimum habeat pecoris, ac reliquas opes his propemodum esse similes. Caudam insuper habere omnes, tam viros quàm

mulieres, supra clunes, caninæ, similem, nisi quòd major sit, & pilis densior. Quadrupedes item hos, canum more, cum mulieribus congredi aliúmque congrediendi modum omnem pro turpi habere. Justissimos cosdem esse,
vitæq; reliquos inter homines longissimæ. Vivere namq; ad centesimum usq; &
septuagesimum, nonnullosq; ad ducentissimum quoq; annum.

i. e.

'i. e. In these Mountains (saith Ctessas) live certain Men, who have 'Heads like Dogs, are cloathed with Skins of wild Beasts, speak no Language, but bark like Dogs, and thereby understand one another. They have Teeth larger than Dogs; and Nails like Dogs, but longer and rounder. They dwell up in the Mountains, as far as the River Indus; they are black and very just, as are the other Indians with whom they are mixt; and they understand what is said to them, tho' they cannot speak themselves. But by their Barking, and their Hands and Fingers, they signific their Minds, as Deaf and Dumb Men do. They are called by the Indians, Calystrij, which in Greek is Cynocephali. The 'whole Nation is an hundred and twenty Thousand in number.

'These Cynocephali that inhabit the Mountains, do not work, but live ' upon Hunting; and when they kill any wild Beast, they rost it in the 'Sun. They breed a great many Sheep, Goats and Asses; and drink the 'Milk and Butter-milk of the Sheep. They eat likewise the Fruit of the Sipachora Tree, from whence comes Ambar, the Fruit whereof is sweet, 'which having dried, they put up in Baskets, as the Greeks do Raisins. 'These Cynocephali having made a Boat, they load it with this Fruit, and ' with Purpura, the Flower being first picked, and with Ambar, to the quantity of Two hundred and fixty Talents, which they every Year. ' ship off, and as much too of the Drug, with which the Dyers dye 'the Scarlet; and they carry every Year a Thousand Talents of Ambar ' to the King of India, and they take with them other Commodities, 'which they fell to the Indians; for which they receive Bread, and ' Meal, and Cotton Garments. And the Indians fell them likewise Swords, 'which they use in taking the wild Beasts; and Bows and Darts, for they are very skilful Archers and Darters. They are invincible, because 'they inhabit very high, and inaccessible Mountains. Every fifth year, the King bestows upon them Three hundred thousand Bows, and as ' many Darts: Also an Hundred and twenty thousand Shields, and Fifty 'thousand Swords. They have no Houses, but live in Caves. In hunt-'ing the wild Beasts, they use their Bows and Darts, and pursuing 'them, they take them; for they run very swift. The Women bathe only once a Month, when they have their Catamenia, otherwise not. 'The Men don't bathe, but only wash their hands; but they anoint themselves three times in a Month with Oyl made of Milk, and rub 'themselves with Hides. The Cloaths both of the Men and Women are onot hairy, but Skins macerated smooth, and made very thin. ' richest of them wear Linnen, but those are but few. They have no 'Beds, but lye upon Straw or Leaves. He is esteemed the richest a-' mongst them, who hath most Sheep, or such like Substance. They have 'all, both Men and Women, Tails on their Rumps, like Dogs, but lareger and more hairy; and, like Dogs too, they lye with their Women on all four, and they think it unbecoming to do otherwise. 'just

'just, and the longest lived of any Men, for they live an Hundred and feventy, and some of them Two hundred years.

Had not Ctesias made such a Solemn Asseveration of the Truth of all that he had wrote, that Apology that Strabo(b) makes for the Poets, might excuse him, Φαίνε) ε (saith Strabo) ἐυθυς ὅπ μώθες παραπλέκεσιν ἑκόντες ἐκ ἀγνοία τῷ ἀντων, ἀλλὰ πλάσει τῷ ἀδυνάτων, περαθείας κὰ πέρξεως κάθεν i.e. Statim enim apparet eos fabulas admissere, non ob verorum ignorationem, sed delectationis causa, monstra & alia qua esse non possunt, singentes. For our Historian had as good a Talent at Fiction as any of the Poets. And tho Æschylus, as the same Strabo there tells us, first invented the Story of the Cynocephali, or Canicipites, as likewise the Pectoroculati and the Unoculi, as Hesiod and Homer did that of the Pygmies; yet I can't but think he hath as far out-done the Original in what he relates of the Cynocephali, as he did in the Account he gives of the Pygmies.

These Cynocephali by (c) Ælian are called ἄνθρωποι πυνοπε όσωποι, and he gives this Relation of them, as I find him translated by Conrad. Gesner, who is more faithful in rendering him than Pet. Gillius, Ultra Oasin Ægypti, solitudo maxima ad septem dierum iter extenditur. Eam excipit Regio quam Cynoprosopi Homines incolunt, in via Æthiopiam versus. Vivunt illi Caprarum & Bubalidum venatu. Aspectus iis niger, Caput & Dentes Canis. Quod Animal, quum referant, non absurda eorum (quamquam Hominum) hoc in loco existimanda est mentio. Nam & Sermonis usu carent, & acuto quodam stridore sonant. Barbam insta supraque os gerunt, Draconum quadam similitudine. Manus eorum validis & acutissimis unguibus armantur. Corpus omne hirsutum est, hoc etiam instar Canum. Sunt autem pernicissimi, & aquas Regionis norunt; atque eam ob causam, difficiles captu.

Now tho Alian calls them here Men, yet where he describes them before, even out of Ctesias, he plainly tells us they are not Men, but only Brutes, because they cannot speak, but only bark. I will give you (d) Gesner's Translation of this Passage: In eodem India tractu, ubi Canthari (†) jam dicti, Cynocephali etiam reperiuntur: quibus à facie & Corporis specie nomen inditum, catera sere humana habent: & vestiti pellibus ferarum ingrediuntur. Justi sunt, Hominum nemini molesti aut injurij, non Sermone sed ululatu sonant. Indorum tamen linguam intelligunt. Venatione Animalium serorum vivunt, qua ut sunt celerrini, facile consecuti interimunt, & srustatim divisa ad solem assunt. Capras etiam & oves alunt, ut

⁽b) Strabo Geograph.lib.1.p.m.29. (c) Alian. Hist. de Animal. lib. 10. cap.25. p.m.601. (d) Alian. Hist. de Animal. lib. 4. cap. 46. p. m. 239. (†) These Canthari are that fort of Scaribain we call a Lady-Com, and I have formerly given a Figure of, in Philosoph. Transact. N. 176. p. 1202. from the Worm or Chrysalis of which, come the Cochineel, for dying Scarlet, of which there is a good account here in Alian out of Ctosian.

ex lacte potu fruantur. Horum inter Animantes rationis expertes non temere mentionem feci, articulato enim, discretoque & humano Sermone non utuntur.

But 'twas for want of Education, it may be, and by their living wild in the Woods, they lost their Learning and their Speech; for the *Egyptians* in the time of the *Ptolomies* took more care of them; and as the same *Elian* relates, they taught them Letters, and to Dance, and to play upon Musick: Nor were they ungrateful to their Masters; for they beg'd a great deal of Money, which they carefully put up into a Bag, to reward them for the pains they had taken with them. For thus, saith (e) *Elian*, as Gesner translates him; Animalia Disciplinae idonea hac essepercepi. Regnantibus Ptolomeis Cynocephalos Egyptij literas, & saltare, pulsare Citharam docebant. Tum verò unusquispiam Cynocephalorum mercedem, Domini nomine sic scitè tanquam peritus aliquis Mendicus exigebat. Et id quod dabatur in Marsupium, quod ferebat, appensum, congerebat.

I could not but take the more notice of this passage in *Ælian*, because the Cynocephali are always represented to be of a fierce and untractable Nature; which feems their particular Character: For faith Aristotle, as I have quoted him already (f), Kal of nuwonkparos of the author executor τοῖς πιθημοις, πλίω μείζονες τ' είπ, η ίχυς όπες οι, η τα πεόσωπα έχοντες κυνοειδέσερα. "Επι δε άγριώτερα τε πά ήθη, η, τες όδον ας έχεσι πυνοειδεσέρες η, ique oripses. i. e. The Cynocephali are of the same shape with Monkeys, but they are bigger and stronger, and they have a Face more like a Dog's, and are of a fiercer Nature, and have Teeth more like a Dog's, and stronger. And so (g) Pliny, Efferacior Cynocephalis Natura sicut Satyris: And (h) Solinus, Cynocephali & ipst sunt è numero simiarum, in Æthiopiæ parte frequentissimi: violenti ad saltum, feri morsu, nunquam ita mansueti, ut non sint magis rabidi. And (i) Diodorus Siculus describes them after the same manner: Οί δι δνομαζόμενοι πυνοκέραλοι τοῖς μεν σώμασιν ανθρώποις δυσειδέσι παρεμφερείς είσι, παις δε φωναίς μυγμες ανθρωπίνες περίεν). άγειώπαια δε ταύπα πα ζωα, η πανθελώς ἀπθάσσελθα καθεςώπα, τω δπο εμ οφρύων πεόσολιν σώς η-μαίω φέρειν απανία τ χρόνον. i. e. Qui Cynocephali (à Canino Capite) dicuntur, Corporis aspectum Hominum deformium instar habent, quorum voceme mussitatione tantum exprimunt. Apprime ferox est hoc Animal, nec ullo cicurationem pacto admittit, & vultum à supercilis austerioribus præfert. Singulare quiddam fæmellis accidit : quod vulvam perpetud extra Corpus projectam habent. And Agatharcides in (k) Photius gives just the same description of them: O de κωνοκέραλ (faith he) το μέν σώμα ανθρώπε δυσειδες το-

⁽e) Elian. Hist. de Anim. lib. 6. cap. 10. p. 331. (f) Vid.pag. 2.657. of the Anatomy. (h) Plinif Hist. Nat. lib. 8. cap. 54. p. 243. (h) Solini Polyhistor. cap. 27. p. m. 39. (i) Diodori Siculi Biblioth. Histor. lib. 3. p. m. 168. (k) Photij Biblioth. Cap. 38. Cod. 250. p. m. 1364.

γεάρει, τὸ πείσωπον δὲ κιυθές φωνίω δὲ ἀρίπσι μυγμῶ παραπλησίαν ἄγριον δὲ ἐωρεολη ἢ τελείως ἀπθάσευθον, ιὰ τωὶ ὅψιν ἐμραῖνον ἀπό τε τῶν ὁρρύων καὶ τῶν ὁμμάτων αὐςηράν. Περὶ μὲν τὰ ἄρρενα ταῦτα. Τῶ δὲ ઝηλει πρόσιες) καὶ τὸ τιωὶ μήτραν ἔξω τε σώμαθω φορείν, καὶ οῦτω διαχίνεδαι πάντα τὰ είον. i. e. In Cynocephalo Hominis Corpus, specie turpis, adumbratur. Canina ei facies, vocem stridori Muris non dissimilem exprimit. Sed immodice ferum est Animal, nec ullo modo cicuratur: vultumque à supercilis & oculis austerum prodit. Ita Mas comparatus est. Fæmineo generi hoc est proprium, ut uterum extra Corpus gestet, eoque habitu totam exigat vitam.

Salmasius (1) remarks that Agatharcides borrowed this Passage, as he hath some others likewise, from Diodorus Siculus. But that these Relations of Ctesias that are so extravagant and wild, should be copied from him, by fo many and noted Authors too, feems fomewhat strange. Yet we find Ælian, Pliny, Solinus, and a great many others have done it; tho' they have added by it little Credit to their Histories, and no doubt much lessened their own Reputation by transcribing the Errors of their Predecessors. In the History therefore of Nature we must not depend. upon the Authority of the Number of those that only transcribe the same thing, without duly examining the Matter themselves: For the Authority here wholly depends on the veracity of the first Relator: And if what Ctefias faith is false, tho' never so many say the same thing from him, they must all be in the wrong. Especially in transcribing the Ancients, and believing their Reports, we ought to be very cautious, since 'twas a common Practice amongst them to disguise and conceal the Truths they would deliver, in *Enigmatical* and *Mythological* Representations. times there is something of Truth contained in their Relations, but 'is under fuch Vails, that you will not discover it, till you have taken them And tho' there are no fuch Men, as Ctesias's Cynocephali, and Pygmies; yet there are Apes, and Monkeys, and Baboons, that afforded him a ground for his Invention.

Now what fort of *Monkey* these *Cynocephali* were, I shall not at present enquire; that they are of the *Monkey-kind* is evident, because they have Tails: and *Aristotle* tells us, that they are bigger and stronger, and therefore I make them of the *Baboon-kind*. But not having seen any of them my self, I shall refer my Reader to the Authors who have wrote about them. 'Tis sufficient to my present purpose that they are a fort of *Monkeys*, and not *Men*, as formerly represented.

⁽¹⁾ Salmasij Exercitat. Plinian. Cap.27.p.267.

A

Philological Essay

Concerning the

SATYRS

OF THE

ANCIENTS

Of the SATYRS of the Ancients.

ULPIUS and Bontius indeed think the Orang-Outang to be the Satyr of the Ancients; but if we enquire into their History, and examine what Opinion the Ancients had concerning them, we shall find it no less involved in Fables, than that of the Pygmies; and upon this account feveral of our Learned Men of late, have wholly denied them, and look upon all the Stories concerning them to be only a Fiction of the Poets and Painters, and that there were never any fuch Beings in Nature. The Learned (a) Casanbon is clearly of this Mind, Quicquid de Satyris legimus (saith he) ex Poetarum Pictorumque fingendi Licentia Originem ducere. Nihil hujus reverà in Rerum Natura existere. So (b) Isaac Vossius speaking of the Ægipanes tells us, Sane neque in forma hujus monstri conveniunt, si tamen monstris accensenda sunt ea, que sunt mera Graculorum Commenta. And the Learned (c) Bochartus saith, Absit interim ut ex his locis Quisquam colligat, ullos aut jam exstare, vel unquam extitisse in Rerum Natura Satyros. However, I do not doubt but to make it plainly appear, that there were

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⁽a) Cafaubon de Poessi Satyricâ, lib. 1. cap. 2. (b) Is. Vossi Comment.ad Pompon. Melam.lib. 1. c. 8. p.m. 46. (c) Bocharti Hierozoic. seu de Animal. Sacra Scriptura, part. post. lib. 6. cap. 7. p. 829.

fuch Animals in Africa which the Ancients called Satyrs. And tho' they fometimes called them Men, and for the most part worshipped them as Gods, yet I shall shew, that they were only a fort of Monkeys, and likewise Evince, that the Orang-Outang was not this fort of Monkey or Satyr of the Ancients.

Having proposed these as the Heads of my ensuing Discourse, it will not be expected of me to give an Account of all that has been said on this Argument. I shall rather apply my self to make out what I have here afferted. And tho' on this occasion, it may be, the Poets have Enigmatically represented some Nobler Secrets of Philosophy, by what they relate under the Fables they have made of these Satyrs, the Fauni, the Nymphæ, Pan, Ægipan, Sylvanus, Silenus, or any other Name they have given of this fort of Animal; yet I think my self no farther concerned at present, than to shew what might give the first rise to and occasion of these Inventions: or rather to prove that the Satyrs were neither Men, nor Demi-gods, nor Damons; but Monkeys or Baboons, that in Africa were worshipped as the Gods of the Country; and being so, might give the Poets the Subject of the Stories which they have forged about them.

The Satyrs therefore are generally represented like Men in the upper Parts, but with Horns on their Heads; and in their lower Parts or Legs like Goats: hence they are called Capripedes, or Air and is and ges, as Herodotus expresses it. And Pliny (as I shall shew) where he describes them as Brutes; and faith, they are sometimes Quadrupeds, sometimes Bipeds, yet tells us, they are Humana Effigie. Diodorus Siculus (d) informs us, that when Ofiris went into Æthiopia, αχ Νίναι λέγεσι πε ος αὐτον το το Σατύρων γένω, ές φασίν 6πι της δοφύω έγειν πόμας,&c. i.e. Dum in Æthiopia versatur (Osiris) Gens Satyrorum ei adducitur, quas pilos in lumbis (Osphye) habere ferunt. Risus enim amator erat Osiris & Musicae Choreises; gaudebat, &c. Satyri igitur quia ad tripudia, & decantationem Carminum, omnemque hilaritatem & lusum apti erant, in partem Militiæ venerunt. He makes them likewise the Companions of Bacchus, and for the same reafon (e), Τές ή Σαθύρες πείς πεύς γέλωθα συνεργέσαις επιθηδίσεο χρωμένες, παρασκεθάζειν τω Διονύσω τον ευδαίκιονα η κεχαρισκένον βίον i.e. Ita Satyri ludicris & ad risum compositis gestibus & actionibus, vitam Dionyso beatam, Gratiisque delibutam, reddunt. And they are always represented as Jocose and Sportful, but Scurrilous and Lascivious; and wonderful Things they relate of their Revellings by Night, their Dancing, Musick, and their wanton Frolicks. For thus Pliny (f) describing the Parts about the Mountain Atlas in Africa, informs us, Incolarum neminem interdiu cerni : silere omnia, non alio quam solitudinum borrore : subire tacitam

⁽d) Diodorus Siculus Bibliothec. Hist. lib. 1. p. m. 16. (e) Diodorus Siculus ibid. lib. 4. p. m. 213. (f) Plinij Hist. Nat. lib. 5. cap. 1. p. m. 523.

Religionem animos propriùs accedentium, præterque horrorem elati (sc. Montis) super nubila, atque in viciniam Lunaris circuli. Eundem noctibus micare crebris ignibus, Ægipanum, Satyrorumque lascivia impleri, Tibiarum ac Fistulæ Cantu, & Cymbalorum Sonitustrepere. And then adds, Hec celebrati Authores prodidere. And so (g) Pomponius Mela, Ultra hunc sinum Mons altus (ut Graci vocant) Ocov oynma, perpetuis ignibus flagrat : ultra montem viret Collis longo tractu, longis littoribus obductus, unde visuntur patentes magis Campi, quam ut prospici possint, Panum, Satyrorumque. Hinc opinio ea fidem cepit, quod cum in his nihil culti sit, nulla habitantium Sedes, nulla Vestigia, solitudo in diem Vasta, & silentium Vastius, nocte crebri ignes micant, & veluti Castra late jacentia ostenduntur, Crepant Cymbala & Tympana, audiunturque Tibiæ Sonantes majus humanis. Where we may obferve that what Pliny calls Ægipanes, Mela calls here Panes. And the Satyrs being commonly called Fauni, I can't but think, that the idle Stories we have about the Fairies, must come from hence: For they likewise have their Revellings, Dancing, and Musick by Night. And as even to this day, to fright Children, they tell them Stories of Fairies and Hobgoblins, so the Ancients did use to call any great sudden Fear, as we do now, a Panick Fear, from this Pan. For as (h) Pausanias tells us, Έν ἢ τῆ νυκτὶ φόδ ⑤ σφίσιν ἀπτίπθει Πανικός. Τὰ χο ἀπτίας ἐδεμιᾶς δείμιαςτα čα τέτε φαοί γίνεδας i. e. Eå nocte Panicus illos incessit terror. enim nulla ex causa Ortos ab eo (sc. Pane) immitti aiunt. (i) Euripides:

Κεσνίε Πανός τεσμεςα μάτιχι φοδή.

Saturnij (Senis) Panis tremendo flagello (Ictus) trepidas.

And so (k) Dionysius Halicarnasseus speaking of the Faunus, says, Τέτω ηδ ἀνατιθέασι τω δαίμωνι Ρωμαΐοι τα Πανικώ, η εσα φάσμαια α ότε ἀλλοίας εχονθα μορφας, εἰς εἰν ἄνθεώπων εξχονθ, δείμαθα φερονια i.e. Huic enim Romani Panicos terrores adscribunt, & quacunque alia Spectra, qua varias induentia formas in Hominum conspectum veniunt, & Metum ipsis incutiunt. And (l) Ovid:

---Faunique bicornes

Numine contactas attonuere suo.

How jolly therefore soever and merry the Satyrs may be by night amongst themselves, with their Dancing and Musick: yet they have been frightful to Men formerly, as the Stories of the Fairies and Hobgoblins are (as I said before) to Children now; and indeed, the telling Children Stories of this

⁽g) Pomp. Mela de fitu Orbis, lib. 3. cap. 9. p. m. 63. (h) Pausanias in Phocicis. (i) Euripides in Rhaso. (k) Dionysij Halicarnass, lib. 5. cap. 3. (l) Ovid in Phadra.

kind, is a very mischievous Custom; for they are thereby impressed with such Fears, as perhaps they cannot conquer all their Life time. But the Account that (m) Phurnutus gives of these Panick Fears, I think is natural; for he tells us, "Εςι ή το πανικώς λέγωθαν πεσαχάς πὰς ἀρνιθίες, κὶ ἀλόγες, ἔτω γάς πως κὶ ἀι ἀγλλα, κὶ τὰ ἀιπόλια ποῦται, ψόρε τινὸς ἐξ ῦλης, πὶ τὰ ἀνίσων κὶ φαραχωδῶν τόπων ἀνέσανδα i. e. Nihil prohibet quin etiam Panicos tumultus dicamus, qui subito & sine ratione certa exoriuntur: sic enim interdum armenta & greges terrentur, dum sonus quidam subitus è Sylva, aut ex Antris aut ex Terræ voraginibus affertur.

Now Lucretius thinks that all this Musick of Pipes, Flutes, Cymbals and Drums, that is said to be made by the Jollity and Revellings of the Satyrs, Fauni, Panes, &c. in this dreadful Mountain by Night, is meer Romance and Fiction; and that 'tis nothing but the Ecchoing of the whistling boisterous Winds amongst those hideous Rocks: For speaking of Eccho's, he tells us (n),

Sex etiam, aut septem loca vidi reddere voces Unam cum jaceres: ita colles collibus ipsis Verbarepulsantes iterabant dicta referre. Hæc loca Capripedes Satyros, Nymphasque tenere Finitimi fingunt, & Faunos esse loquuntur; Quorum noctivago strepitu, Ludoque jocanti Adfirmant volgo taciturna silentia rumpi, Chordarumque Sonos fieri, dulceisque querelas, Tibia quas fundit digitis pulsata canentum: Et genus Agricolum late sentiscere, cum Pan Pinea semiferi Capitis velamina quassans, Unco sape labro calamos percurrit bianteis. Fistula Silvestrem ne cesset fundere Musam. Catera de genere hoc monstra, ac Portenta loquintur, Ne lova deserta ab Divis quoque fori è putentur Solatenere: ideo jactant miracula dictis Aut aliqua ratione alia ducuntur, ut omne Humanum Genus est avidum nimis auricularum.

Which the Ingenious Mr. Creech hath thus rendered:

And I my felf have known
Some Rocks and Hills return fix words for one:
The dancing words from Hill to Hill rebound,
They all receive, and all reftore the found.
The Vulgar, and the Neighbours think, and tell,
That there the Nymphs, and Fauns, and Satyrs dwell;

⁽m) Phurnuties de Natura Dedrum Cap. de Pane, p. m. 70. (n) T. Lucretij de Rerum Natura, lib.4. vers. 581.

And that their wanton sport, their loud delight Breaks thro' the quiet silence of the Night:

Their Musick's softest Ayrs fill all the Plains,
And mighty Pan delights the listning Swains;
The Goat-fac'd Pan, whilst Flocks securely feed,
With long-hung lip he blows his Oaten Reed;
The horn'd, the half-beast God, when brisk and gay
With Pine-leaves crown'd, provokes the Swains to play,
Ten thousand such Romants the Vulgar tell,
Perhaps least Men should think the Gods will dwell
In Towns alone, and scorn their Plains and Cell
Or somewhat; for Man credulous and vain
Delights to hear strange things, delights to feign.

Lucretius here attributes the Invention of these Fables to the superstitious Notions Men had of Deities, and the Itching Ears Mankind generally hath for hearing Novelties and Wonders; and no doubt, the satisfying this Humour put the Ancients upon inventing most of these Stories. But we may take notice that Lucretius places together the Satyrs, the Nymphs, the Fauni and Pan; and generally I observe, where mention is made of them, several are joyned together: As (o) Ovid,

Illum Ruricolæ, Sylvarum Numina, Fauni Et Satyri fratres, & tunc quoque clarus Olympus Et Nymphæ flerunt.

The Fauni therefore and Satyrs I find are near akin. And (p) Ovid in another place saith,

Quid non & Satyri Saltatibus apta juventus Fecere, & Pinu præcincti Cornua Panes. Silvanusque suis semper juvenilior annis.

And elsewhere he tells us (q),

. Panes & in Venerem Satyrorum prona juventus.

The Satyrs therefore and Fauni seem to be young ones, and the elder, the Panes and Silvani, according to that of (r) Virgil,

Panaque, Silvanumque Senem Nymphasque Sorores.

And (s) Plutarch tells us that what the Greeks called Ægipan, the Romans called Silvanus. And (t) Pausanias expresly tells us, that when the Satyrs

⁽c) Cvid. Metamorph. lib. 6. vers. 392. (r) Virgil. Georg. l.2.vers. 494.

⁽p) Ovid. Metamorph. lib. 14. vers. 637. (q) Ovid. l. z. (s) Plutarch in Parallelis. (t) Pausan. in Attic.p.m. 213.

grow old, they are called Sileni: Τες ηδ ηλικία η Σαθύρων ως οπονίας ονομάζεσι Σειλίωες. And by Virgil's Expression Nymphasque Sorores, 'tis very evident, that the Nympha likewise were of this Family, and nearly related. Ovid (u) joyns them together.

Sunt mihi Semidei, sunt Rustica Numina Nymphæ, Faunique, Satyrique, & monticulæ Silvani.

Now what difference there is amongst all these, unless as to their Age and Sex, I will not undertake at present to determine. The Poets and the Painters of old, if we nicely enquire into them, have been pleased, as their fancy govern'd them, to make, or not make a distinction between them. Those that have a mind to satisfie their Curiosity farther in this Matter, may consult Salmasius, Bochart, Gerard, and Isaac Vossius, and several others, who have largely wrote about them. I am apt to think that Pan, Ægipan, Silvanus and Silenus, were all the same; as were the Satyri and the Fauni; only these were younger than the former; and the Nymphs were the Females of the Kind. But 'tis sufficient to my business, if I make it appear, notwithstanding all this, that the Satyrs were not Men, nor Demi-Gods, nor Dæmons, but only Brutes of the Monkey-kind; which is plain enough even from the Ancients, who have invented so many Fables about them.

For (w) Herodotus tells us, and he is apt enough oftetimes to be overcredulous, εμωί μεν έ πις α λεγονίες, οἰκειν πα έρεα αιχιποθας ἄνδρας: for they are neither Men, nor have they such Feet. Satyri de hominibus nihil aliud præferunt quam figuram, saith (x) Solinus. Satyrus præter Effigiem nihil humani, faith (y) Mela. Pliny gives us a larger description of them; Sunt & Satyri (faith (z) he) subsolanis Indorum montibus (Catharcludorum dicitur Regio) perniciosissimum Animal: Cum Quadrupedes tum recté incedentes, humana effigie, propter velocitatem, nisi Senes aut ægri, non capiun-Choromandarum Gentem vocat Tauron, Silvestrem, sine voce, stridoris horrendi, hirtis Corporibus, oculis glaucis, dentibus caninis. You may here perceive they have something of the shape of Men, but can't speak, they are hairy, they go sometimes upon all four, sometimes erect, they have Dogs Teeth, they are wild mischievous Animals. But Hian is a little more express: Finitimos Indiæ montes (saith (a) he) transmittenti, ad intimum latus densissimas convalles videri aiunt, & Corudam locum nominari: ubi Bestiæ Satyrorum similitudinem formamque gerentes, & toto Corpore hirsutæ, versantur: atque Equina Cauda præditæ dicuntur. Eæ quum non à venatoribus agitantur, in opacis & spissis Sylvis solent ex frondibus (& fructibus) vivere. Qu'um autem Venantium strepitum sentiunt, & Ca-

⁽u) Ovide Metamorph. lib. 1. vers. 192. (w) Herodot. in Melpomene, p. m. 229. (x) Solinus Polybist. cap. 34. (y) Pomp. Mela de situ Crbis, lib. 1. cap. 8. p. 11. (z) Plinij Hist. Nat. lib. 7. cap. 2. (a) Ælian. Hist. Animal. lib. 16. cap. 21.

num latratus exaudiunt, in Montium vertices incredibili celeritate excurrunt: nam per montes iter conficere assuetæ sunt. Contra eos qui se insequuntur pugnant, de summis montibus saxa devolventes, quorum impetu sæpe multi deprehensi pereunt. Itaque difficillime capiuntur: Et ex iis nonnulla, sed agerrime tandem, aut agrotantes nimirum, aut gravida comprehenduntur. Illa quidem propter morbum; ha verò ob gravitatem. Capta autem ad Prasios deferuntur. Ælian here tells us that they have Tails like Horses, therefore they must be of the Monkey or Baboon kind. And Pausanias, who made it his Business to enquire more particularly about them, informs us they have such Tails, but can't speak, but are very Lascivious and Lustful, as they are observed to be to this day. I will give you Pausanias's words; Περλ ή Σαθύρων (saith (b) he) οι πινες είσιν, έπερε πλέον εθέλων βπίσαοθαι, πολλοϊς αὐτίβ τέτων είνεμα ές λόγες ήλθον. Ερη 🕽 Εὐρημο Κας ανής πλέων ες Ίταλίαν αμαρίειν του ανέμων το πλο, κ, ες τίω έξω θάλασαν, ες ην εκέπ πλέεσιν έξεννεχθηναι Νήσες ή είναι μεν ερήμες πολλάς, εν ή ταίταις οικείν άνδεας άγείες άλλαις ή εκ εθέλειν νήσοις περσίχειν τες ναίτας, οια περπερόν τε περχύνλας, κ τη ενοίκων εκ άπειρως έχονλας. Βιαθιώας δι έν η, τότε. Τχώτας καλείωθαι μέν των την ναυτήν Σαιυρίδας, εί) ή τες ενοικενίας η πυρέες, η ιππων ε πολύ μείες έχειν 6πο τοίς ίχιοις έξας. Τέτες ώς ποθονίο κατάδεαμόνιας δπί τω ναιώ, φωνίω μεν έδεμλαν ίέναι, ταῖς ή γιωαιξίν όπιχειρείν ταῖς ἐν τῆ νηί. Τέλος ή δείσαν Ιας τὰς ναύτας, βάςδας ον γιωαϊκα ακβαλείν ές τιω νήσον. Ες ταυτίω εν υβείζειν τες Σαίθες, ε μόνον ή καθέςηκεν, άλλα ται το παν δριοίως σώρια. Which (c) Conrad. Gesner. I find hath thus translated; Caterum de Satyris, quinam sint, cum plura qu'am alij scire laborem, cum multis ea de re sum collocutus: Dixit autem Euphemus Car, se quùm in Italiam navigaret cursu esse excussum vi ventorum, & ad mare extimum, quod navigari non item soleat portatum. Insulas autem ibi multas esse ac desertas. & viris agrestibus incoli. Ad alias verò aiebat nautas destectere recufasse, quòd antea quoque eò appulsi, Incolarum Inhumanitatem essent experti. Tempestatis denique violentia eò pervenisse. Insulas eas à Nautis vocari Satyrias. Incolas inesse rubicundos, & caudas imo dorso habere, Equinis non multo minores. Hos, ubi senserant, ad navigium accurrisse nullamque vocem edidisse, sed mulieribus Navi unà advectis manus injecisse. Nautas verò timore correptos, Barbaram Mulierem in Insulam tandem projecisse. Eam Satyros, non solum qua parte consuetudo permittat, verum etiam toto corpore libidinosè violasse, referebat.

It appears therefore plainly that the Satyrs have Tails. But that there might not the least Scruple remain what sort of Animals these Satyrs were, I shall produce a Passage out of (d) Philostorgius which is very express, and comes fully up to our Business: For he tells us, "Εςι ἢ ἢ τῶτο (sc. Satyrus) τίνους, ἐξυθεζν τὸ πεζοωπον, ἢ γοργὸς τίνο πίνησιν, ἢ ἐξοὰν ἔχων. i. e. That a Satyr is a sort of Ape with a red face, swift of motion, and ha-

⁽b) Pausanias in Atticis, p. m. 21. (c) Gesner. de Animal. p. 865. (d) Philostorgij Hist. Eccle-fiastic. lib. 3. cap. 11. p. 41.

ving a Tail. Where you may observe that Philostorgius and Pausanias both agree, that they have a red Face, which may be some mark, by which to know them again. And (e) Galen hath given us another, viz. that their Rostrum or Chin is longer than an Apes, but not so long as that of the Cynocephalus, as appears in that Passage I have already quoted (f), viz. That a Man in proportion to his Body hath the shortest Chin of any Animal; next to a Man, an Ape; then the Lynx and Satyrs; and after these the Cynocephali. Now none of these Marks agree to the Orang-Outang; for it had no Tail, it had not a red Face, and his Chin was shorter than any other fort of Apes. So that Bontius was mistaken in calling it a Sa-And Tulpius was too hasty in laying down this Conclusion, In summå (saith (g) he) vel Nullus est in Rerum Natura Satyrus: aut si quis est, erit proculdubio illud Animal, quod in Tabella hic a nobis depictum. Had Tulpius a mind to have made his Orang-Outang a Satyr, he should not have compared him to a Courtier, nor instanced in such Niceties as he obferves, of his drinking, and going to bed: For, Efferation Cynocephalis Natura, sicut Satyris, saith (b) Pliny. And in another place he tells us, Satyris præter figuram nihil moris humani (i). But the Orang-Outang had very tender Passions, and was very gentle and loving. Another very remarkable difference that I find between the Satyrs and the Orang-Outang, is, that the Satyrs have Pouches in their Chops as Monkeys have; but the Orang-Outang, as I have shewn in the Anatomy, had none. Condit (saith (k)) Pliny) in Thesauros Maxillarum Cibum Sphingiorum & Satyrorum genus: mox inde sensim ad mandendum, manibus expromit : & quod formicis in annum solenne est, his in dies vel horas. The Orang-Outang therefore cannot be the Satyrs of the Ancients, as Tulpius, and Bontius, and Dapperimagined.

By what has been said, I think it fully appears that there were such Animals as the Ancients called Satyrs; and that they were a fort of Monkeys or Apes with Tails: And this Account that I have given of them, will very well make out those Texts in Isaiah; as Chapter 13. verse 21. But wild Beasts of the Desart shall lye there, and their Houses shall be full of doleful Creatures, and Owls shall dwell there, and Satyrs shall dance there. And Chapter 34. vers. 14. The wild Beasts of the Desart shall also meet with the wild Beasts of the Island; and the Satyr shall cry to his Fellow; the Schrich-Owl also shall rest there, and find for her self a place of rest. For since the Text calls them wild Beasts, I see no reason why we should fancy the Satyrs here to be Damons, as the Learned Bochartus and others seem to do. I agree with Bochart, that what is told us in the Life of St. Paul the Hermite by St. Jerome, and in that of St. Anthony by St. Anastasius of a Satyr meeting St. Anthony in the Desart, and discoursing with him, may be

⁽e) Galen. Administr. Anat. lib. 4. cap. 3. p. m. 94.
(g) Nic. Tulpij Observ. Med. lib. 4. cap. 56. p. m. 274.
(i) Plinj ibid. lib. 5. cap. 8. p. m. 549.
(k) Plinij Nat. Hist. lib. 10. cap. 72. p. m. 466.

fabulous

fabulous or a Delusion. Non assentior (saith (1) Bochartus) narrationic Magni Scriptoris, in qua Satyrus introducitur Antonium in Eremo rogans, ut pro se communem Deum deprecetur, tanquam Salutis in Christo particeps suturus. Non alios servat Christus, quàm quos assumpsit. At non assumpsit Angelos, multò minùs Dæmones ant Satyros qui nusquam sunt, sed semen Abraha. And tho' St. Jerome, to consirm this Relation, adds, That in Constantine's time one of these Monsters was seen alive at Alexandria in Ægypt, and after it's Death, it's Carcass was embalmed and sent to Antioch for the Emperor to see it; Yet I shall plainly prove that this Satyr was nothing else but that sort of Monkey I am now discoursing about.

This Story I find often mentioned; but (m) Philostorgius gives us the most particular Account of it, and therefore Ishall insert his own words; Καὶ άλλαις πολλών ζωών είθεαις της πιθηκείας μορφής Επημίνυμένης η δήλον ταῦτα εξίν, πολλών εἰς ἡμας κομιζομένων, οί Β. δίν κ, ο Παν επικληθείς ζωάρχει, ός τίω μεραλίω οίγοπε έσωπος εξι, η οίγοκερως, η όκ λαγόνων πὰ κάτω αίγοσκελης, τω ή κοιλίαν η το εκρυον η τας χείεσες καθαε ès πίθηκω, δυ η δ την Ίνδων Βασιλούς Κωνςαντίω άπεςάλκει. Τέτο 🖰 το ζωον έζη μεν φεράμενον άχρι πινός εν πινι πλειμαίι δια το Αμριώδες ειριμένου, έπει ζάπεθανε, παριχδίσανίες αὐτὸ οἱ κομίζοντες, Θεάμαί 🕟 παραγείν ἀσιωήθες εἰκόνα,μέχρι τῆς Κωνς αντίνε διεσώσαν Το πόλεως. Και μοι δοκέσι το ζώον τέτο Ελληνες πάλαι ίδείν, κ) οκπλαγέντες τω ξένω της Θέας, Θεον σρίσιν νομώσαι, είθιπλένον αὐτοῖς τὰ παechoza Θεοποιείν. * Ωασες ης τ Σάπιοςν. i.e. This Ape-form is mixt with other Species of Animals; and this is plain, several being sent over to us; as that which is called Pan, which in its Head had a Goat's face and Goat's horns, from it's Loins downwards Goat's Legs; but in it's Belly, Breafts. and Hands was a pure Ape. Such an one the King of India sent to Con-This Animal lived for some time, and was carried about inclosed Itantius. in a Cage, being very wild. When it died, those that looked after it, having embalmed it to make a shew of this unusual fight, sent it to Constantinople. Now I am apt to believe the ancient Greeks had seen this Animal, and being Surprised at the strangeness of the sight, fancied it to be a God; it being usual for them to make a God of any thing that they admired or wondered at: as they did the Satyr.

Tis evident therefore by this Relation, that the Satyr is of the Ape or Monkey-kind: For monkey here is generical, and includes both. But there being several Species of them, they received a denomination according to the resemblance they had to other Animals; as in Philostorgius are mentioned before, the Leontopithecus, the Arctopithecus, the Cynocephalus and Aegopithecus, which last seems to be our Satyr, from the resemblance it hath in it's Head and Legs to a Goat. That their Legs and Face are like a Goat's, is easie enough to be believed: but the Horns that they clap upon his Head, seem to me as an addition of the Poets, or the Painters, or both. But what gave a foundation to this Invention, possibly may be the large-

⁽¹⁾ Bochart. Hierozoic. part. poster. lib. 6. cap. 7. p. 829. (m) Philostorg. Hist. Ecclesiastic. lib. 3. cap. 11.

H 2

ness of their Ears standing off from their Head, and which are very remarkable. And this *Phurnutus* (n) gives as the reason of it. *Horace* (o) takes notice of their Ears, but ill describes them in making them sharp pointed, whereas they are round.

Capripedum Satyrorum acutas.

But by this Account it likewise appears, that Pan was a Name of this fort of Monkey; and Philostorgius's Remark at the Conclusion of this Pasfage. I think is very just: for is certain that this Animal was worshipped in India as a Deity, as a Dog was by the Ægyptians; and 'twas Death for any Body to kill one of them: For thus faith (p) Diodorus Siculus, Τάς τε 30 αὐτας οἰκίας οἱ πίθημοι καθώκεν τοῖς ανθρώποις, Θεοὶ πας αὐτοῖς νομιζόμενοι, καθάπες παις Αἰγυπίοις οι κύνες έκ τε τη παςεσκευαγκένων έν τοις ταμείοις τὰ ζῶα τὰς τροφὰς ἐλάμβανον ἀπωλύτως δπότε βέλοιλο. Καὶ τὰς προσηγορίας δι έτιθεσαν γονείς ποίς παιοί κατά το πλείςον δοπό την πιθήκων, ώσοτε παρ' ημίν Δπο το θ Θεών. Τοῖς δι ἀποκθείνασι τέτο το ζώου, ώς ποτεδηκόπ τὰ μέγιςα, θάνα] 🖟 ώθιςο πεόςιμον. Διο δη κλ. παρά ποιν ένίχυσεν έν παεοιμίας μέροι λεγόμενον όπι τη αναθεινομένων, όπι πιθίκε άιμα ποθίσειαν. i.e. Eafdem enim domus Simia quas Homines frequentant; & pro Diis habentur apud illos, ut apud Ægyptios Canes; paratos etiam in Cellis penariis cibos, quando libet, nemine prohibente, ha bestia sumunt, nominaque ut plurimum à Simis, ut apud nos à Diis, Parentes Liberis suis imponunt. Qui Animal hoc interfecerint, in eas, ut nefariæ Impietatis reas, supplicio capitis animadvertitur. Ideo apud nonnullos Proverbij vicem obtinuit, quod in magnifice se efferentes dicitur; Simiæ Cruorem bibisti. And in another place (q) Diodorus tells us, that Pan was in the greatest Veneration amongst the Ægyptians, and And (r) Juvenal remarks, his Statue was in every Temple.

Effigies Sacri nitet aurea Cercopitheci.

The Superstition of worshipping this Animal obtained not only amongst the Ancients, but there are Instances likewise of a later date, and what (s) Johannes Linschoten relates, is very remarkable. 'How that in the Year 1554. the Portuguese having taken the Island of Ceylon, they proposed to rob a Temple on the top of Adam's Pike; but they found nothing there, but a little Cabinet adorned with Gold and Jewels, in which was kept the Tooth of an Ape, which they took away, to the great grief of the Kings of that Place; who sent Ambassadors to the Portuguese, and offered them Seventy thousand Ducats for the Tooth; which the Portuguese were willing enough to take, but were distingled from it by their Bishop Gaspar, who told them, that it was a Crime, thus to encourage the Idolatry of the Indians; whereupon he burnt the Tooth, and flung the Ashes into the River. Joh. Euseb. Nierembergius (t) hath the

⁽n) Phurnutiu de Nat. Deorum. Cap. de Pane. p. m. 71. (o) Horace Odarum, Lib. 2. Ode 19. (p) Diodor. Sicul. Biblioth. Hist. 1. 20. p. m. 793. (q) Diodor. Sicul. bid. 1. p. m. 16. (r) Juven. Satyr. 15. v. 4. (s) J. Linschoten apud Theod. de Bry India Orient. part. 2. cap. 46. p. m. 111. (t) J. Eus. Nieremberg. Hist. Nat. 1. 9. cap. 46. p. 180.

fame Story, but varies in the Account of some Particulars. And Joh. Petrus Maffeius (u) gives us a Relation of one of their Temples, which for Magnificence, might vie with any at Rome: His words are these; Sane fanum est Simiæ dicatum: Cujus duntaxat Pecori in victimarum usum custodiendo, Porticus miram in longitudinem excurrit, Columnarum Septingentarum è Marmore, tanta magnitudinis, ut Agrippa Columnas, qua in celeberrimo quondam omnium Deorum Templo Roma visuntur, sine dubio adaquent. Now these Animals being worshipped by the Indians as Gods, 'tis natural to believe (as Lucretius suggests) that they would invent and relate prodigious things concerning them; and no doubt this gave the occasion to the Poets and Historians of making such fabulous Representations of them: How far the latter might be concerned in the addition of Horns to the Satyrs Heads, I shall not at present enquire: I call it an Addition, because there is no Account from any credible Author, that there were ever observed any of the Ape-kind to have Horns. Possibly some ancient Statues or Paintings might give some light into this matter: for the ancient Statuaries and Painters were curious in representing them; and Pliny recommends, as excellent in this kind, the Satyr of Mylo, of Lucippus, Antiphalus, Protogenes, Ariston, and Nicomachus, as Pieces admired in those days.

Albertus Magnus (w) who was happier in guessing, than in proving or describing what he meant; tells us indeed, that the Satyr (whom he calls Pilosus) was of the Ape-kind; but he makes such an odd Composition of him, that one would take it to be rather a Chimara, than a real Being: You may see his words in the Citations.

⁽u) Joh-Pet. Masseis Hist. Indic. lib. 1.p.m. 36. (w) Albert. Magnus de Animalib. lib. 22. p. m. 223. Pilosus est Animal Compositum ex homine superius, & Capra inferius; sed Cornua habet in fronte; & est de genere Simiarum; sed multum monstruosum; & aliquotiens incedit erectum, & esticitur domitum. Hoc assernation Disertis habitare Æthiopia; & aliquotiens captum & in Alexandriam deductum, & mortuum sale insusum & in Constantinopolin delatum.

Of the SPHINGES of the Ancients.

E come now in the last place to discourse of the Sphinges of the Ancients, where I shall not relate all that is said of them; nor concern my self with the Mythology or Interpretation of the several Fables that have been invented about them; but I propose rather to shew, that there were indeed such Animals which the Ancients call'd Sphinges; and that they were not Men, but Brutes; and that they were of the Ape or Monkey-kind.

If we consult the fabulous Descriptions that are given of the Sphinx, we shall find it a very monstrous Composition. Apollodorus (a) tells us, ἐπεμ νε χδ Ἡρα Σρίηα, ἣ μεθρὸς μὲν Ἐχιδνης Ιω, Παθρὸς ;ς, Τυρῶν, κείχε ἢ πεόσωπον μὲν γιωαικὸς κῆθω ἢ κὰ Βάσιν κὰ ἐκολι λέον ὶ, πείρυμας ἔρνιθω. That Sphinx roas the daughter of Echidna and Typho, she had the face of a Woman, the Breast, Feet, and Tail of a Lion, and the Wings of a Bird. And (b) Ausonius,

Terruit Aoniam, Volucris, Leo, Virgo triformis Sphinx, volucris pennis, pedibus fera, fronte Puella.

But as their Fansies govern'd them, so they made their description. Clearchus (as I find him quoted in (c) Natalis Comes) has out-done them all; At Clearchus (saith he) Caput & Manus Puellæ, Corpus Canis, vocem Hominis, Caudam Draconis, Leonis ungues, Alas Avis, illam habuisse scripsit. Palaphatus (d) is somewhat different in his Account, where he tells us, Neel τις Καδιμείας Σφιγός λέγκουν ως δηνείον εγένειο, σωμα μεν έχον ως κιμιός, κεραλλω ζ, καλ περοωπον πόρης, πίερυγας έρνιθω, φωνλω ζ ἄνθρώπε· i. e. They say that the Cadmean Sphynx was a wild Beast, having the Body of a Dog, the Head and Face of a Virgin, the Wings of a Bird, and the Voice of a Man. But for the most part they make the Sphinx Biformis with a Maiden's Face and Lion's Feet; as the Scholiast upon (e) Euripides gives it, περωπον παρ- Δένει ενίθως ζιλιοντώς. So the Scholiast upon (f) Aristophanes, οι εριγίος πόλες λέοντώδεις νίστων. And Euripides himself, as he is quoted by (g) Ælian, makes her to have the Tail and Feet of a Lion, in that Verse,

Οὐρὰν δί డుజుసεο' του λεοντόπεν βάπν Caudam remulcens ad Leoninos pedes.

Where we may observe that Ælian tells us here that the Ægyptian Statuaries, and the Theban Fables, made the Sphinx to be only Biformis: Biformem nobis conantur representare, ipsam ex Corpore Virginis & Leonis cum gravitate compositam architectantes, as Gesner there translates him: But the Greeks represented the Sphynx with wings; for as (b) Ælian in another place tells

⁽a) Apollodori Bibliothec.l.3.c.5.§ 8.p.m.170. (b) Ausonius in Grypho Ternarij. (c) Natalis Comes Mytholog.l.9.c.18. (d) Palaphatus de incredibilibus Historius Cap.de Sphinge.p.m.14. (e) Eurip. in Phanissis (f) Aristophan. in Ranis. (g) Ælian.de Animal. l.12.c.7. (h) Ælian.de Animal. l.12.cap.38.

us, Sphingem quicunque vel Pictura vel Plastica operam dant, singere alatam solent.

But our chief Business is to enquire, how Nature hath formed them; and not how the Poets, Painters, or Statuaries have, according to the Luxuriancy of their Fancie, seigned or sigured them; to shew what they really are in themselves, and not what Hieroglyphically the Ancients might intend or understand by them; and we shall find, that they are only a fort of Ape or Monkey, that is bred in Æthiopia and amongst the Troglodytes, of a comely Face, with long Breasts, thence up to their Neck not fo hairy as on the rest of their Body; and are of a mild and gentle Nature. For thus (i) Pliny, Lyncas vulgo frequentes, & Sphinges, fusco Pilo, mammis in Pectore geminis Æthiopia generat. And so (k) Solinus, Inter Simias habentur & Sphinges, villofa comis (Salmafius reads it villofa omnes) mammis prominulis ac profundis, dociles ad feritatis oblivionem. Ælian (1) places them amongst the wild Beasts of India, where he tells us, N_a turali quodam Ingenio & Prudentia valent etiam apud nos Animalia, non totidem tamen, quot sunt in India: illic enim hujusmodi sunt, Elephantus, Pfittacus, Sphinges & nuncupati Satyri, & Indica Formica. And Artemidorus in (m) Strabo tells us, that the Sphinges, Cynocephali and Cepi are bred amongst the Troglodytes. Agatharchides (n) confirms the same, and gives us this Account of them; As σφίχες κ) οί Κιωοκέραλοι κ), Κήροι παραπέμιπου? είς τίω 'Αλεξανδρείαν όκ τ Τρωγλοδυλικής, η δ Αίδιοπίας είπ ή αί μεν Σρίγες παίς γεφορμέναις παρόμοια. Πλω ότι πάσαι δασείαι, η παίς ψυχαίς ήμεροι η περοι. Και πανεργίας ποινωνέοι πλείτης, διδασκαλίας τε μεθοδελικώς όθλ ποσον απίον), ώσε τίω ευρυθμίαν εν πάσι θαυμάζειν. i.e. The Sphinges, Cynocephali and Cepi are sent to Alexandria from the Country of the Troglodytes and Æthiopia. The Sphinges are like to what they are painted, only they are all hairy, and mild and gentle in their Nature: they have a great deal of Cunning, and a Method of Learning what they attain to, that one would wonder at their aptness to any thing. Diodorus Siculus (o) gives us much the same Relation, and 'tis likely Agat barchides borrowed his from him: for he tells us, Ai 3 Σφίγες γίγνον?) μεν περί τε τίω Τρωγλοδυλικίω, κ, τίω Αίδιοπίαν, πεῖς 🕽 μορφαῖς Καάρχεσιν έκ ἀνόμοιοι παῖς γεαφομέναις, μόνον 🖰 ταϊς δασύτηση διαλλάτικου. Τάς ή ψυχάς ήμερες έχεσαι ή πανέργες, όπι πλείον n) διδασκαλίαν με Βοδικίω Επιδέχου?. i. e. Sphinges circa Troglodyticam & Æthiopiam existunt, formå his non absimiles, quæ Arte Pictorum exhibentur, nisi quod hirsutia tantummodo differunt. Placidi illis sunt Animi, & versuti, artisque quæ compendio tradi solet, admodum capaces. But Philostorgius (p) is so particular in his Description, and he is the more to be credited, because he declares he had seen them himself, that I think I need.

⁽i) Plinij Hist. Nat. lib. 8.cap. 21.p.m. 168. (k) Solinus Polyhist. cap. 27. p.m. 39. (l) Ælian. de Animal. lib. 16.cap. 15. (m) Strabo Geograph. lib. 16.p. 533. (n) Agatharchides apud Photij Biblioth. p. m. 1362. cap. 38. (o) Diodorus Siculus Biblioth. lib. 3. p. m. 167. (p) Philostorgius Hist. Ecclesiast. 1.3. c. 11. p. 41.

no more Authorities to prove what I have here laid down, that these Sphinges were only a fort of Ape or Monkey. I will therefore give you his own words, which are these; Καλ μεν ή Σρληξ γέν . 36λ π. Απουν (σώτος οδ θε ασάμεν & γράθω) ης το μεν άλλο σώμα λάσον όζειν, ώς τοις άλλοις πιθήποις· τὸ ή ξέρνον άχει γε αὐτο το τεαχήλο ελίλω), μάζος ή γιωαικός είχει. Ερυθρε τινός βραγέδι κείχρος ειδες έπανας ήμαίδι απαν ον κύκλω το γεγυμίνωμένον το σώμα β περιθέον β, η είς πολλιώ τινα ευπρέπειαν ανθρωπορανεί όνπ τω εν μέσω χρώμαλι σιωαςπαζομένε.Τὸ ζ περοωπον ένες ες ζύλωζ μάλ-λον, η εἰς γιωαινίαν ελκει μορφίω. Ἡ τὰ φωνη Επιεικάς ἀνθρωπεία, πλίω έσον έκ είς άρθοα διαιρεμένη, άλλα τωι παχέως, η όξη μεπά πυθι όργης τε η άχθηδύ Βάσημα το ορθεχομένης πε σσερική α βαρυθέσα τε μάλλον βλν δξυνομένα άγριού τε εξι δεινώς το Αυρίου, η πανεργοπαίου, η έδε βαδίως πθασσευόμενου. i. e. A Sphinx is a fort of Ape (I shall write what I saw my felf) all the rest of whose Body is hairy like other Apes. But it's Sternum or Breast is smooth without hair up to the Throat. It has Mamma or Breast's like a Woman; little reddish Pimples like Millet Seeds, running round that part of the Body that is bare; very prettily suiting with the Flesh colour in the middle. It's Face is roundish, and resembles a Woman's. It's Voice is very much like the Humane, only it is not articulate, but pracipitate; and like one that speaks unintelligibly thro' Anger and Indignation. When 'tis incensed, it's Voice is deeper. This Animal is very wild, and crafty, and not easily tamed. And Pierius, as I find him quoted by (q) Philip Camerarius, gives us much the fame description of one he saw at Verona. Harum ego unam (saith he) Veronæ quum essem vidi ; Mammis illi & Glabris & Candidis, à Pectore propendentibus. Circumducebat eam circulator quidam Gallus, ex ignotis antea Insulis recens advectam. And a little after adds, Ipsa verò Sphinx toto erat pectore glabello, facie & auribus humanis proprioribus, dorso hispido Supra modum, fusco & oblongo Pilo, eoque densissimo.

What has been said, I think fully makes out, that the Sphinx is not a meer Figment of the Poets, but an Animal bred in Africa, of the Ape or Monkey-kind. 'Tis different from our Orang-Outang in the colour of it's Hair; in the roundness and comeliness of it's Face; in it's Breasts, being pendulous and long; and the red Pimples it hath on the naked part of it's Body. Pliny tells us (as I have elsewhere remarked) that the Sphinges have Pouches in their Chops as Satyrs and Monkeys have; and the Poets describing them with a Lion's Tail, make me apt to think, that they are of the Monkey-kind.

⁽q) Phil. Camerarij Opera subcisiva siv: Meditat. Hist. Cent. 1. Cap. 71. p. m. 325.

An Advertisement

Of some Discourses and Observations made by Dr. Edw. Tyson, and where published.

HOCENA, or the Anatomy of a Porpess, diffected at Gresham-Colledge; with a Praliminary Discourse concerning Anatomy; and a Natural History of Animals, Lond. Printed for Benj. Tooke at the Ship in St. Paul's Church-yard, 1680. in 4to.

Vipera Caudisona Americana; or the Anatomy of a Rattle Snake; disfected at the Repository of the Royal Society, Jan. 168; vide Philosoph.

Transactions N° 144. p. 25.

Lumbricus Latus, or a Discourse read before the Royal Society of the Joynted Worm. Wherein a great many Mistakes of former Writers concerning it, are remarked: it's Natural History from more Exact Observations is attempted: and the whole urged, as a Dissiculty, against the Doctrine of Univocal Generation. Vide Philosoph. Transactions N° 146. pag. 146.

Lumbricus Teres, or some Anatomical Observations on the Round Worm, bred in Humane Bodies. Vide Philosoph. Transactions N° 147. pag. 154. Tajaçu, sive Aper Mexicanus Moschiferus; or the Anatomy of the Mexico

Musk-Hog. Vide Philosoph. Transact. No 153. pag. 359.

Lumbricus Hydropicus, or an Essay to prove, that Hydatides often met with in Morbid Bodies, are a Species of Worms, or impersect Animals. Vide Philosoph. Transact. N° 193. pag. 506.

Carigueya, seu Marsupiale Americanum; or the Anatomy of an Opossum, dissected at Gresham-Colledge. Vide Philosoph. Transact. No 239. pag. 105.

Ephemeri Vita, or the Natural History and Anatomy of the Ephemeron; a Fly that lives but five hours. Written originally in Low-Dutch, by Jo. Swammerdam M. D. of Amsterdam, and published in English by E. Tyson M. D. Lond. Printed for Henry Faithorne and John Kersey at the Rose in St. Paul's Church-yard. 1681. in 4^{to}.

Embrionis Galei lævis Anatome. Vide Franc. Willoughbæi Hist. Piscium.

Edit. à Jo. Raio in Appendic. pag. 13.

Lumpi Anglorum Anatome. ibid. pag. 25.

The Scent-Bags in Poll-Cats, and several other Animals, first discovered. Vide Dr. Plot's Natural History of Oxfordshire, pag. 205.

Vide Thom. Bartholini Acta Medica & Philosophica Hafniensia, Vol. 5.

ubi,

Observ. 26. Vomica Pulmonis.

Observ. 27. Hydrops Thoracis, & difficultatis spirandi rara Causa.

Observ. 28. Hemoptoe, Tussis, Pleuritis & Empyema à duobus claviculis, fortuit din Pulmones delapsis.

Observ. 29. Polypus omnes Corporis totius Venas & Arterias occupans.

Observ. 30. Polypus Bronchiarum & Trachea.

Vide ejusa. Observ. 101. Observ. 107. Observ. 108.

Some Anatomical Observations of *Hair* found in several Parts of the Body; as also *Teeth*, *Bones*, &c. with Parallel Histories of the same observed by others. *Vide* Dr. *Hooks Philosophical Collections* N° 2. pag. 11.

Anatomical Observations of an Abscess in the Liver; a great number of Stones, in the Gall-bag and Bilious Vessels; an unusual Conformation of the Emulgents and Pelvis. A strange Conjunction of both Kidneys, and great Dilatation of the Vena Cava. Vide Philosoph. Transact. No 142. p.1035.

An Anatomical Observation of four Ureters in an Infant; and some

Remarks on the Glandula Renales, ibid. pag. 1039.

An Abstract of two Letters from Mr. Sampson Birch an Alderman and Apothecary in Stafford, concerning an Extraordinary Birth; with Reflections thereon. Vide Philosoph. Transact. No 150. pag. 281. and Dr. Plot's Natural History of Staffordshire, pag. 272.

The Figure of the Cochineal Fly. Vide Philosoph. Transact. Nº 176.

pag. 1202.

An Observation of Hydatides found in the Vesica Urinaria of Mr. Smith.

Vide Philosoph. Transact. Nº 187. pag. 332.

An Observation of an Infant, where the Brain was depressed into the Hollow of the Vertebræ of the Neck. Vide Philosoph. Transact. N° 228.

An Observation of one Hemisphere of the Brain sphacelated; and of a Stone found in the Substance of the Brain. Vide Philosoph. Transact.

Nº 228. pag. 535.

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