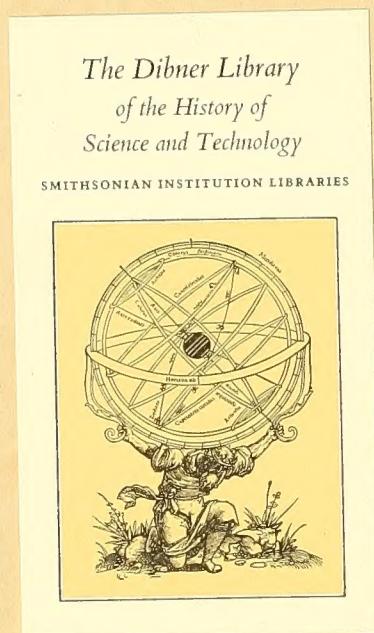
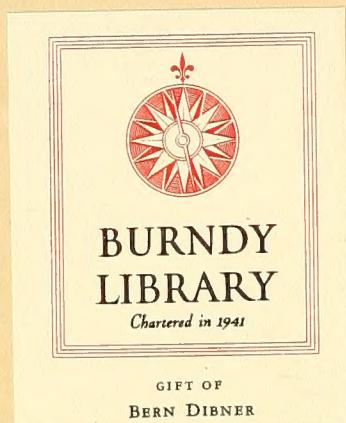




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1887. May 21st

Dear Dr. M. S. R. S.
I hope you will receive this letter from me. I am sending you
a copy of the paper I have written on the subject of the
Amphibians of the Andean Cordillera.

R. A. F. Newbold

17^o 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:

OR, THE
ANATOMY
OF A
P Y G M I E

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.*

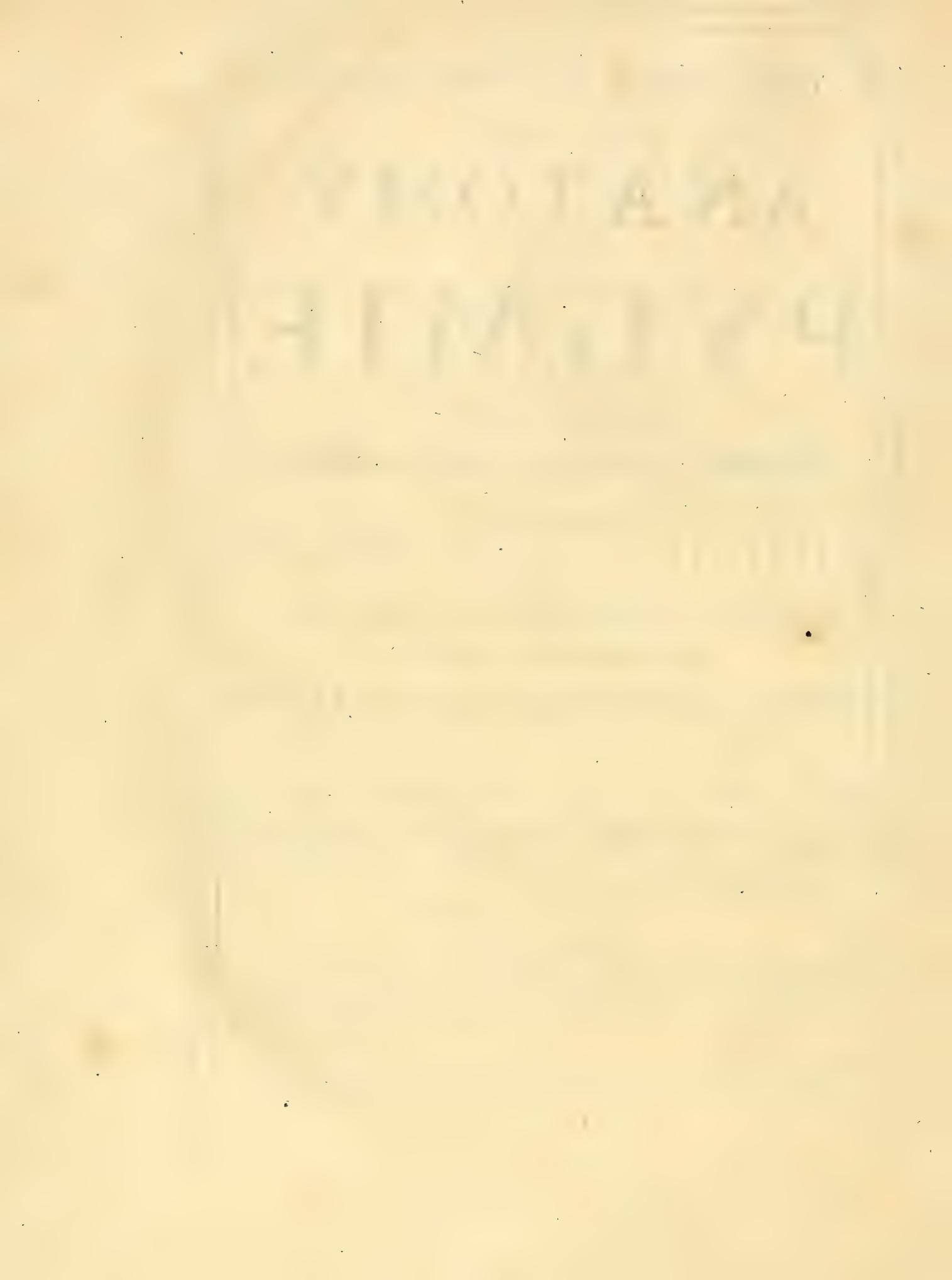
Wherein it will appear that they are all either **APES** or
MONKEYS, and not **MEN**, as formerly pretended.

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.

L O N D O N :

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.



TO THE
RIGHT HONOURABLE
JOHN Lord Sommers,
Baron of *Evesham*,
Lord High Chancellor
OF
ENGLAND,
One of the Lords of his MAJESTIES
most Honourable PRIVY COUNCIL,
And President of the ROYAL SOCIETY.

SIR,

TH E great Variety of weighty and important 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 inexpressible Labours in distributing Justice, 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 Dissuasions, 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 Attention; 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 Protect 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 Admiratio; 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 Lordship, and those of your High Rank and Order for Knowledge

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.

LEAST this Discourse should be rejected meerly for the Title's sake, 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*; so I have made it my Busines 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*, so 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 P R E F A C E.

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 miss, 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 dissect 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 such.

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 Vesalius 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 justifies me for engaging in this Argument: I wish I had so good an Apology for my Performance.

This

The P R E F A C E.

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 sorts 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 found 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 "Ανθραῖς" Αγελοι, Μινεγι, Πυζμάσαι, Μέλαρες; so the "Ανθρώποι" Κυνοπερέωποι, &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 Δρεξα, *Wild Beasts*; and if so, no doubt but they were of the *Quadru-mannus* kind; i. e. either *Apes* or *Monkeys*. And such were likewise the *Satyrs*, the *Fauni*, *Pan*, *Ægipan*, *Sylvanus*, *Silenus*, and the *Nymphae*, 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 *Fictions* 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* assertion 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 gratifie the Importance 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-

Orang-Outang sive *Homo Sylvestrus*:

OR, THE
ANATOMY
OF A
PYGMIE.

THAT the Pygmies of the Antients were a sort 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 sort 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 Sylvestrus*, *The Wild Man*; *Orang-Outang*, or *A Man of the Woods*; by the *Africans Quoias Morrou*; by others *Baris*, or *Barris*, and by the *Portugese*, 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

B.

discri-

discriminate 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 tho' 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 seem 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 serve 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 dissecting a Young *Lion* and a *Cat* at the same time, I wondred to find so 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 several other *Animals*, that belong to the same Family. I could have wished I had had the like Opportunity, when I was dissecting 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 differ'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 Aristotle, 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. Cæs. Scaliger's Latin Translation*: And as you may observe by the Letters of Reference, I have rendred each Paragraph into English, adding my Observations thereon.

(a) ΕΝΙΑ ἡ τῷ ξών ἐπαμφοτερίζεται τὸν φύσιν, τῷ τε ἀνθρώπῳ οὐ τοῖς τετράποδοι, οἷον πίθηκοι οὐ μῆτοι, οὐ πυροκέφαλοι. (b) Εἰ δὲ δὲ μὲν μῆτος, πίθηκος ἔχων ἐργάνην. (c) Καὶ οἱ πυροκέφαλοι ἡ τὸν αὐτὸν ἔχον μορφὴν τοῖς πίθηκοις, πλὴν μείζονες τοῦ εἰστι, οὐ ἰχυρότεροι, οὐ τὰ πρόσωπα ἔχοντες πυροειδεῖς. Ἐπὶ δὲ αὐτοῖς τὰ μῆτη, οὐ τὰς ὄδοντας ἔχον πυροειδεῖς τοῦ ἰχυροτέρους. (d) Οἱ δὲ πίθηκοι, διεστοῖς μὲν εἰσι τὰ προσώπη, ὡς ὅντες τετράποδοι, οὐ τὰ ὑππαὶ ἡ ὠσαύτως, ὡς ὅντες ἀνθρώπων παρειδεῖς. Τέτο γὰρ οὐτὶ τῷ ἀνθρώπῳ ἐναντίος ἔχει οὐτὶ τῷ τῷ τετραπόδῳ, καθάπερ ἐλέφαντι περάτερον. Πλινθὸν τε δειλὸς παχεῖα, οὐ διεστοῖς ἐπειδή μερότερος σφρόδερος εἰσιν οἱ πίθηκοι. (e) Τοῦ δὲ πρόσωπου, ἔχει πολλὰς διοικήσεις, τῷ τῷ ἀνθρώπῳ. Καὶ γὰρ μυκτῆρες, οὐ τὰ παρεπλήσια ἔχει. Καὶ ὄδοντας, ὥστερ δὲ ἀνθρώποις, οὐ τὰς προσοδίους οὐ τὰς γομφίους. (f) Επὶ δὲ βλεφαρίδες, τῷ αὖλων τετραπόδων ἐκ ἐπειδή μερότερος ἔχονται, οὐτοῦ ἔχει μὲν, λεπτὰς δὲ τοῦ σφρόδερος, οὐ μακρὰν τὰς κατάτα, οὐ μηρεῖς πάμπαν· τὰ γὰρ αὖλα τετράποδα ταῦτας ἐκ ἔχει. (g) Εχει δὲ τῷ σίθερδός τοις ματαῖς μυρῶν. (h) Εχει δὲ οὐ βερεχλοντας, ὥστερ ἀνθρώποις πλινθεῖσι οὐ κρυμμέται οὐ τέτως οὐ τὰ σκέλη ὥστερ ἀνθρώποις, τὰς περιφερεῖται πρὸς

(a) Inter hominem, quadrupedumque genus natura quedam media, atque utriusque communis est: Quales, simia, cebus, caniceps. (b) Est autem cebus simia caudata. (c) Caniceps communem cum simia formant habet: nisi quod & major & robustior est: faciemque habet caninæ propiorem. Tum moribus existunt effratiorebus. Dentes quoque caniniores, atque firmiores. (d) Simiae partes que cælum spectant, ut pilosæ sunt: Propterea quod quadrupedum generi ascribuntur: Ita que ad terram devergunt quoque: quia hominis speciem referunt. Nam in homine, & quadrupedibus hoc contrario se habere modo supra dictum est: Ceterum simiis crassus pilus, ac prædensus utraque in parte est. (e) Ejus vero facies multis modis humanæ similis. Quippe tum nares, tum auriculae: Item dentes tam primores, quam maxillares sunt propemodum tales, quales & homini. (f) Quintianus quadrupedes ceteræ cum in utraque gena neutiquam palpebras habeant: ipsa habet, sed tenues admodum: tenuiores vero inferiores, atque perpusillos: quibus carent quadrupedes alii. (g) Ei sunt in pectore papillæ due parvarum mammarum. (h) Ad hæc,

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

αλλήλας ἀμφοτέρων τῷ πάλαιν. (i) Πρέστε
τὸ τέτοιος, χεῖρας ηδὲ δάκτυλος ηδὲ
ὄνυχας δρούσις τῷ αὐθεώπῳ πλίν
πάντα τῶν τοῦ θηριωδέστερον.
(k) Ιδίους δὲ τὰς πόδας εἰσὶ γὰρ οἵσιν
χεῖρες μεγάλει. Καὶ οἱ δάκτυλοι,
ώστε οἱ τῷ χειρῶν ὁ μέσος, μακρό-
πτυνος ηδὲ τὸ κάτω τὸ ποδός, χειρὶ²
ὄμοιον πλίν τοῦ τοῦ μηνος τῆς χειρὸς
τοῦ πάλαιτα τείνον, καθάπερ θέντα.
(l) Τέτοιος δὲ ἐπ' ἄκρα σπλαγχτερον,
κακῶς, ηδὲ ἀμυδρῶς μιμέμενον πλέρις.
Κέχριται δὲ τοῖς ποσοῖς ἐπ' ἄμφω, ηδὲ
χειροῖς, ηδὲ ωσὶ ποσοῖς, ηδὲ συγκάμπτει οὐστερ
χειρας. (m) Εχει δὲ τὸν ἀγκάναν καὶ
τὸν μηρὸν βραχεῖς, οὐστερ πρέστε τὸν
βραχίονα καὶ τὸν ποντίλιον. (n) Ομρα-
λὸν δὲ ἔχειντα μὲν εἰς ἔχει, σπλαγχνόν,
δὲ καὶ καλὰ τὸν τόπον τοῦτον τὸ δι-
φαλό. (o) Τὰ δὲ ἄνω τῷ κάτω πολὺ³
μείζονα ἔχει, οὐστερ τὰ τετρά-
ποδα. Σχεδὸν γὰρ, οὐστερ πέντε πρέστε
τρία τοῦ, ηδὲ διὰ τε ταῦλα, καὶ διὰ
τὸ τὰς πόδας ἔχειν δρούσις χεροὶ, καὶ
οὐστερανεὶ συγκειμένους ἐπ' χειρὸς καὶ
πόδος· εὖ μὲν ποσοῖς, καλὰ τὸ πλέρ-
ινον ἔχετον· εὖ δὲ χειρές, πᾶλα μέρη.
Καὶ γὰρ οἱ δάκτυλοι ἔχοντα καλέμε-
νον θέντα. (p) Διατελεῖ δὲ τὸ πλέον
χειρὸν τετράποδον μᾶλλον ηδὲ ὅρθον.
(q) Καὶ εἴτε ιχθύα ἔχει ωστε τετράποδον
οὐ, εἴτε κέρπον ωστε δίποιον, πλίν μη-
ροῖν τὸ σῶμα, δύον σπουδεῖς χάριν.
(r) Εχει δὲ καὶ τὸ αὐθοῖον ηδὲ θηλεῖα
ὄμοιον γίνεσθαις· οὐδὲ ἄρρεν, πυνωδέ-
σθεντον ηδὲ αὐθεώπως. (s) Οἱ δὲ γῆραι,
καθάπερ εἴρηται πρότερον, ἔχονται κέρπον
τὰ δὲ εὐτὸς διασρεθέντα, οὐ μοιαζούσιν
αὐθεώπῳ πάντα τὰ τοιάντα.

hominis brachia, nisi hirta essent. Quæ
etiam sicut & crura hominis modo in-
flectat. Nam & horum, & illorum
curvaturas inter se habet contrarias.
(i) Tum manus, digitos, ungues,
quasi humanos. Verum hæc omnia
ferinam ad naturam potius vergunt.
(k) Suis quidam modus pedibus, ac
peculiaris. Etenim quasi manus quæ-
dam magnæ sunt. Quippe & digitii
in iis, veluti manuum, medio lon-
gissimo. Et planta manui similis,
quanquam porrectior ad extremum
usque, sicuti-vola. (l) Cujus postre-
num callosus est: inepta, atque in-
explanata calcanei similitudine. Pe-
dum usus, & pro manibus, & pro
pedibus: flectit enim eos manuum
modo. (m) Superior brachij pars, &
coxa, breves: si ad ulnae, & tibiæ
magnitudinem referantur. (n) Um-
bilicus non prominet: sed durum
quiddam ibi invenias. (o) Superæ
partes inferis majores: quasi si qui-
narium cum ternario conferas. Hoc
autem tum ex quadrupedum natura:
tum propterea quod pedes & mani-
bus similes habet, & quasi ex pedum,
manuumque constitutione compositos.
Nam calcanei postrema pedem, ca-
teræ partes manuum repræsentant. Ha-
bent enim digitii id, quod volam ap-
pellamus. (p) Quadrupedis habitu
frequentiore est. (q) Proque eo nates
non habet: neque caudam, quoniam
bipes. Sed perpusillam omnino illam,
& nota tantum gratia. (r) Fæminæ
genitale muliebri specie est: mariibus
canina potius, quam humana. (s) Cebi,
sicuti diximus, caudati sunt. Uni-
verso generi viscera similia humanis.

(a) Arist.

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

Ἐπαυτοτεῖλαι τῷ φύσῃ. Theodorus Gaza thus renders this Passage : *Sunt quæ natura accipite, partim hominem, partim Quadrupedem imitantur, sicut simiæ, &c.* Note 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 cohærent intervallo, sic ζωόπυττα 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 *Pithecius* 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*.

Πίθηνος, &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 perplexed. Mr. Ray (3) places these *Animals* under this general Title, *Animalia Pede unguiculato multifido, πλακιώνυχες & αρθρωπόδια*. 'Tis call'd *Pithecius*, *πίθης τὸ πείθεσθαι εὑρέμενον*, *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 *Cercopithecius*, 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 erant.*

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

(5) Conradus Gesner thinks, that this *Cebus* of Aristotle, which he describes only as having a Tail, must be the *Cercopithecus* or Common Monkey, since he mentions not the *Cebus* anywhere else, and the *Cercopithecus* nowhere. (6) Harduin, 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 Rufum vocabant, Effigie Lupi, Pardorum maculis. Idem ex Aethiopia quos vocant οἵτες, 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 φυσι καὶ σφίγξ, καὶ πυρούραλοι, καὶ οἴποι, λέοντες μὲν περιώπων ἔχοντες, τὸ δὲ λοιπὸν σῶμα πάνθηρες, μέγαθος δὲ δορέφαδος. 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, ὁ δὲ λεγόμενος οἴποις, ωνόμασας μὲν διὰ τῆς περὶ ὄλον τὸν ὄγηνον σφίξις, καὶ περιώπες οἰλινίας. Τὸ δὲ περιώπων ἔχων ὄμοιον λέοντι, τὸ λοιπὸν σῶμα φέρει πάνθηρες παρεπίδητον, πλεύ τοις μεγέθες, ὁ παριστάται δορέφαδος. 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) Aelian 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' somewhat 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 appositè idcirco "nominari, quod tanquam Hortus variis coloribus distinguatur. Cum "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 aureæ vittæ pertinent, "Colli inferiores partes ad Pectus, & anteriores Pedes omnino albi, "Mammæ duæ manum implentes cæruleo colore visuntur, venter candi- "dus, Pedes posteriores nigri sunt, Rostræ formæ Cynocephalo recte

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

"comparari potest. The *Cepus* therefore of *Pliny*, *Strabo*, *Diodorus Siculus*, and *Aelian*, 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 tho' the Philosopher makes them only a sort of *Ape* or *Monkey*, yet there have been those, that would impose them on the World for a Race of Men; and by (10) *Aelian* they are call'd *κυνοκεφαλοι νυνηπεστωποι*; 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, *καὶ ἄλλαις πολλῶν ζώῶν εἰδῆς τῆς πληνίας μορφῆς θηριωμένους*. 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 *fierceness* 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 associate 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 *Osteology*.

(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 coarse, and thick set.

The Place that *Aristotle* refers to, is this. (13) *Ἐσὶ δὲ τῷ μὲν ἀλλων ζῷον τῷ ἐχόνταν τείχας, τὰ πρανθάνοντα, τὰ δὲ ὑπίστα, ἢ λεῖα πάμπαν, ἢ δεστίς τὸν. δὲ ἀνθρώπος τουταντὸν.* 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) *Aelian. 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

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 sort of Louse, 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 self, 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 besides. 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 Commemoratives of Peru, lib. 1. cap. 3.*

Years, "The Hairs of his Body grew in that manner, that he was covered all over with Bristles; the hair of his Head and Beard reaching to his Waste, that he appeared like some Wild or Savage Creature."

(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) seems 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 similitè flexa. In manibus, ungues, digitos, longiore inque medium. Pedibus paulùm differunt, sunt enim, ut manus, prælongi, sed vestigium Palmæ simile faciunt. Pollex quoque his & Articuli, ut homini; ac præter Genitale, & hoc in maribus tantùm. Viscera etiam interiora omnia ad exemplar. We will compare both their Accounts, with our Pygmie; and observe wherein 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 Assertion 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 rising, jutting out much beyond the whole surface, 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 I 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 Jaw, 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 μιμεῖσθαι, 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 bruising and flattening it against her Shoulders; because 'tis so universal in them all.

(17) *Natur. Hist.* lib. II. cap. 44. p. m. 593.

As to the *Ears*, none could more resemble 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 *Osteology*.

(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 Assertion*, that no *Quadruped* hath *Hair* on the *under Eye-lid* besides *Man* but the *Ape-kind*, I cannot justify; or I do not take his meaning aright: Tho' he has much the same Opinion a little before. (18) Where he tells us, Καὶ Ἐλεφαῖδας δὲ μὲν ἀνθρώπος επὶ ἄμφω ἔχει, οὐ δὲ μαχαλαῖς ἔχει τείχας, οὐ δὲ τὸν ἕτερον. Τὰν δὲ ἀλλων εἴθεντε τέταν εὐδίτερον, εἴθε τὸν κατάθεν Ἐλεφαῖδας, ἀλλὰ κατάθεν τῷ Ἐλεφάρε εὐίσις μανὰ τείχες περύκασιν. Which Scaliger thus renders: Ac *Palpebras homo utrâque in Genâ habet tum & in Alis, & in Pube Pilos. Cætera Animalantes neque in his locis, neque in Genâ inferiore: Sed sub Genam & paucos & paucæ.* Our *Pygmie* had *Hair* in the *Arm-pits*, and that in the *Pubis* seemed somewhat 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 *Palpebrae* and *Gena*, in his Translating this Text of *Aristotle*, different from what commonly they signifie now. For by *Palpebrae* he means, what *Aristotle* and *Hippocrates* call *Elephasides*, 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 sola Quadrupedum in inferiore habent Genâ.* And so Scaliger uses these words in this Translation of *Aristotle*: And he makes *Cilium* to signifie, *Sumnum Genæ 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 *Mammae* on the *Sternum* or *Breast*, which is different from *Brutes*. And tho' the *Elephant* herein seems somewhat alike, yet he makes this distinction, (19) ὁ δὲ ἐλέφας ἔχει μὲν μαστὸς δύο, ἀλλὰ εἰς τῷ στήθει, ἀλλὰ πρὸς τῷ στήθει. *Juxta Pectus potius, quam in Pectore*, as Scaliger renders it; or as Theodorus Gaza, *non in Pectore, sed paulò citra*. And a little after, (20) he more particularly expresses himself, οὐδὲ ἐλέφας ἔχει τοὺς μαστὸς δύο περὶ τὰς μακρὰς. *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 see 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 saith) 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 *Mammae* 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, eo quod manus dedit ei Natura, quibus ad Pectus potest elevare partum, sicut Mulier*. Our Pygmie was a *Male*, yet here the two *Papillæ* or *Teats* appeared very plain, and were exactly situated as they are in Men. The *Mammae* 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) *Tulpis*. And (24) *Gassendus*, in the Life of *Peiresky*, speaking of the *Barbis*, saith, *Huic Mammae 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 so 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 flection

(19) Arist. *ibid.* p. 151. (20) Arist. *ibid.* p. 176. (21) Albert. *de Animal.* lib. 22. p. 224.
 (22) Jac. Bontij *Hist. Nat. & 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* (faith (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 summae existimantur* (faith (26) Pliny) *omnibus hi, quibus & digitii : sed Simiae imbricati, Hominibus lati.*

In the *Palms* of the *Hands* of our Pygmie were remarkable those *Lines* which are usually taken notice of in *Palmistry* ; 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 differunt, sunt enim, ut manus, praelongi ; 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.

(l) Arist. The sole of the *Foot* in the hinder part was more callous, ill, and oddly 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. Hist.* l. 11. cap. 45. p. m. 594. (26) Plinij *Nat. Hist.* lib. 11. cap. 45. p. 594.

a *Foot* ;

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 *Quadrupes*, i. e. a *four-handed*, than a *four-footed Animal*.

And as it uses it's hinder Feet upon any occasion, as *Hands* ; so likewise 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 four, 'twas awkwardly ; not placing the *Palm* of the *Hand* flat 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 respect Natural and alike.

(o) Arist. *They have the upper Parts much larger than the lower, as being Quadrupeds, almost as five 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 *Upper* 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 squob *Belly*. We shall presently give the Dimensions of all the Parts, as soon as we have done with this *Text of Aristotle*.

We shall hereafter farther consider the structure of the *Foot* in the *Osteology*, where we shall describe the *Os 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 : *Caudæ notam sive vestigium animadvertisit, quam vix Oculis deprehendas. Taeniu tamen subesse intelligas, quam si attractare tentes, promptâ mirâque celeritate sese substrahit, ridiculâ indignatione læsum præ 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 Assertion : *Caninum Genitale dixit Simij, non temere ; nodos enim quosdam deprehendimus : differt autem figurâ 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.*

(27) *Philosoph. Transact.* Numb. 239.

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, & minus 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, *Kai δ πίθηνς ἀπάντων τῷ ζώντινον δμούλατος αὐθεόπῳ, οὐ σπλάχνοις, οὐ μωὶ, οὐ ἀγενεῖαις, οὐ φλεψὶ, οὐ νεύραις, ὅπι οὐ τῇ τῷ δοσῶν ιδέᾳ.* Διὰ γὰρ τὴν τέταυν φύσιν ὅπι τε δυοῖν θεοῖς θεολοῖν, οὐ τοῖς πρεσβυτοῖς καλοῖς ὥσπερ χερσὶ χρήται, οὐ στέρνον πλατύτατον ἀπάντων τῷ πτερεπόδων ἔχει, οὐ πλεισ ὠσαύτας αὐθεόπῳ, οὐ πεζῶπον σεγγύλον, οὐ τεφχιλον μηνέον. 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 bath the largest Breast of any Quadruped, and Clavicles or Collar-bones 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 Eniformis*, 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 Eye-brow, 'twas two Inches three quarters. From the Eye-brow to the *Occiput* 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 Eniformis* 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 Anat. Administ.* lib. 1. cap. 2. p. m. 26.

and

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 Wrist 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 setting 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 Soje of the Foot, about the setting 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 Jaw* 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 Mammæ 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 hereafter 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 straitnes 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 *Tulpus*, *Bonius*, and *Gesner*, we shall find a great difference. That of *Tulpus* 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 Mammæ are larger and pendulous, and the Belly more protuberant. *Dapper*, (30) in his Description of *Africa*, has borrowed this Figure from *Tulpus*, without naming him, as likewise his Description, which is the same. For avoiding the often quoting it, I will here Transcribe *Tulpus*'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. *Tulpus* 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 tele, Satyrum Indicum; nostrâ memoriâ, ex Angolâ delatum: & Frederico Henrico, Aranfionensium 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 perniciissimo. Artibus verò tam stridulis, & musculis adeò vastis: ut quidvis auderet, & posset. Anteriorū undique glaber: at pone hirsutus, ac nigris crinibus obsitus. Facies mentebatur hominem: sed nares simae, & aduncæ, rugosam, & edentulam anum.

Aures verò nihil discrepare, ab humana formâ. Uti neque pectus; ornatum utrinque mammâ pretumidâ (erat enim sexus fæminini); venter habebat umbilicum profundiorum; & 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: nem̄ dum pollici figura humana: vel cruribus suræ: vel pedi calcis fulcrum. Quæ concinna, ac decens membrorum forma, in cauſâ fuit, quod multoties incederet erectus: neque attolleret minus gravatè, quam transferret facile, qualecunque, gravissimi oneris, pondus.

Bibiturus prehendebat canthari ansam, manu alterâ; alteram verò vas̄ fundo supponens, abstergebat deinde madorem labiis relictum, non minus adpositè, ac si delicatissimum vidisses aulicum. Quam eandem dexteritatem observabat utique cubitum iturus. Inclinans quippe caput in pulvinar, & corpus stragulis convenienter operiens, velabat se hand aliter, ac si vel molliſſimus illic decubuisse homo.

Quin imò narravit aliquando affini nostro, Samuels Blomartio, Rex Sambacensis, Satyros hosce, præsertim mares, in Insulâ Borneo, tantam habere animi confidentiam, & tam validam muscularum compagem: ut non semel impetu fecerint, in viros armatos: nem̄ in imbellem, fæminarum, puellarumve, sexum.

Quarum interdùm tam ardentí flagrant desiderio: ut raptas non semel conſuprarent. Summè quippe in venerem sunt proclives (quod ipsis, cum libidinosis veterum Satyris commune) imò interdùm adeò protervi, ac falaces: ut mulieres Indicæ, propterea vitent, cane pejus & angue, saltus, ac lustra, in quibus delitescunt impudica hæc animalia.

Dapper, who hath transcribed this Account of *Tulpus*, (as I said) but without taking any notice of him, makes this Preface 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 groſſe et pesant, les bras nerveux, ils n'ont point de quevè, et Marchent tantôt tout droit, et tantôt à quatre pieds. Les Animaux ſe nourriffent de fruits 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 toujouſrs dans les For ts. On dit qu'ils forcent les femmes & les filles, & qu'ils ont le courage d'attaquer des Hommes armez.*

We will now examine *Jacobus Bontius's Figure*, and compare it with ours: And tho' he tells us, that he had ſeen ſome of both Sexes that went erect, especially that *Female one*, whose *Effigies* he here gives us; yet 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* ſo riſing: The large *Breasts* 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 altogetheг 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 ſelf, 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 miſtruit the whole *Representation*. But because he hath ex-preſ'd, 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* clapt on, which fits 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, diſferent from ours.

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

[(32) *Dapper ibid.* p. m. 257. (33) *Hift. 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; since 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 *Tulpinus* or *Bontius*; or even whether that of *Bontius* be the same with that of *Tulpinus*. For *Bontius* his Account is so very imperfect, that from thence one cannot make a safe Conclusion; and I rather suspect the contrary: For *Bontius* describes it with soft, tender Passions; *Tulpinus* and *Dapper* make it Warlike and Fighting. *Bontius*'s words are these: (34) *Ast quod majorem meretur admirationem, vidi ego aliquot utriusque sexus eretè incedentes, imprimis eam (cujus Effigiem hic exhibeo) Satyram femellam, tanta verecundia ab ignotis sibi hominibus occulente, tum quoque faciem manibus (liceat ità dicere) tegentem ubertimque lachrymantem, gemitus crientem, & ceteros humanos actus exprimentem, ut nihil ei humani deesse diceres, præter loquaciam. Loqui vero eos easque posse, Javanii aiunt, sed non velle, ne ad labores cogerentur: ridicule mehercules. Nomen ei induit Ourang Outang, quod Hominem Sylvæ significat, eosque asci affirmant è Libidine Mulierum Indarum, quæ se Simis & Cercopithecis detestandæ libidine miscent:*

Nec pueri credunt, nisi 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 Succodanæ viderent. Cauda autem illis est prominentia quedam ossis Coccygos, ad quantuor, aut paulo amplius, digitos excrescens, eodem modo, quo truncata canda (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

(34) Jac. Bontij, *Hist. Nat. & Med.* lib. 5. cap. 32.

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 quæ forent Naturæ homines inter & simias mediae*; which being doubted of, Peiresky produced a Letter from *Natalis* or *Noël*, a Physician who lived in *Africa*, which gave him this Account. *Esse in Guineâ Simias, barba procerâ, canaque, & pexâ propemodum venerabileis, incedere ipsos lente, ac videri sibi præ ceteris sapere: qui maximi sunt, & Barris dicuntur, pollere maximè judicio; semel duntaxat quidpiam docendos; veste induitos illicè bipedes incedere; scitè ludere fistulâ, Citharâ, alijsque id genus (nam quod everrant domum, convertant veru, pinsant in mortario, aliaque ratione famulatum præstant, hanc reputari admodum) fœminas denique in iis pati menstrua, & mares mulierum esse appetentissimos.* He likewise produced other Letters from *Arcosius* or *d' Arcos*, which related what happened to one of *Ferraria* when he was at *Angola*, the Country from whence our *Animal*, as likewise that of *Tulpius* came. I will give it in Gassendus's words: *Incudit nempè quâdam die in Nigritam Canibus venantem Homines ut visum, Sylvestris. Capto, cæsoque illorum uno, inhumanitatem Nigritæ increpuit, qui in suum genus itâ sœviret. Ille verò, falleris, inquit, nam hic non est homo, sed bellua homini persimilis. Quippe solâ pascitur herba, intestinaque Ovina habet, quod ut credas melius, rem ecce; simulque abdomen aperuit. Sequenti die rursus venatum, captique mas & fœmina: huic Mammæ ad pedis longitudinem: cæterâ mulieri simillima fuit; nisi quod Intestina quoque herbis oppleta, & cujusmodi Ovis, habuit. Totum utique pilosum Corpus, sed pelo 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 *Grafs*, 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 sort 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 Guineâ scribit P. Jarius existere Simias, quæ instar famuli in Pilâ tundant quæcunque 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 domūm defē-
 “ rant, ità tamen ut ubi primūm domūs fores attigerint, illicò Hydriis
 “ exonerandæ sint, alioqui eas excidere, casuque isto frangi, atque tūm
 “ clamoribus ac fletu compleri universa. Neque ista modo, sed plurima
 “ item alia obire de domesticis ministeriis dicuntur hi Simij Baris. To-
 “ rosi 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 Curiosity 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 *Botanic*. 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 clasped on the Nape of his Neck, when he goeth upon the Ground.*

(39) *Purchas Pilgrims, Part. 2. l. 7. cap. 3. §. 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 Beast. The People 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 sit 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

(40) Pag. m. 510.

Course him, as we do Stags here, and this sort of Hunting is the King's usual Divertissement. 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 shew 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 flight 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 see, how an *History of Animals* can be well wrote without giving the *Dissection* 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 *Dissection* 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 dissected *Apes*, (as Vesalius 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 dissect them; especially those that come nearest to a *Man*. Had he known our *Pygmie*, no doubt but he would have preferred it, for this purpose, 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 resembles 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 adhesion 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 *Glandulae 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 *Glandulae Axillares*. For these I have observed to be *Lymphatic Glands*; and have traced the *Lymphaducts* thence to the head of the *Ductus Thoracicus*, where they empty themselves.

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

Together with the *Skin*, we took off the *Mammæ 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 signify 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 cohærens, 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 illnes, 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 *Peritonæum*, a Common Membrane, that lines all the inside 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 side, 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 *Peritonæum*; 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 *Enterο-cele*: If of the *Omentum*, *Epiplocele*. In our *Pygmie* I observed the *Peritonæum*, in this respect, to be

(42) Memoirs for a Natural History of Animals, p. 162, &c. English Translation. (43) *Apud Ger. Blasii, Anst. Animal.* cap. 33. pag. 109, &c.

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 *Blasius* (44) observed in the *Ape* he dissected, *Processus Peritonæi* (saith he) *codem modo hic se habet, ac in Cane*. *Datur & hic facilis via stylo ex ventre in Processum dictum inferendo*. And the *Parisians* have remarked the same in the *Monkeys* they dissected, which is a notable difference of our *Pygmye's* from the *Ape-kind*, and an agreement with the *Humane*. Hereafter, whenever I mention *Blasius*, unless I specify 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 *Peritonæum* 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 dissected, 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 *Peritonæum*, 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 *Peritonæum* 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 it. 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 *Ottavo*. 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 seen 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 loose 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, quâ parte Colon substratum jecoris limbis.* *Idem adhæret ventriculi fundò & Colo, ut in homine.* And in the Male Ape he dissected 'twas tinged yellow, as ours was.

We shall proceed now to the *Ductus Alimentalis*, at least those parts of it 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 *Senses*, 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 *Excrements*; 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 desire 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 sensible 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

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, quæ jam cecidere: cadentque
Quæ 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 *Mouth*, 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 fleshly 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. Noſt. 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. &c passim alibi. (50) Galen *de locis affectis.* 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. *Orificio ejus superius, nullâ Valvula clausum ; sed interceptum duplice portione Diaphragmatis carnosâ, ab ejus tendinibus oriundâ.*

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 likewise differ from a Man's, it's inferior Orifice being very large and low ; for it was not elevated so high as the superior, as it is in a Man.* I did not observe this in our Pygmie. So Drelincourt tells us in the Female Ape, *Ventriculus rugis interius 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.

Jacobus

Jacobus 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* (saith he) & *Lapides Pa-zahar natos in ventriculis Simiorum, qui teretes sunt & longitudinem digiti aliquandò excedunt, qui præstantissimi omnium censemur.* *Pa-zahar*, he tells us a little before, signifies in the Persian, *contra venenum*, whence may come the word *Bezoar*. *Job. 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, *Job. Bapt. Tavernier's* (55) Travels are quoted, where he prefers two Grains of this, before six of the *Goat-Bezoar*. *Tho' Philip. Baldæus*, in his Description of *Malabar* and *Cormandel*, does esteem it much cheaper. *Casper Bauhinus* hath wrote a distinct Treatise of the *Bezoar-stone*, to whom I refer my Reader; and shall only farther observe 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 Effects 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 Efficacy; and upon Tryal, he assures us, that they are so. *Hoc certè compertum habeo, Lapidem in vesicâ hominis repertum, urinam & sudores probé ciere, quod tempore ingentis illius pestis, quæ Anno 1624 & 1625. Leydam, Patriam meam & reliquias Hollandiae Civitates, miserandum in modum vastabat, in penuria Lapidis Basaartici, nos exhibuisse memini, & Sudorificum (ausim dicere) melius & excellentius invenisse, cum admixta Theriacâ, 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 *Fæces*, and so transmitting it into the *Vasa Chylifera*, or *Vene Latæ*, 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) *Job. 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 *Cæcum* or beginning of the *Colon*, was Nine Foot Ten Inches; and the *Colon* and *Rectum* were Three Feet and Five Inches long. The *Cæcum* 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 'tis 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 Vermiformis* (which was in our *Pygmie* as 'tis 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 *Pygmie*, a little below the *Pylorus*, were inserted the *Ductus Communis* of the *Gall*, and the *Ductus 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 præposita, ad foramen usque intra eandem Ecphysein Commune Ductui Bilario & Wirzungiano, præcise pollex est Mathematicus; ab illo autem foramine intra duplice Ecphyseos tunicam stilus gracilissimus intrusus est in predictam Vesiculæ felleæ recurvitatem, rursusque ab eodem Intestinali foramine idem stilus compulsus est in Ductum 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 situation, was the same : but it being so long, it had more windings than usually. The *Parisians* observed in their *Monkeys*, that the *Colon* was not redoubled like an *S.* as in *Man*, being quite strait. *Drelincourt's Ape* was more like ours, for speaking of the *Colon*, he faith, *retorquetur varie antequam producat Rectum ; cellulas habet ut in Homine.* For the length of the *Colon* in the *Monkeys* dissected by the *Parisians*, was but thirteen Inches ; and an Inch in Diameter ; whereas, the *Colon* of our *Pygmie* with the *Rectum*, was three Foot five 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 *Craffa* : The *Tenuia* are subdivided into the *Duodenum, Jejunum,* and *Ileon* ; The *Craffa*, into the *Cæcum, Colon* and *Rectum* : and the *Cæcum* 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 *Craffa*. 'Tis true, in *Brutes*, this part is often found to be very large and capacious ; and to be filled with *fæces* ; and in such, it may be justly esteemed an *Intestine*. As in a *Rabbit*, 'tis very long and hath a *Cochlear Valve* ; so in an *Ostridge*, there are two *Cæcums* ; each a yard long, with a like *Valve*. But in *Man*, 'tis far different. Many therefore do not think this *Processus Vermiformis*, to be the *Cæcum* ; but rather take for is, that bunching out of the beginning of the *Colon* ; which is projected beyond the entrance of the *Ileon* ; 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 *Cæcum* had no *Vermiform Appendix*. So in the *Ape* dissected by *Blasius*, he faith, *Processus Vermiformis in totum hic desideratur.* And so *Drelincourt*, *Cæcum caret Epiphysi Vermiformi, quallem homines habent.* We will see therefore, what kind of *Cæcum* '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 fortified 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 *Ileon*, *Manus transversæ*, *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 ; so 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 sort of *Valve* 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 inside 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 sometimes seen the same in *Hu-
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 inoscultate 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*. And the same is in *Man*.

I have likewise seen, by injecting the *Mesenterick Vessels* ; that the *Mercury* has passed into the *Lymphœducts* ; and so into the *Vene* or *Vasa Læcia*. 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, & passim in ambitu, numerose & planæ, magnitudinem Lentulae, sed Cavales. Anastomoses frequentissime Venarum cum Venis & Arteriarum cum Arteriis in universo Mesenterij circulo.* And as that part of the *Mesenterie* which fattens the *Colon* is call'd *Mesocolon* ; so for the same reason, that slip of it represented in our figure, that runs down to the *Processus vermiformis*, may be call'd the *Meso-cæcum*.

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* heré, 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 fifth 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 vescula fellis, duo alij ventriculum amplectebantur, cum lobulo quinto se inferente in spatium ventriculi intra orificium 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, optimè cum Canino convenit, manifestissime in lobos VII divisum, tanta & magnitudinis ut etiam utrumque Hypochon-*

drium occupet. *Vesalius* (57) therefore is in the right; where he saith, *Quæ enim Dissectionum Professores de Jecoris formâ, ac penulis seu fibris (quos Λόσσος Græci vocant) commentantur; & 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 Protostatarius*, (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 saith, *σεργύστων δ' οὐ τὸ τὰ ἀνθεώπης ζηταῖ, ἀλλ' οὐδὲν τὰς βοεῖς. 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 several Physicians and Chirurgians, that were with him at the opening of *Charles the Ninth*, Duke of Savoy, saith, *hi omnes per Jovem mihi possunt 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 satisfie himself, 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. Its adhesion 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 fastened to it only by a Membrane, as is also the *Ductus Cysticus*. So that the *Vesca fellea* when inflated with wind, seemed more to represent an *Intestine* by its *anfractus* 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) *Vesalij de fabricâ corporis humani*, lib. 5. cap. 7. p.m. 519. (58) *Andr. Vesalij. 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. 1. cap. 17. p. m. 595. (62) *Franc. Putei Apologia pro Galeno in Anatomicis contra Andr. Vesalium*, lib. 5. p. m. 153. (63) *Vesani cuiusdam Calumniarum in Hipp. Galenique rem Anat. depulsio. per Jac. Sylvium.* vid. *Depuls. 26.* p. m. 150. (64) *Renat. Henerus adversus Jacobi Sylvij Depulsionum Anat. Calumnias pro Andrea Vesalio Apologia*, p.m. 55.

half

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 Tunica 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 fellea longa 2*½* pollicibus à fundo ad cervicem, ubi recurvitatem habet maximam, dimidiata hæret merfa substantia fecoris.*

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 fissure. It seemed large, but I found it's fistula 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 Pancreas, as in Man, and having numerous branches near the Spleen.

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

that the Spleen *triangularis figurae est*, *exiguus admodum respectu corporis*, *coloris nigricantis*, *læve equidem molleque valde corpus*, *ast exteriū inæquale*, *quasi ex globulis variis confectum*, *adè ut etiam conglomeratis Glandulis Substantiam Lienis annumerare velle*, *tali in subiecto fundamentum aliquod agnoscat*. Ex Ramo Splenico numerosos eosque insignes Ventriculo suppeditat ramos, magnitudinem & figuram externam Fig. 3^a. 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 surface 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 saith, *Lien Scalenum figura refert, cohæret Reni sinistro & liber est à Diaphragmate*. And in the Male Ape he observes, *Lien triangularis & crassior quam in femina, 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; its surface uneven, being made up of abundance of Glands; its Secretory Duct emptied it self into the Duodenum, just where the *Ductus Communis* of the Gall doth, as I have mentioned before.

The Parisians in their Monkeys observed, that the Pancreas had only its figure, which made it to resemble that of Man; its connection, and insertion being wholly particular. For it was strongly fastened to the Spleen; and the insertion of its Ductus into the Intestine (which in Man is always near the Porus Bilarius) was two Inches distant therefrom. Blasius in his Ape describes it thus; *Pancreas ventriculo substratum, solidæ admodum substantia est, nec adeò molle, quam in Canibus aliisque Animalibus notatur*. *Longum itidem insigniter, ast latitudinis ejus, quæ nè 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 sinistro*. *Ejus ductus inseritur octo lineis supra Porum Bilarium, contrà ac Canibus, subternitur immediate Ventriculo, & superternitur brevi Intestino*. Tho' in the Male Ape he 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 Glandulae Renales in our Pygmie were very large, and placed a little above the Kidnies as they are in Man. That on the right side, 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 Atrabiliaria, 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 ferè figuræ 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 Atrabiliaria triplicem Scrobiculum habent, quarum liquor expressus lignam non ita constringit, uti in Capsulis fœmineis.* 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 communis vel propriâ*, as he tells us of his Ape. The Kidneys of our Pygmie 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 Substance, 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 vessels* which run between the *Tubuli Urinarij* or *Secretory Ducts*, which make up this part of the Kidneys. Which Vessels when inflamed and over-extended, 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. I. 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 flat ; 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 Costæ 11. & 12. Sinister locum habet intra Costam ultimam. Altitudo Renis dimidiæ uncia. Renalium venarum dextra longè elatior sinistrâ. Rene aperto Carnis discrimin 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 bigness 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. Drelincourt in the Male Ape saith, *Ureteres suprà Psoas Musculo & Iliaco, atque subiùs vasis Spermaticis, quibus decussati substrati sunt etiam quibus vascula admittunt, sese reflectunt in Hypogastricam, decussantes ramos Iliacos & Ejaculatorios. And in the Female, Ureteris expansiones arcuati reflexæ 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 Peritonæo 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 Cæliaca ; the Arteria Mesenterica superior ; then the Emulgent Arteries ; below them, the Spermatick Arteries ; then the Arteria Mesenterica inferior ; then the

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Trunk divides into the Iliac Branches. So the Vena Cava too in our Pygmie exactly imitated that in a Man.

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

We come now to the Parts of Generation; and shall begin with the *Vasa Preparantia*; 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 left, is emptied into the left 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 Parisians 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 describes, 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 self 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 Cavæ & Aortæ oriuntur, & quidem altiori loco ea quæ sunt lateris dextri, inferiore quæ sinistri.* But Drelincourt certainly is more in the right, who informs us, that in the *Male Ape* he dissected, *Vena Spermatica dextra crassa, & ab interiori trunco Cavæ adscendentis pollice infra Emulgentem sinistram enascitur, surculosque emittit sinistros in Membranas vicinas. Arteria Spermatica dextra à trunco anteriori*

(67) *Thom. Bartholin. Acta Medica & Philos. Hafniens. an. 1691. p. 1672. Obs. 35.*

Aortæ paulò infra Emulgentem sinistram enascens sub Venâ Emulgente intercruciat Cavam ascendentem, quæ superinequitat, & conjungitur Venæ Confo-ciali eò præcisè loci ubi Vena inseritur suum in truncum. Sinistra Vena Sper-matica inseritur in Emulgentem juxta truncum Cavæ, & consocialem Arteri-am admittit eò præcisè loci, in quo enascitur dextra. So in the Female Ape he saith, Spermatica Vena sinistra ab Emulgente sinistrâ, dextra è Trunci parte anteriore, pollice infra 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 sollicitous 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* (if 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 Lusitanicæ de filiis ex muliere, ac simio natis, mulierem

(68) *Miscell. Curiosa German. Decur. 2. Ann. 5. Obs. 187.* (69) *Ant. Deusingij Fasscul. Dissertat. select. de Ratione & Loquela Brutorum, p. m. 196.* (70) *Fortun. Licetus de Monstrorum Causis, lib. 2. cap. 68. p. m. 217.*
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nempe ob quoddam crimen in insulam desertam navi deportatam, quum ibi exposita fuisset, eam simiorum, quibus fertilis locus erat, agmen circumstetisse fremeendum; supervenisse unum grandiorem, cui reliqui loco cesserint: hunc mulierem blandè manu captam in antrum ingens abduxisse, eique cum ipsum tum ceteros copiam pomorum, nucum, radicumque variarum apposuisse; & nutu ut vesceretur invitasse; tandem à ferâ coactam ad stuprum; facinus hoc multis diebus continuatur adeò, ut duos ex ferâ liberos pepererit: ita miseram (quintâ mors optabilior!) vicitasse per annos aliquot; donec Deus misertus navim eâ Lusitanam detulisset; quumque milites in terram aquatum ex proximo ad antrum fonte exscendissent: abeissetque fortè 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 vidi 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, & eâdem velocitate ad littus rediens ostentat 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 clauistro perpetuo commutasse.

But to return to our Busines. Our Pygmie in this Particular of the Scrotum, more resembles the Ape-kind, than a Man. For the Parisians 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 shrank, that it did not appear. Or, as they afterwards express it, The Testicles were shut 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 muscularum Abdominis, quos vasa Spermatica transeunt, ac si iis uniti essent, sic ut potius in Inguine utroque collocatos eos dicerem, quam ultra ossa Pubis a Corpore pendulos.* And so Drelincourt to the same purpose; *Scrotum pendulum nullum est, sed Testiculi utrinque juxta Ossis Pubis summa latera, vel Spinam summam ejus decumbunt extra prorsus Abdominis cavum, & proinde extra Muscularum 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 figure quite contrary, and almost as remote from the figure of those of *Man*, being perfectly round. *Drelincourt's* account in his *Ape* is, *Tunica Elytroides fibris carneis à Cremastere conspersa, ut in homine. Arteria Spermatica miro lusu, spiratim revolvitur super Testiculi dorsum. Testiculus autem Ventri Epididymidum adhæret, nisi fibrillis paucis & laxis, capite suo, quo Spermatica Deferentia admittit, separatur illæsus, 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 figure there. And as the Body of the *Testes* was made up of a curious convoluted Contexture of *Seminal Vessels*, which running into fewer, form at last the Body of the *Epididymis*; 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 *Parisians* 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 *Vesiculæ Seminales*, which are not to be met with in a *Dog*. They describe them in their *Monkeys* thus: The *Glandulous Prostatae* were small; the *Parastatae 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 slenderest near the neck of the *Bladder*. They were composed of several little Baggs, which opened into one another. The *Caruncle of the Urethra* was small, but very like to that of a *Man*. *Blasius* 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 hic valde amplæ, quæ immisso flatu per ductum Seminalem Ejaculatorium insigniter intumescent. Quod si premantur, manifestissime observamus Mate-*

riam iis contentam moveri in Meatum Urinarium, Vesicæ continuum, & quidem per foramen singulare, quod in unoquoque latere unicum est, quæ res occasionem videtur dedisse Jacobo Sylvio duos ductus Seminales in simili constituendi. All that Drelincourt saith of them is, Vasa ejaculatoria retrò Vesicam tendunt in Corpuscula prædura mirè anfractuosa, ut & ipsam initium Epididymidis. Which is very conformable 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 *Prostatae*, which in our *Pygmie* appeared the same as in *Man*. The *Parisians* tell us in their *Monkeys* that they were small. *Blasius* in his figure, besides the *Prostates*, which he saith are *Glandula vesicis adstans, albidiior solidiorque* represents another, at the Letters (H. H.) viz. *Glandula alia, major, rubicunda & plexu Nervorum, aliorumque vasorum prædicta*; 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 Sphincterem 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*, so 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 *Præputium*, which was left entire to the Skin. *Drelincourt's* account of it in the *Ape* is this; *Genitale prorsus expers est frænuli ac proinde Præputium devolvitur ad radicem usque Penis, & denudatur Glans ipsa, atque Penis integer. Balanus consimilis virili, excepto frænulo, atque præterea hiatum maximum exhibet, quæ parte Ligamenta Cavernosa desinunt, & Glans utrinque 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 Urinæ* was large, covering the *Bulb* of the *Cavernous body* of the *Urethra*. 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 *Penis* answered exactly to those of a *Man*.

Blasius in his *Ape* saith, *Penis 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, exterius carnosæ naturæ, interius reticulari vasorum plexu refertum, interstitia ipsius materia rubicundâ 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, *Urethra planè carnosâ*; This was different in our Pygmie; for as I have mention'd, the sides of the Urethra 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 self. But by *Analogie* 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 exterior Orifice was round and strait, as in Bitches, and the generality of other Brutes, and had neither Nymphæ nor 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 Spongiæ 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 joined together, going from one of the Ligaments to the other, besides a hard and nervous Membrane which enveloped them. They terminated at a Gland like to that of the Penis of the Male. The little Muscles, which were fastened to these Ligaments, proceeded as usual from the tuberosities of the Ischium. These Ligaments were of Substance so thin and spongiæ, 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. Its figure was Pyramidal, ending from a very large Basis in a point, which run along the third Ligament to its 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 fleshy Fibres, which proceeding from the Sphincter of the Anus, were fastened to the sides of the Neck of the Uterus, and other such like Fibres which did come from the Sphincter 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 extrenity 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. Orificio interius valde solidum. Cervix interior admodum dura, & paulo intrà osculum internum duritie cartilaginosâ.*

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 Parisians 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 but two on the other; five 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, simiusque Venæ Cavae Caudicem suffulcit, nunquam in homine observavi, & hunc illo destitui certo certius scio, quamvis interim Galeni locus in septimo de administratis Dissectionibus mihi memoria non exciderit, quo inquit, quintum hunc Pulmonis Lobum eos non latere, 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 aggredarentur, in quibus praesenti 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 dissected *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 seen; as to the latter, *Drelincourt* tells us in the *Male Ape*; *Pulmo dexter quadrifidus, Lobus insinus omnium crassissimus, superior minus crassus, intermedius reapse medius situ & magnitudine. Quartus denum crenam insculptam habet, qua parte Cavae fulcrum praebet. Pulmo sinister bifidus, & Lobus ejus superior bifurcatus.* So in the *Female Ape*, *Lobi Pulmonis dextri totaliter divisi IV, quorum superior, bifidus totus, adeo ut sint quinque in eâ parte: sinister Pulmo bifidus totus, & Lobus superior ultrâ dimidium suâ divisus.*

The *Trachæa* 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, *Trachæa annuli se habent uti Intestinorum spiræ, nervosiss Membranis colliguntur.* The Comparison, I think, is not so well made.

(72) *Andr. Vesalij de Corporis humani fabrica*, lib. 6. cap. 7. p. 724.

For the present we will leave following the Duct of the Trachæa 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, *Cæterum Involucri mucro, & dextri ipsius lateris egregia portio Septi transversi nerveo circulo validissime, amplectu admodum spatio connascitur, quod Hominibus est peculiare. Simiis quoque & Canibus & Porcis involucrum à septo multum distat. Tantum abest ut ipse magnâ sui portione concenteretur, adeò sanè ut & hinc luce clarius constet, Galenum hominis viscera aut oscitantur, aut neutiquam spectasse, Simiasque & Canes nobis describentem, immerito veteres arguisse.* He can't forbear at all turns to have a fling at *Galen*: But he is here in the right, and *Galen* mistaken. So *Blancardus* (74) tells us, *Homo præ cæteris 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 *Biped* and to go *erect*. For therefore in a *Man* is the *Pericardium* thus fastened, that in *Expiration* it might assist 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 adhæſion 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,

(73.) *Andr. Vesalij de Corporis Humani fabrica, lib.6. cap.8. p.m. 728.* (74.) *Steph. Blancardi Anatom. 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 enjusdam Simij habens duo Capita.* And a little after, he denies the *Heart* to be a *Muscle*; *Jam autem erravit* (saith he) *qui existimavit, quod sit Lacertus, quamvis sit similem rerum in eo, verum motus ejus non est voluntarius.* The Person he hints at, I suppose, is *Hippocrates*, who so long ago asserted this; *H n̄ap̄dīn* (saith (76) *Hippocrates*) *μῶς δὲν καὶ πλατεῖς, & τῷ ρύπῳ, ἀλλὰ πλήνειται σαρπός.* *Cor muscularis est validus admodum non Nervō, verum Carnis spissamento.* And *Steno* and *Dr. Lower* since have shewed us the way of dissecting it, and have made it most evident that 'tis *Muscular*; and it's *motion* is such; but as *Avicenne* observes, 'tis not a *voluntary 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 barbarously 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 such *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 *Hæmoptoe*, 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 interior Superficies of it's *Ventricles*, it had that great number of Fibres and fleshy Columns, which are seen in *Men*. *Drelincourt* in his *Ape* observes, *Cor solidum in ventriculo sinistro, laxum in dextro; prædurus Conus ejus: Serum in Pericardio salsum. Vasa Coronaria tumida, præsertim circâ Ventriculum. Adeps circâ ea nullus.*

(75) *Avicenna lib.3. Fen.2. Tract.1. p.m.670.* (76) *Hipp. de Coras, p.m.270.* (77) *Vide Tho. Bartholini Acta Med. & Philos. Hafniens. Vol. 5. Obs. 30. p.94.*

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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 Scutiformis of the Larynx ; 'twas red and spungy, full 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 Thyroideæ & Cricoidæ crassæ sunt, & subnigricantes ; & illæs permeant surculi Corotidis Arteriæ & Jugularis venæ externæ ; 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 Reflection that the Parisians 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 Parisians 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 wisest 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 rise 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 thereto

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 *Uvula*, 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 found 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 Spheno-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 alis præter hominem & simiam nunquam à me observata*. All that *Drelincourt* saith of it is, *'Uvula firma 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 Sub-linguales* as in *Man*.

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

At the Root of the Tongue of each side were placed the *Tonsillæ* 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 cavae, 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-Mastoidem, articulationem Maxillæ & Musculi Pectoralis portionem*, saith *Drelincourt*.

The *Maxillary Gland* of the left side (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 tunefied 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 Maxillæ Inferioris oblongæ, laxæ, 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 obtagit, quâ parte simia saccum formant, intra quem Esculentæ reconidunt.* Pliny is very express, That both Satyrs and Sphinges (which I make to be of the Monkey-kind) have them likewise, (78) *Condit 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 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-*

(78) *Pliniij Hist. Nat. lib. x. cap. 72. p. m. 466.*

pil round and large : The *Crystalline Humour* Spherical or *Lentiformis*, 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 figures *Casserijs* (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, so 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 since 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 Drachm. The *Parisians* 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; since our *Pygmie* exceeded not the Stature and Bulk of the Common *Monkey* or *Ape*; so that herein, as in a great many other Circumstances, our *Pygmie* is different from the Common *Monkey* and *Ape*, and more resembles a *Man*.

I can't agree with *Vesalius*, 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 Pentesthesion*, h. e. de quinque sensibus. Vide de Organo visus. Tab. 3.
fig. 12, 13.

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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 *Vesalius* 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*. *Vesalius* (80) his words are these; *Cerebri nimirum constructione Simia, Canis, Equus, Felis, & Quadrupeda quae hactenus vidi omnia, & Aves etiam universæ, plurimaque Piscium genera, omni propemodum ex parte Homini correspondent: neque ullum secanti occurrat discrimen, quod secis de Hominis, quam illorum Animalium functionibus statuendum esse prescribat. Nisi forte quis meritò dicat Cerebri molem Homini, Perfectissimo sane quod novimus Animali, obtigisse maximam, ejusque Cerebrum etiam tribus Boni Cerebris grandius reperiri: & dein secundum Corporis proportionem mox Simiae, dein Cani magnum quoque non secus obtingere Cerebrum, quam si Animalia Cerebris tantum praestarent mole, quanto Principis Anima viribus apertius vicinius 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 Reflection the *Parisians* 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* consists 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 else, where the *Organ* is the same, 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. Vesalij 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* ; insinuating it's self 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 so. 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 *Glandula due alba 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 *Parisans* 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 Anterior 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 Matillares, 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 firmer than ordinary. The Glandula Pinealis was of a Conical figure, 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

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 anterious 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 Vermiformes. Dr. Willis (80) makes this Remark upon this Part : *Cerebellum autem ipsum, in quibusvis fere Animalibus, ejusdem figuræ & proportionis, nec non ex ejusmodi lamellis conflatum reperitur. Quæ Cerebrum diversimode ab homine configuratum habent, uti Volucres & Pisces, item inter Quadrupedes Cuniculi & Mures, quorum Cerebra gyris seu convolutionibus carent ; his Cerebelli species eadem, similis pli-carum dispositio & Partium cæterarum composituræ existunt.* 'Tis from hence he forms his 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 spacious. 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 Protuberantiae 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 does. 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.*

T H E
OSTEOL O G Y,
 OR
DESCRIPTION
 OF THE
B O N E S.

WE come now to the *Osteology*, 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*: since in their first Formation, they are *soft* 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 soft, might they be bended any way by them. But by understanding exactly the Structure of the *Bones*, we shall the better apprehend the Rise 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, 30.*

make

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 since 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 Naturâ*, 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, οὐ δὲ εἰ μηδὲ τοῖστον μηδὲ διπλοῦς διαστάσεως, πίθην δὲ ἀνατεμὰν, εἴ τοι αἱ τε γαλανότοις ἔργασσον τὰν δέσμων ἀνελέως, &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 sort of Apes to make choice of, as most resembling a Man: And concludes, ἀντίτιτων, ως ἐφεύ, τὰν δέσμων γαλανόται χεὶ τινα φύον εἴτε θηρώπεις σώματι, εἴτε εἰ μήδινε εἰ διευκλίεις. ἀμενεν δέ θητὶ ἀμφοῖν, εἴθεξης θητὶ τινα τὰν μυῶν ἀνατοπίῳ εἰλθειν, 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 Fabricâ*, 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 *Depulso Vesani cuiusdam 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 Cunæus*, 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 famous for *Anatomy*, but ungrateful to his Master, as *Vesalius*

complains in his Book *De Radice Chynæ*, and his *Examen Observationum Falloppij*. But *Gabriel Fallopius* 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 *Bartholomæus 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 futurum, fuisse nunquam plane confirmo. Quare dubitis in rebus dissentire ab eo honeste non possumus, sed magis expedire, decereque putandum est, illo Duce errare, quam his illisve Magistris hodie erudiri, nè 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 some things, do now wholly reject him, and lay him aside as good for nothing. The wisest 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 *Bartholomæus 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 differ; and how far *Galen's Descriptions* of those Parts are different from those in an *Ape*. *Volcherus Coiter* has likewise made the same Comparative Survey, in his *Analogia Ossium Humanorum, Simiæ & vera & caudata, que 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. *Simiæ Osteologia sive Ossium Simiæ & 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 *Osteology* 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-

(82) *Barthol. Eustachij Ossium Examen*, p. m. 189.

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 censured 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.

C A P. II.

De Capitis & Faciei Ossibus.

Simiæ Caput (a) rotundum est, humano simile, cynocephali verò caput oblongius. Utriusque (b) Suturæ adeo sunt obscuræ, ut earum nullum apparet vestigium. Propterea potius harmoniaæ dici merentur, quam suturæ, quia rerum consuntarum figuram non æmulantur. Attamen Volcherus suturas attribuit simiis, parum ab humanis discrepantes. In cercopitheco squamiformes desiderantur. (c) Frontis Os in calvariæ basis sede, ad conjunctionem Ossis sphenoidis, transversâ porius linea quæ 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 longè ab ea sede, quæ frontem constituit, alto & rotundo foramine parumper à lateribus compresso, illo foramine quod nervum visorium emitit, nonnihil ampliori, excavatum est. In ejus humiliori profundiorique sede, quatuor aut quinque alia foramina recta & lata cernuntur. In simia caudata (e) Os Ethmoides admodum profundè in nares descendit, paulò infra canæ regionem ex qua nasus exoritur. Harmonia per medium dividitur, & utrimque ab Osse frontis, quod etiam profundè descendit effigi videtur. (f) Superficies sellæ Sphenoidis ad narium principium in Osse frontis non est planæ & equalis ut in homine, sed est eminentissima. In posteriori sellæ eminentia glandulam excipiente, reperitur foramen exsculptum. In sellæ (g) hujus substantia nulla latet cavitas ut homine. (h) Cavitates illæ quæ in apophysibus pterygoideis exsculptæ sunt, 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. (l) Cavitas auris videtur unica, orbiculatim in plures gyros striata, nec tria Ossicula Malloclus, Incus, & Staples reperiuntur, quibus aliorum animantium aures instructæ sunt, si credimus Casserio, sed ego semper observavi.

Os

Os Zygoma (m), quâ parte ab Osse orbitario procedit, crassum & robustum est, atque ejus in medium lineâ potius quam suturâ distinguitur. In homine verò tenue existit, & suturâ dirimitur.

Simiæ Facies (n) rotunda est, cynocephali oblonga & antrorum protuberans. Ossa verò Maxillæ superioris respondent humanis. (o) Suture sunt harmoniæ, 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 proreptit, ipsumque palatum dirimit.

Maxilla inferior (p) integra est, nullâ lineâ in mento dissecta, 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.

(q) *Simia in dentibus caninis & molaribus differt ab homine. Caninos quidem habet dentes humanis similes, in unaquaque maxilla binos, qui utrumque affident & accumbunt incisoribus. Singulas radices ut incisores habent, sed altius infixas robustioresque, minus etiam ex anteriore parte, quam posteriore pressas & angustas. Ac simia cynocephalus dentes caninos longiores prominentioresque, quam vera simia obtinet. Molarium dentium numerus in homine incertus est, auctore Galeno: saepius enim in utraque maxilla sunt sexdecim, interdum viginti, nonnumquam viginti quatuor. At simia semper certus ac definitus molarium numerus. Differunt quoque Maxillares simiæ ab humanis, in figura externa, & radicum numero, quamvis enim priores duo molares simiæ, ab humanis, aut nihil, aut certè parum discrepant, 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 ferrarum mutuò sibi occurrentium modo committantur: quod profectò accuratissimus Author Galenus explicare minimè prætermisisset, si molares simiarum descripsisset.*

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

(a) The

(a) The *Cranium* of our *Pygmie* was round and globous, and it seemed 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 *Pygmie*, 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 serrated or indented very curiously, as in *Man*. In the *Lambdoidal Suture* I observed Nine *Osseum 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 side for about half an Inch, was serrated; 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 such bony ridge in the *Cranium* of the *Pygmie*. In the *Monkey* too I saw the *Squamious 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 serrated; and they had no *Osseum triquetra Wormiana*.

(c) In our *Pygmie* there was an *Os Cribiforme*, as in *Man*; 'twas about half an Inch long, and a quarter of an Inch broad; in it I numbered 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

(d) In the *Cranium* of the *Monkey* there was no *Crista Galli*; and where the *Os Cribiforme* 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 Cribiforme* 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*s in our *Pygmie* were very little, yet more than in the *Monkey*; but herein our *Pygmie* rather imitates the *Ape-kind*.

(l) 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' *Cafferius* 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 resembles a *Man*.

(n) Tho'

(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, Ἀπειλων γῳ τὸν ζῶντον αὐθρωπῷ ἔχει βραχυλάτῳ τὸν γάτῳ, ὡς τερῆστον αὐτογίαν δηλοῦντα τὰ παντὸς σώματος· εἴδες αὐθρωπῷ πίθηνος, εἶτε λύκος, οὐ σύτεροι, καὶ πειθὼν ξένης πυρονέφαλοι. 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*; and not *Gynglymoides*, as *Volcherus Coiter* and *Barthol. Eustachius* observe.

(q) Our Pygmie had in each Jaw before, four *Dentes Incisores*; 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 some of the *Molares*, that still lay hid there, or were not much exerted. In a *Monkey* in each Jaw there were two *Dentes Incisores* before; then four *Dentes Canini*, two of each side; then eight *Dentes Molares*, four of each side. 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 *Incisor* and *Caninus*; being not so broad as the two first *Incisores*, 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 *Surfaces* of the *Molares*, was not so serrated as the *Monkey's*, but liker *Humane* Teeth.

I have omitted the Printing the next Paragraph in *Riolan*, 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*.

C A P. III.

De Spina & Ossibus & Adnexis,

SIMIÆ (a) *Cervix brevis est, septem vertebris extructa, corpora vertebrarum anteriori parte non sunt rotunda ut homini, sed plana. Posticæ apophyses spinosæ non sunt longæ, & bifidæ, sed breves, simplices, & acutæ. In prima (b) vertebra, nullum spinæ vestigium appetat, immo nulla sentitur asperitas, in anteriore parte corporis prime vertebre humanæ obtusa quædam eminentia appetat, quæ in simia magis extuberat, & in mucronem producitur. Quod si vertebrae & spinas breves habet simia, (c) apophyses transversas obtinuit longiores, atque ad anteriora magis, quam in homine reflexas. Imprimis vero sexta colli vertebra, quæ hunc processum præ ceteris insignem accepta est, eumque bifidum, magisque recurvum & aduncum, quam in aliis vertebris. Hic autem spondylus sextus maximus est, propter illas transversas apophyses grandiores, in simia caudata minor est. Septimi spondyli transversæ apophyses simplices & tenues, in caudata simia bifide, & satis longæ existunt, quæ licet in homine simplices appareant, sexto tamen crassitie non cedunt.*

(d) *Prima simiae vertebra ad finem processus transversi ascendentis utrumque foramen habet, ad nervum transmittendum, quo humana caret vertebra, Septima colli vertebra in homine saepius est perforata: Unde evenit, quod transversi processus hujus vertebrae non sunt similes apophysibus transversis collii, sed potius thoracis apophysibus transversis assimilantur. (e) Vertebra-rum dorsi corpora parum ab humanis differunt, neque apophyses multum dis-similes sunt, exceptis rectis ultimarum duarum vertebrarum, quæ rectiores sunt in simiis, paulum deorsum inclinat in hominibus. In (f) postremis vertebris dorsi reperiuntur quatuor inferna apophyses articuli gratiâ constructæ. In humanis vertebris duæ tantum notantur, quas etiam in lumborum vertebris observabis. (g) In simia decima dorsi vertebra, infra supravæ suscipiuntur, at in homine est duodecima.*

(h) *Lumbi,*

(h) *Lumbi, inquit Galenus, in simiis sunt longiores quam in hominibus, si pro ratione reliquarum partium hoc estimare velis, nam in homine quinque vertebræ lumbos efformant, in simiis non secus, quam in aliis quadrupedibus sex adjunt.* (i) *Harum vertebrarum processus ab humanis differunt. Si quidem transversi in homine teretes sunt & oblongi, non nihil in exteriora conversti, costularum vicem gerentes. In simia sunt ampli, intrò spectantes, & instar squammæ tenues: figurâ caudam hirundinis referunt, aut cornu retortum, quod oblongo acutoque mucrone erigitur, ac sursum vergit. Ac tertia lumbi vertebri primò incepit transversum consequi processum, qui brevis est. Reliqui subsequentes longiores existunt.* (k) *Posteriorcs processus spinosi non sunt recti, sed supernè spectant, atque excipiuntur à supernis incumbentibus vertebris, quæ biatu sive scissura triangulari inter duos transversales processus existente, dum in posteriora simia spinam inflectit, eosdem transversales excipiunt.*

(l) *Observandum venit in homine circa radices infernas transversarum apophysœ on lumbarium, atque etiam duarum infirmarum thoracis, quædam tubercula magnitudine figuraque mespilorum nucleos referentia sèpius reperiri, quæ cum in canibus & simiis non habeantur, suspicari posset aliquis vicem illarum quas paulò ante descripsit proceritatum in homine tenere.*

(m) *Os Sacrum spinae fundamentum in homine, ex tribus vertebris conflatur: In simiis ex duabus tantum componitur, quibus ilium Ossa copulantur.*

(n) *Simiae longior est Coccyx, quam homini, pluribus ideo constructus Ossibus, quæ juxta commissuram Ossis Sacri perforata sunt, medullamque continent, atque nervos anterius & retrorsum emittunt, quæ omnia desunt in cocyge hominis: cur autem simia vero coccyge caruerit, rationem reddit Fallopius, in Observat. Anatomicis.*

(o) *Homo, inquit Galenus, ex omnibus animalibus Costas curvissimas habet, propterea latissimum pectus obtinuit. Simiae latius cæteris pectus datum, sed humano angustius.*

(p) *Porro simia, tam caudata, quam non caudata, costas viginti sex præse 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 ossæ magis quam cartilagineæ, à se mutuò disjunguntur. Costæ in simia, tam caudata, quam non caudata, spatiosis vertebrarum intermediis inseruntur: at in hominibus magis corporibus vertebrarum attexuntur.*

(q) *Sternum octo constat Ossibus rotundis, quorum primum aliquantis per prominet, supra cartilaginum duarum primarum conjunctionem, quæ duæ cartilaginiæ videntur amplexari superiore parte primum os sterni. Cartilaginiæ*

costarum commissuris Ossium sterni accrescunt, duæ ultimæ concurrunt simul in articulationem ultimi & penultiimi ossis sterni. Ultimum os sterni xiphoidem cartilagineum referens, impensè longum est, & teres.

(r) *Simia quoad scapulas & claviculas homini maximè similis est, authore Galeno. Clavica incipiens à primo sterni osse ad medium costæ rectæ procedit, inde ad acromion usque multum curvata intumescit: huic articulationi interjectum est officulum, quod in homine ad decimum octavum annum & ultra, appendix existit: at in simia, nec istud officulum, nec illius vestigium ullum appetet, immo 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 *bifide*, 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 reflected 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 infernae*, 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

(b) 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 *Lumbar Vertebræ* in the *Pygmie*, were round and thick, as in *Man*; and not thin and flat, or broad, as in the *Monkey*.

(k) The *Spines* of the *Lumbar Vertebræ* in the *Pygmie*, were strait, as in a *Man*; and not bending upwards, as in the *Ape* and *Monkey kind*.

(l) 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 mistaken, nor is he here consistent 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 praesenti textu facit, tanquam quartum adjungens assumpit, à Sacro interim distinguens.) sapient autem tribus duntaxat propriè sumptum Os Sacrum à Coccyge distinctum expressit, uti nunc etiam facit: unde tribus ex partibus constructum esse ait, tanquam ex propriis Vertebris.* So *Fallopianus* and others do make the *Os Sacrum* in a *Man* to consist of six *Bones*, sometimes five. In our *Pygmie* the *Os Sacrum* was composed of five *Bones*: But in the *Skeleton* 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 *Skeleton* 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 Skeleton*; 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 Skeleton*, 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* styles it, δ τεγλὸς κόκκινος, *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 Geographiâ Arabica Nubiensi*, pag. 70. *fabulosum puto quod de Anglis Caudatis referunt Historici, quibus ob injuriam D. Thomæ Cantuariensi illatam, Deus Coccygem instar Caudæ produxit* (85).

(o) In our *Pygmie* the *Ribs* were altogether as much curved, as in an *Humane Skeleton*; 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, tho' sometimes there has been observed thirteen of a side. As to the other Particulars that *Riolan* mentions, viz. the number of the *Costæ veræ*, and the ossious Extreams of the *Nothæ*, and the Articulation of the *Ribs*, herein our *Pygmie* more resembled a *Man*: for it had but seven *Costæ veræ* that were articulated to the *Sternum*; and the Extreams of the *Nothæ* were *Cartilaginous*, not *Ossious*, and continued to the *Sternum* as in an *Humane Skeleton*; and the Articulation of the *Ribs* was more on the Body of the *Vertebrae*, 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 Ingraffias* (86) makes eight Bones in the *Sternum* of Infants; and tells us, that in time these Bones do coalesce, and grow fewer. *Galen* makes seven Bones in the *Sternum*, according to the number of the *Costæ veræ* that insert their *Cartilages* into them. But the eighth Bone *Ingraffias* faith, is for the *Cartilago Ensiformis*. In the *Sternum* of our *Pygmie* I numbered seven Bones, the two last being small and partly *Cartilaginous*; and here the *Cartilages* were inserted at the *Commissures* and *Joinings* of the Bones of the *Sternum*. The *Cartilago Ensiformis* was long and roundish. The whole of the *Sternum* of our *Pygmie* much more resembled the *Humane Skeleton*, 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. Ingraffias Comment. in Galen. de Ossibus, Cap. 12. Text. 1. pag. m. 190,*

narrower,

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 self, 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 *Clavicularia* to the *Acromium*, which in time might become long; this *Cartilage* was about a quarter of an Inch long.

C A P. IV.

De Artibus Superioribus.

(a) **S**IMIÆ & Hominis Omoplatæ omnino similes sunt.

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

(c) Cubiti Ossa duo in utraque simia humanis respondent.

(d) Carpus simiæ non valde differt ab humano, obtinuit tamen nonum os, de quo sic loquitur Eustachius: Hoc ossiculum non in prima brachialis acie est locatum, sed tertio ejusdem aciei ossi incumbit, atque inter ea quæ indicent & medium digitum sustinent seipsum inserit: vocatur à Galeno dipus, hoc osse videntur carere simiæ caudatae, sed ejus loco adipiscuntur os peculiare, quod carpi ossi cubito substrato annexitur, & satis longè protuberat. Deinde instar cornicis versus manus volam incurvatur, atque cum processu ossis carpi radio articulati, magnam cavitatem muscularum tendinibus efformat.

(e) Metacarpij, Digitorumque Ossa simiæ, tam caudatae quam non caudatae, parum admodum ab humanis ossibus discrepant. Simia quidem magnum manus digitum Pollicem, muiulum obtinet, & curtum, & inditum, & spinquum, non oppositum, instar alterius manus, ut in homine: Reliqui digiti multè sunt minores digitis pedum.

(a) I

(a) I have already mentioned that the *Scapula* or *Omoplate* in our *Pygmie* did not seem 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 *ossified* : 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 *άρτιχειος*, and *Hippocrates μέγαρος*, 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 vigorously disputes against the *Epicureans* and the Followers of *Asclepiades* ; and from the admirable Structure and wise 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*, οὐτ', ὁ πρᾶξις δέννει εἰχοτες εἰ τοσαῦταις καταρύσσει μέμφασις, οὐτ' εἰ τὸ θηρίον τῷ τωντινῷ, γέτε τὸ τόπον, οὐτε τὸ τρέπον τῆς ἐμφύσεως, αλλ' εἰ ἀπόδοις αἵταις θωματισθενταῖς λόγιαν δρᾶντες, μήτις μόνης δύσολυμην κατὰ τὸ αὐτὸν τρόπον εἰ ἀμφοτέροις τοῖς μετάλοις δικτύουσι, ηγε τάχτις εἰ αλλο-

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

γως, ἀλλ' ὅπι μηδὲν αὐτῆς ἐχεῖσθαι, εἰνὶ φάτε, οὐ χωρὶς τέχνης, ἔπειτα τὰ τοιῶντα γεγονέναι. i. e. Vos, per Deos immortales, cum nihil habeatis, quod in tot Insertionibus reprehendatis, neque Tendonum molem, neque locum, neque Insertionis modum, sed in his omnibus mirabilem quandam Proportionem videatis, unā solā in utroque magno digito similiter perditā (Et hoc non sine ratione, quod eā non egebamus) temere dicitis Et 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*.

C A P. V.

De Artibus Inferioribus.

OSSA (a) Ilium in utraque simia, tam caudata quam non caudata, toto habitu, & figura distant ab humanis: debiscunt enim eo in loco, ubi pubis Osse esse debebant, atque omnino privantur Osse pubis: propterea ad velociter currendum ineptae 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 coxae, committitur. (c) In homine cervix rotundi capit is femoris oblonga est, & sensim oblique deorsum ducitur. In simia vero brevis, & propemodum transversa visitur. Sed femoris cervice, apophyses due, trochanteres dictae, in simia similes sunt humanis, verum in illa, ut in caudata minores.

(d) Patella utriusque simiae manifestum discrimin ab humana demonstrat: est enim oblonga, non rotunda. Quamvis autem extrinsecus gibba sit, atque intus cava, nihil minus longe aliter se habet quam in homine. Nam secundum

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

(e) Tibiae utrumque Os in utraque simia humanis Ossibus simillimum est.

(f) Simiae Pes ab humano maximè discrepat, est enim oblongus latusque homini, angustus brevisque simiae, pro ratione corporis, pedisque digitii longiores sunt, sed metatarsi Ossa breviora, calcaneum vero angustius, & anteriori in parte qua cum Ossē cyboide committitur, latius evadens, magisque inibi longum, quam retro, impedit ne simia diu erecta, & stare, & ambulare queat. Astragalus Galeno tenuis non efficitur, sed manens sublimis, Ossi scaphoidi conjungitur, quod simiae repugnat, in qua astragalus humilem, oblongam atque tenuem cervicem habet. Planta in simia ex quatuor Ossibus componitur. Pollex ex tribus, inquit Eustachius. Quamvis Volcherus in caudata simia nullam observarit differentiam, quam discreparent ab homine. (g) Digitorum notissima est discrepantia in homine, ut notavit Galenus, omnes una serie disponuntur, brevissimoque spatio discreti, multo minores sunt, quam qui in manu habentur. Nam quantum pes summa manu major est, tanto illius digitii manus digitis sunt minores.

(h) Accedit quod pollex longitudine indici aequalis est, quem dupla crassitudine superat, talisque est quatuor digitorum commensuratio, ut ab indice ad minimum semper deficiat longitudo: & secundæ aciei Ossa, si indicem exceperis, breviora sunt iis, quæ in tertia phalange reponuntur. Hæc omnia in utraque simia aliter se habent, omnes enim pedis digitii insigni spatio discreti sunt, multoque longiores, quam in manu existunt: Pollex cæteris digitis brevior tenuiorque est, atque diversam ab aliis positionem sortitur, debilis etiam, ut pollex in manu valde ab indice. Digitii pedis simiae, manus humanæ digitorum seriem imitantur, est enim pollex in pede simiae reliquis digitis brevior, inter alios quatuor digitos ut in manu, medius omnium longissimus.

(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 Dehiscence 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 asunder;

asunder ; 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 long.

(b) I did not observe any difference in the Structure of the *Thigh-bone* 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 *ossified*. 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 *Skeletons* 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 Toe*. 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 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 *Eustachius* 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*.

(h) The *great Toe* in the *Pygmie*, was shorter than the first of the other *Toes*; tho' in a *Man's* it's 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 *Eustachius* 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 set 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.

C A P. VI.

De Sesamoideis.

IN Homine Ossa Sesamoidea paucæ sunt, magnaue ex parte cartilagino-
sa, & si ea quæ pollici applicantur exceperis, in constanti sede firmata.
In simia verò multa, atque magna occurrunt, & ossa perpetuò 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 firmly 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 first 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 Coccygis*, 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 Calcis* in the *Pygmie*, was about ten Inches. From the setting on of the first *Rib*, to the fastening on of the last, was four Inches. The 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 sort of this *Species* of *Animals* has been observed to do ; for then I could not expect, to have seen here, the *Bones* themselves so solid, or the *Cranium* to be so entirely ossified, or the *Sutures* to be so closed and indented, and the *Backbone* and *Ribs* so 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 *ερυθ* of growth sooner 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, since 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 Compte* observed an *Ape* in the Straits of *Molucca* four foot high ; but this may not be our sort. 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 sort 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 justify our present Subject

Subject to be exactly the *Pygmie* of the Ancients: Of this *Quadru-manus* sort 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* (saith he) *hanc longè ab his nasci, quorum qui longissimi sunt, non longiores esse quam pedes duos & quadrantem.* And so *Pliny* (89), *Suprà hos extremâ in parte Montium Trispithami, Pygmae que 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 *Dodrants* 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 seven Inches long, or as *A. Gellius* tells us, two Foot and a quarter. So our *Animal*, before Dissection measured twenty six Inches; but in the *Sceleton*, only four and twenty Inches. Not but *Strabo* (92) out of *Megasthenes*, does mention too, the πενταπάπυς ἀθρώπες, as well as the τετραπάπυς; 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 sort 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 amiss. 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. No. 7. 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, N. 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 walking, 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* flat 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 sides of the Body, which is different from all other *Quadrupeds*, and in it's Progression will be of no use at all, nay, 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 elevation 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, *Hominis genua & Cubita contraria, item Ursis & Simiarum generi, ob id minimè perniciibus*. 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 *Bruntes* 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 confess 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 so, 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 *Scapulae* 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 it's 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 Consideration Galen (94) tells us, That a Man, if he would, could not walk upon all four, Δεόντως ἐν αὐθρωπῷ (saith he) οὐδὲ εἰ βελτίστην βαδίζειν τὴν πετάρων καλῶν διεύσαι' ἄν, ἀπομένων δικαῖος πίπτω τὸ δέργην τῷ γεννήτῳ τὰς ὠμοπλάκας ἀρθρών. i. e. Merito itaque Homo ne, si volet, quidem ambulare quatuor artibus queat, quod in ipso Scapularum Articuli longè à Thorace sint 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, Τὸ δὲ γένος ὠμοπλάκας οὐ πλεῖστον αὐθρώπῳ, οὐ μαίασα προστοκεῖν, οὐ τοι γένος δεδομένῳ ἐσίνεται ταῦτη τοῖς αὐθρώποις εἰς ὀνυτύτην βαδίσειν· ἀπαμφοτελῆς τοιγέτεν ἐκελέεσι τοῖς γένουν, οὐ διπεντεῖν τοῖς δύναμεσι, οὐ τε τελεστούν, ἀλλὰ οὐ ὡς διπούν χωλόν, οὐ δὲ ἀκριβῶς ἐρδὸν σῆνας δύναται, οὐ ὡς τελεπούν, ἀνάπτενται τε αυτα, οὐ βερεδύ, διὰ τὸ πλεῖστον ἀποκθεῖ τὸ δέργην τὸ γένος τῶν ὠμον ἀρθρών, γεθάπερ εἰ οὐ τῷ ἀλλων τοῖς λόγων διποτασσέν τὸ δέργην ἐκλός διποχωρίσειν. i. e. Quod vero ad Scapulas & Claves attinet, homini maxime est similis, quamquam eà 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 Eipes, clauda est, non enim recte planè 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, saith he (95), "Εσὶ δὲ ὠμοπλάκας αὐθρώπῳ πιθμῷ, ὡς ἀν σεργίσιλον τε μαίασ' ἔχων τὸ περιστόν, οὐ τὰς πυρόδοντας μηρούς, τὸ στροφὸν πλαύ, οὐ τὰς πλεῖστας μακρογλίξες, οὐ μητα δασύς, οὐ ὄφδος ἵσαλος γελῶς, οὐ οὐ βαδίζειν ἀμέμπτες, οὐ δένων κανέως διεύσαι. i. e. Est autem simillima homini Simia, ut quæ rotundam præcipue habet faciem, Dentes Caninos parvos, latum Pectus, Claviculas longiores, minimum Pilosa, quæ recta etiam stat bellè, ut & incidere sine errore, & currere velociter possit.

We have seen upon what accounts our Pygmie may be thought not to be a Quadruped, or that it's natural Gressus 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.

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, sufficiently secures 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 preserving the *Æquilibrium* 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 feeble 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 represent what I saw my self. But what very much sways 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 observing 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 so 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 safely 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 sort of *Ape* and a meer *Brute*; and as the Proverb has it, οὐδὲν δέ τι πίστει, καὶ νοεῖται εὖ σύμβολα. (96) An Ape is an Ape, tho' finely clad.

This Proverb, perhaps, might have it's rise 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, Λεγεται δη βασιλεὺς τοις αἰγυπτίοις, πιθίνες τοτὲ προφίξην διδίζει, &c. i. e. Tertur *Ægyptius Rex* quidam *Simias* ut tripudiarent instituisse, *Animaliaque* (nam admodum ad res *humanas* imitandas sunt apta) celerrime didicisse, ut Personata ac Purpura-ta saltarent: eratque admodum visu res digna, donec Spectator quispiam.

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

urbanus nubes è sinu depromptas in medium abjiceret : id simiæ videntes, tripudij oblita, id quod erat, simiæ pro saltatoribus evaserunt, Personas conterebant, vestitum discerpebant, invicemque pro fructibus depugnabant, ita 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 so. 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 loose, 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 set 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. *Copper*, 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 fuller account of them, whenever 'tis 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.

(98) *Lucian. pro Mercede conductis*, p.m.363. (99) *Ælian. Hist. Animal.* lib.5.p.m.26. (100) *Kercher. China illustrata*, Part.4.cap.7. p.m.195.

T H E

M Y O T O M Y

O R

D E S C R I P T I O N

O F T H E

M U S C L E S.

Of the Muscles of the Abdomen.

TH 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 Vertebræ*, 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 *Pygnie*. The *Rectus* (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 Urinae* agreed with the Figure of the *Bladder of Urine* of this *Animal*. The *Sphincter Vesicæ* differ'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 *Sphincter Ani* differ'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 observ'd 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. *Organis 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 Coronæ*; 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 serv'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*, *Coracohyoideus*, *Mylohyoideus* 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 *Styiform 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*, *Cricoarytænoideus*, *Posticus* and *Lateralis*; the *Thyroarytænoideus*, and *Arytænoideus* varied not from those in *Men*. The *Muscles* of the *Fauces* also, differ'd not from those in *Man*, (viz.) The *Stylopharyngæus*, *Pterygopharyngæus*, *Oesophagæus* and *Vaginalis Gulae*. The following *Muscles* of the *Gargaron* were exactly 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.) seem'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, *Ten. linem habet intermedium pollice longum, & gracilem, enascitur, autem non ab Apophyse Styloide, sed ab osse Basilari.*

The *Muscles* of the *Thorax* which appear on the fore-part come next. The *Intercostales externi* and *interni*, (Fig. 4. 32.) *Triangularis*, *Scalenus* *Prius*, *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 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 *Apes*. The *Diaphragma* was larger in this *Animal*, than in *Man*,

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 Clavicle ; when it Acts, it draws up the Clavicle, assisting the *Elevator Scapulae*, 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 Dogs and Apes, and described by *Galen* in Humane Bodies, in whom it is not existent. *Drelincourt* calls it *Levator Omoplatæ*, (adding) *ab Apophysibus transversis cervicalibus in Acromion & extrellum claviculae extenditur*.

The Muscles employ'd in the Motion of the Scapula, are the *Cucularis*. (Fig. 4. 1. 1. 1.) *Rhomboides* (Fig. 4. 6.) *Levator Scapulae* (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 inferior posticus* (Fig. 4. 32. 32.) These differ'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 employ'd in the Motion of the Head of the Pygmie, differ'd 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 Annens*, sometimes observed by me in Humane Bodies, was also in this Animal ; and so was the *Rectus Lateralis* described by *Fallopianus* in Men. Nor was any of those Muscles I have discovered in Humane Bodies, wanting in this Animal, but the *Interspinales Colli*.

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 *Longissimi*.

mus Dorſi (Fig. 4. 28.) not unlike the *Sacrolumbalis* above noted, was not so thick and fleshy 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. 3. 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 Scapulae*. 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 sometimes 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 *Latissimus Dorsi* 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 represents 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 *Olecranon* of that *Animal* : This part of the *Latissimus Dorsi* seems a proper Instrument in turning the *Os Humeri* to a prone Position, 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 Nerve 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.) *Brachiaetus internus*, (ib. 18.) *Gemellus*, (Fig. 4. 14.) *Brachiaetus externus*, *Anconaeus*, (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 *Men*.

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 Digi*t*i*, as in *Men* and *Apes*, which *Drelincourt* observes. The *Extensor Indicis*, *Abductor Indicis*, (Fig. 3. 30.) *Extensor minimi digit*i**, (Fig. 4. 20.) *Abductor minimi digit*i** (Fig. 4. 25.) and *Interosij Manu*s**, differ'd not from those in *Men*. All the Muscles of the *Thumb* resembled those in *Men*, (viz.) the *Flexor tertij internodij pollicis*, *Abductor Pollicis*, (Fig. 3. 28.) *Flexor primi & secundi ossis pollicis*, (ib. 29.) *Adductor 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 *Gluteus minor*; nor did the *Gluteus maximus* (Fig. 4. 33. 33.) resemble the *Humane*: It was merely *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 fleshy Fibres so divided: This *Sylvius* describes for the *Membranosus* in *Apes*. The *Parisians* give a very imperfect account of the *Musculi Glut*ai** in *Monkeys*, where they tell us, *The Muscles of the Buttock had a Figure differing from those*

those in Men; being shorter, by reason the *Osса Ilium* in Apes are much strai-
ter than in Man. The *Glutaeus medius* was also longer than that in Man.
The *Psoas magnus* was also longer ; which *Sylvius* (from it's Figure I
suppose) calls *Lumbaris Biceps* in *Apes*. The *Psoas parvus* was also lon-
ger 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 *Psoas* ;
and were inserted into the upper and inward part of the *Os Pubis*. The
Iliacus Internus was long, conformable to the Figure of the *Os Ilium* of
this Animal ; (Vide Fig. 5. 28. 28.) The *Pectineus* 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 Tu-
bere etiam nata, postico cruri propè toti affixa, ad usque Cavitatem inter duos
condylos medium : tertia minima & brevissima ossis pubis in medium & po-
sticum 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 broa-
der than in Men. The *Quadratus Femoris* was less than in Man. The
Obturator extorsum 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 *Se-*
minervosus (Fig. 4. 40.) and *Semimembranosus*, differ'd not from the
Humane. The *Biceps* (Fig. 4. 41.) had it's second beginning, some-
what lower, than in Men : The Parisians 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 *Rectus* had a double or-
der of Fibres, as in Man. The *Popliteus*, I must confess escap't my no-
tice. *Sylvius* tells us, in *Apes*, it agrees with Men. The rest of the Mu-
scles 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 *Gastrocnemius ex-*
ternus (Fig. 4. 43.) had not so large a Belly, nor were it's Fibres so va-
riously disposed ; but it continued fleshy much lower, than in Man.
Sylvius tells us in *Apes*, *Capita Gemellorum* (meaning this Muscle) *Offa*
Sesamoidea habent, firmantia in Condylis Crus cum Tibia. The *Plantaris*
differ'd not from that in Man. The *Gastrocnemius internus*, or *soleus*,
(Fig.

(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* observ'd an *Os Sesamoïdes* in the Tendon of this Muscle in *Apes*. The *Peronens 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 *Abductor*, 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 *Abductor minimi Digitii*, 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 *Reflections*, 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 *Monkeys* 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.*

1. 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 *Rosstrum* 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 *Cæcum* 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 *Os triquetra Wormiana*. In Apes and Monkeys 'tis otherwise.

28. It had an *Os Cribiforme*, 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 Pterygoideus*, as in *Man*: In Apes and Monkeys they are wanting.

31. The *Os 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.

33. The Shape of the Teeth more resembled the *Humane*, especially the *Dentes Canini* and *Molares*.

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

35. The *Vertebrae* of the Neck had not those *Foramina* for transmitting the *Nerves*; which *Apes* have and *Man* has not.

36. The *Vertebrae* of the Back, and their *Apophyses Rectae* like the *Humane*: and in the lower *Vertebrae* but two *Apophyses infernæ*; not four, as in *Apes*.

37. There were but five *Vertebrae* of the Loins here, as in *Man*: in *Apes* and *Monkeys* there are six.

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

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

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 *Costæ veræ*; and the Extreams of the *Nothæ* were *Cartilaginous*; and the *Ribs* were articulated to the body of the *Vertebrae*. In *Apes* and *Monkeys* there are eight *Costæ veræ*; and the Extreams of the *Nothæ* are *ossious*; and the *Articulation* is in the Interstices of the *Vertebrae*.

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

48. These *Muscles*, viz. The *Obliquus Inferior Capitis*, the *Pyriformis* and *Biceps Femoris*, were like the *Humane*; whereas the same in *Apes* and *Monkeys* are different. And Note, That all the other *Muscles* that are not otherwise specified in the following Catalogue, were like the *Humane* also; but whether all the same *Muscles* in *Apes* and *Monkeys* resemble the *Humane*, could not be determined, for want of a Subject to compare them with, or Observations made by others.

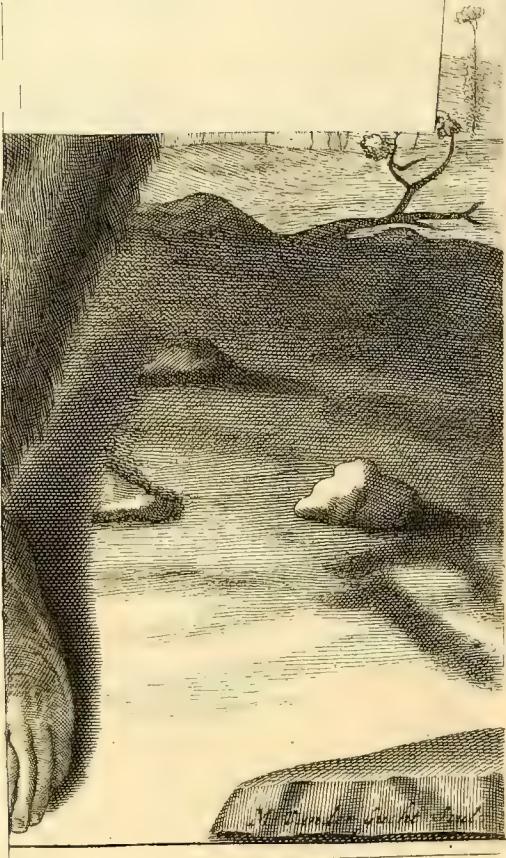
The Orang-Outang or Pygmie differ'd from a Man, and resembled more the Ape and Monkey-kind.

1. IN the littleness of it's Stature.
2. In the flatness of the *Nose*, and the slit in the *Aæ Narium*.
3. In having a rising 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* set at a distance from the other, like a *Thumb*; and being *Quadrumanus*, like the *Ape-kind*.
9. In having the *Shoulder* and *Thigh* shorter.
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 *Frænum* to the *Præputium*.
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 *Vertebrae* 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*.

Fig: 1.



Néanderthalien



25. The *Os Sacrum* altogether like the *Ape-kind*, only in the number of the *Vertebræ*.
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 fleshy Belly of the *Palmaris*; *Attollens Auriculam*; and *Retrahens Auriculam*.
32. The *Elevatores Claviularum* 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*, *Glutæus maximus & medius*, *Psoas magnus & parvus*, *Iliacus internus*, and the *Gasterocnemius internus*.
34. These *Muscles* differ'd likewise from the *Humane*, viz. the *Deltoides*; the *Pronator Radialis teres*; the *Extensor Pollicis brevis*.

The Explanation of the Figures.

Figure the First

REPRESENTS 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* flat; 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* full chested and spread; the *Mammae* or *Teats* placed as in *Man*; the *Belly* flat; the *Navil* as in *Man*; the *Penis* half-way covered with the *Prepuce*, which had no *Frenum*; no pendulous *Scrotum* here; the *Thighs* a little divercated; 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 Fore-parts of the Body rather less hairy than here represented; and the *Head* is too much shrunk down between the Shoulders.

The Second Figure

REpresents 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 setting 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

REpresents 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 *Claviculae*.
- 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*.
- l. A large Trunk of the *Arterie*, and a *Nerve* in the *Cubit*, as in *Human* 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

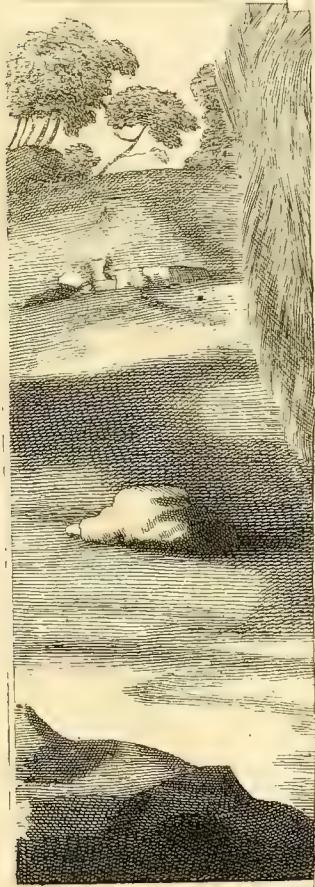


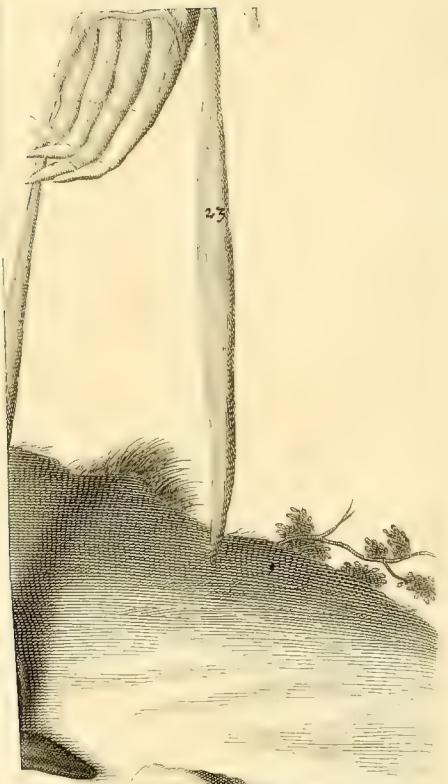
Fig: 2:



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- r. r. The *Tunica Vaginalis*, containing the *Vasa Præparantia*, &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*.
n. 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. *Sternohyoideus*.
X. Part of the *Corocohyoideus*.
11. Part of the *Digastricus*, and it's Insertion into the *Chin*.
12. *Elevator Claviculae*, 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 *Brachius 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 side, being dissected from it's Insertion, 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 Insertion.
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 left 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*.

29. The *Flexor Secundi internodij Pollicis.*
 30. *Abductor Indicis,*
 31. 31. The *Lumbricales.*
 32. The *Abductor minimi digiti.*
 33. The *Pectoralis*; that of the left side being raised; 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 Recti*, 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 *Pectenæus.*
 48. The *Gracilis.*
 49. 49. The *Tibialis Anticus.*
 50. Part of the *Gastrocnemius.*
 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 *Interoijij.*
 55. The *Abductor minimi digiti.*
 56. The *Pronator Radj Quadratus.*
 57. Part of the *Supinator Radj brevis*; at it's Insertion to the *Radius.*

Figure the Fourth

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

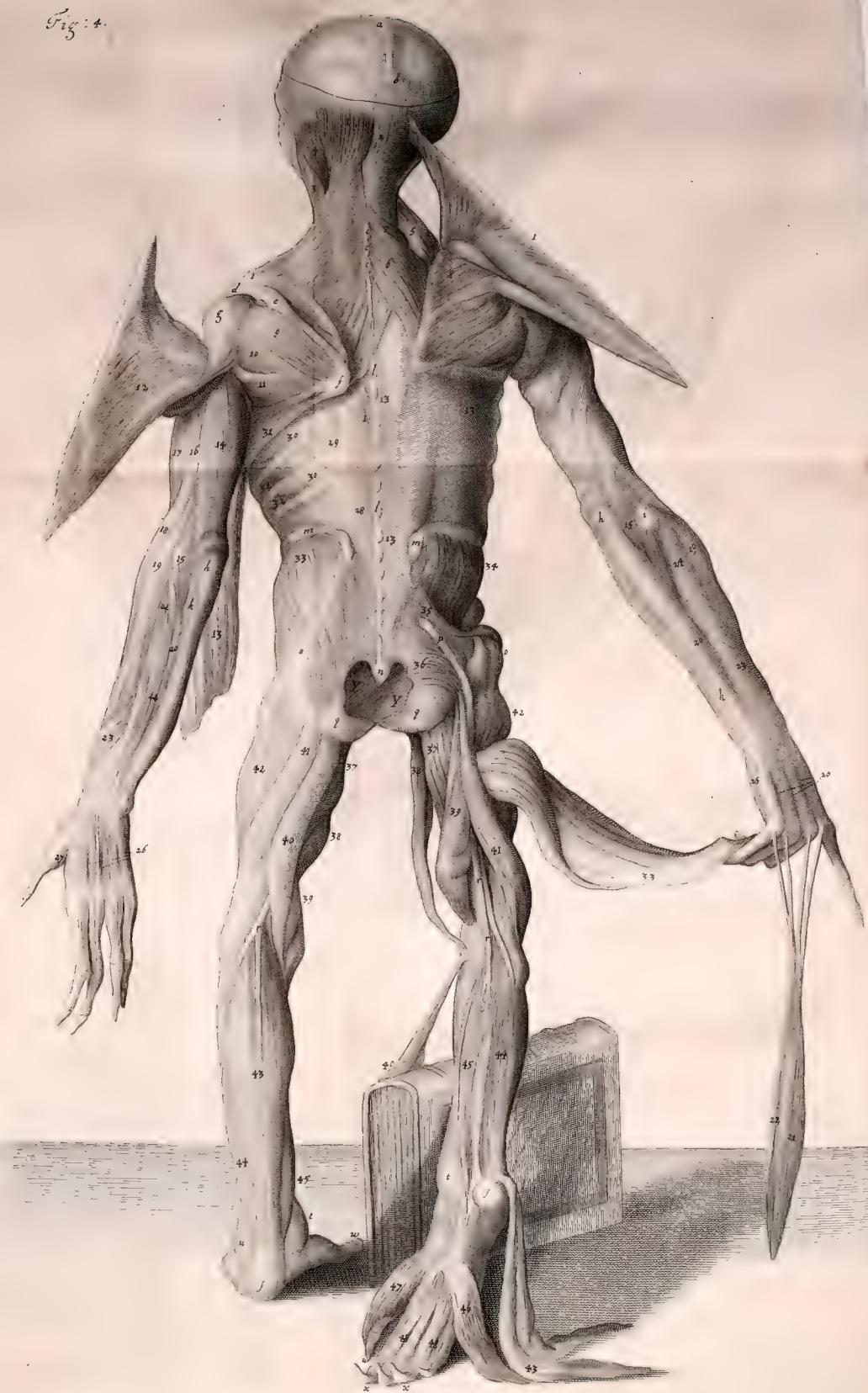
a. THE Sagittal Suture.

b. The Lambdoidal Suture.

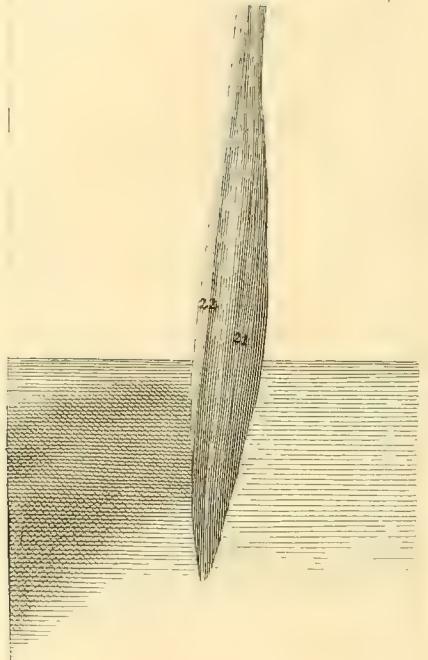
c. c. c. The Spines of the Superior Vertebræ of the Thorax, and of one of the Inferior of the Neck.

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*.
- l. l. The *Spines of the Back and Loins*.
- m. m. The *Spines of the Osseum Ilium*.
- n. The *Os Coccygis*.
- o. The *Great Trochanter*.
- p. The Trunk of the *Great Crural Nerve*.
- q. q. The *Osseum 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*.

Nº 1. 1. 1. 1. 1. The *Musculus Cucularis*, raised on the right side, and left fastened to the *Occiput*, and to its Insertion at the *Spine* of the *Scapulae* and *Clavicle*.

- 2. Part of the *Splenius*.
- 3. Part of the *Mastoideus*.
- 4. Part of the *Complexus*.
- 5. Part of the *Levator Scapulae*.
- 6. *Rhomboides*.
- 7. Part of the *Serratus superior posticus*.
- 8. *Suprasspinatus*.
- 9. *Infraspinatus*.
- X. The *Teres minor*, which is larger here than in *Man*.
- 11. 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 its Original and hanging down.
- 14. The *Biceps Externus seu Gemellus*.
- 15. The *Anconaeus*.
- 16. Part of the *Brachaeus internus*.
- 17. Part of the *Biceps internus*.
- 18. The *Supinator Radij longus*.
- 19. The *Extensor Carpi Radialis*.

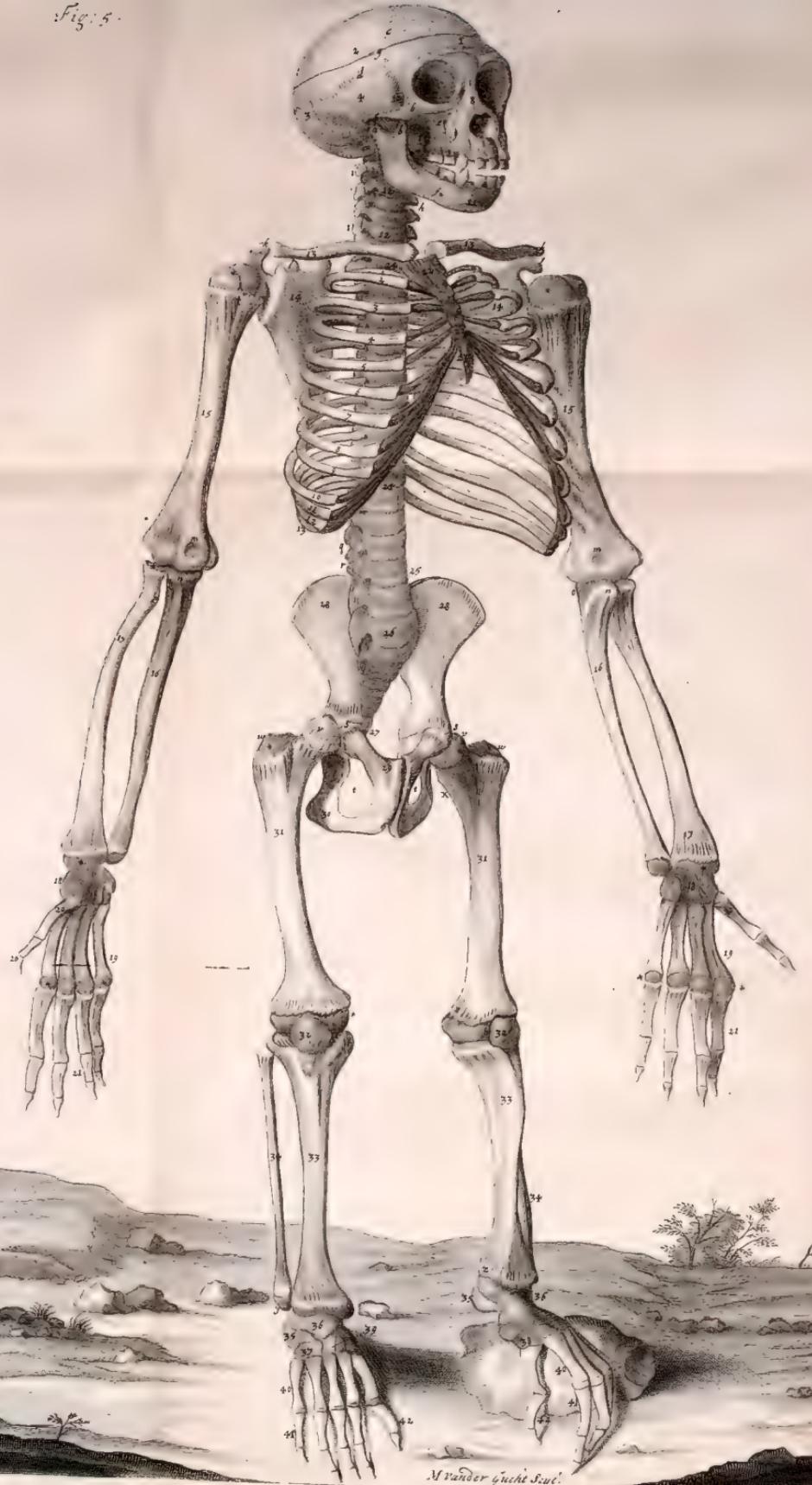
20. 20. The *Extensor Carpi Ulnaris*.
 21. 21. The *Extensor Communis digitorum*, on the right side hanging by its Tendons.
 22. 22. The *Extensor minimi digiti*, on the right side hanging down.
 23. The *Extensores Pollicis*.
 24. The *Supinator Radij brevis*.
 25. The *Abductor minimi digiti*.
 26. The *Musculi interossei*.
 27. The *Abductor Pollicis*.
 28. The *Longissimus Dorsi*.
 29. The *Sacrolumbalis*.
 30. 30. The *Intercostales*.
 31. Part of the *Serratus major anticus*.
 32. The *Serratus inferior posticus*.
 33. The *Gluteus maximus* on the left side *in situ*, on the right freed from its Origin, and left at it's Insertion.
 34. The *Gluteus 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 Ossis Pollicis*, together with the *Abductor Pollicis*, raised from it's Origin, and hanging down.
 48. The *Musculi Lumbricales*.

The fifth Figure

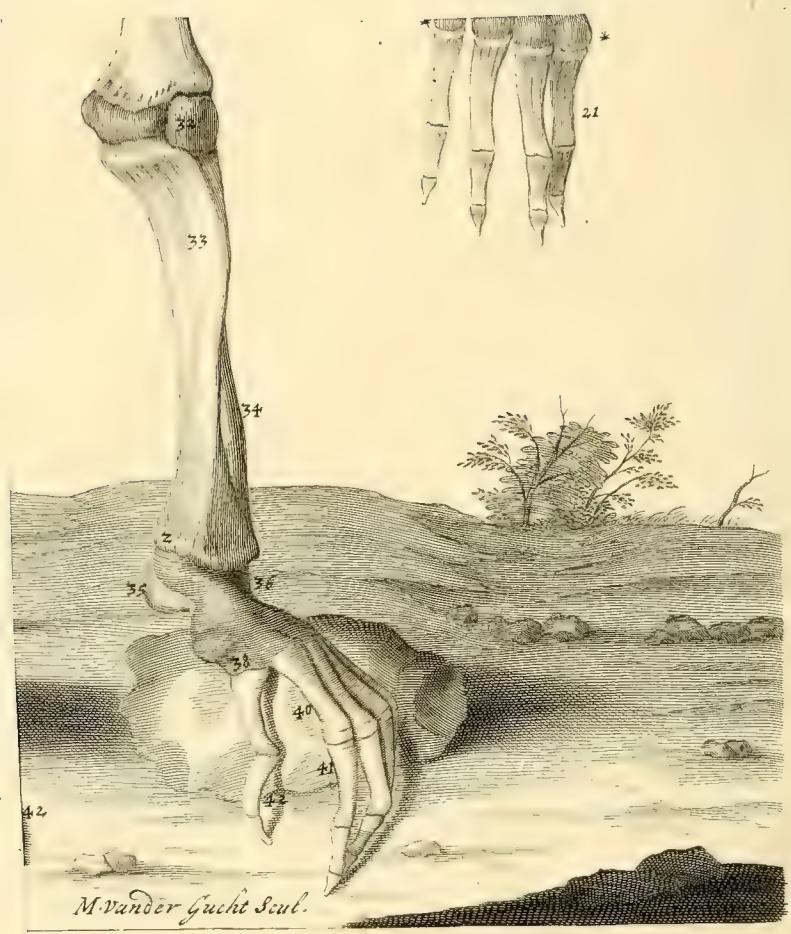
Represents the Sceleton, or the Bones.

1. **T**HE *Os Frontis*.
 2. The *Os Bregmatis*.
 3. Part of the *Os Occipitis*.
 4. *Os Temporale, seu Squamosum*.
 5. *Os Jugale, seu Zygomaticum*.
 6. The first Bone of the Upper Jaw.
 7. The *Os Lachrymale*.
 8. The

Fig: 5.



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8. The *Os Narium*.
9. The fourth Bone of the *Upper Jaw*.
10. The upper part of the *Os Sphenoides*.
11. The *lower Jaw*.
 - a. The *Processus Condylloides* of the *lower Jaw*.
 - b. The *Processus Corone*.
 - c. The *Coronal Suture*.
 - d. The *Sutura Ossis 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 Jaw*.
 - g. Where the *Skull* was sawed, 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 Scapulae*.
14. 14. The Internal parts of the *Scapula*.
- l. l. The *Processus Chorocoides Scapulae*.
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 Ensisformis*.
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

- 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 lesser *Trochanter.*
 32. 32. The *Patella*, which was *Cartilaginous.*
 33. 33. The *Tibia.*
 34. 34. The *Fibula.*
 35. 35. The *Os Calcis.*
 36. 36. The *Astragalus.*
 37. The *Os Cubiforme.*
 38. The *Os Naviculare, seu Cuneiforme majus.*
 39. The *Offa Cuneiformia minora.*
 40. 40. The *Offa Metatarsi.*
 41. 41. The *Offa Digitorum.*
 42. 42. The Bones of the Great *Toe.*
 y. The *Malleolus externus.*
 z. The *Malleolus internus.*
 * * * * Signifie, that those Parts were *Cartilaginous.*

The sixth Figure

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

- A. A. THE back side of the *Stomach*, it being turned upwards.
 B. Part of the *Oesophagus*, 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.*

g. g. The

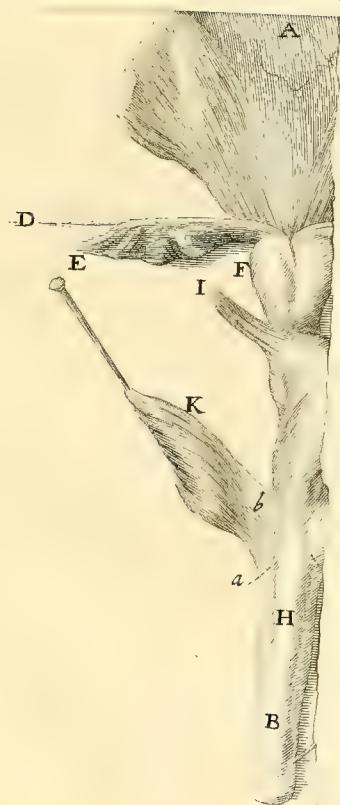
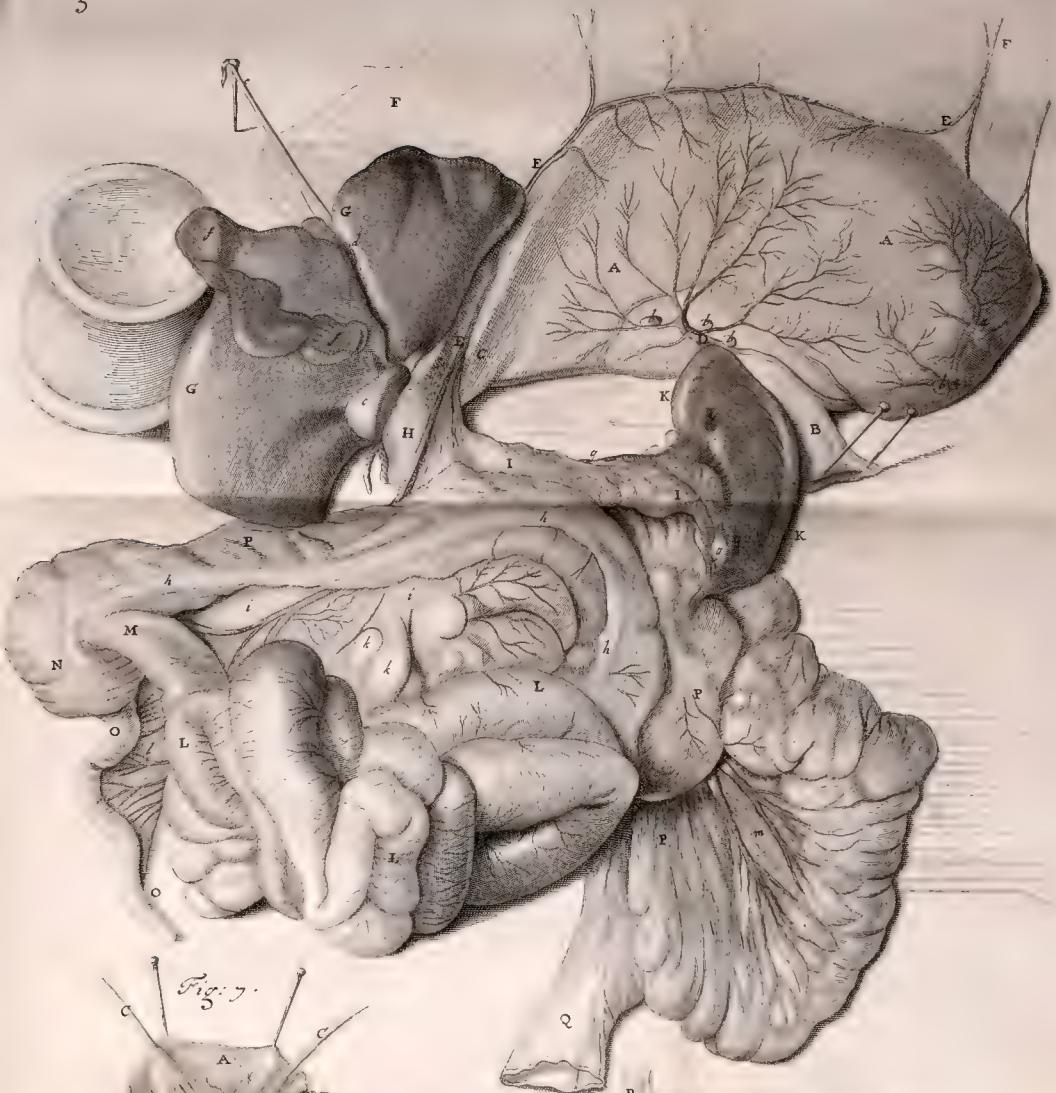


Fig: 6.



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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 Ileum just before it enters the Colon.

N. The beginning of the Colon.

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

O.O. The Cæcum, 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.

l. That part of the Mesenterie, which is connected to the Cæcum, or the Mesocæcum.

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

Q. The upper part of the Intestinum Rectum.

The seventh Figure

Shews the Organs of GENERATION.

A. **T**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 Diferentia.

E.E. The Vesiculae Seminales.

F. The Glandulae Prostatae, or Corpus Glandosum.

G. The Bulb of the Cavernous Body of the Urethra, covered with the Musculus accelerator Urinæ 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 Pair.

K. K. The Musculi Directores Penis.

The Eighth Figure

Exhibits part of the *Musculus Latissimus Dorsi* dissected.

A. A. **T**HAT part of the *Muscle* that lies on the *Back*, as in *Humane Bodies*.

B. Its *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 *Urinary Parts and Organs of Generation*.

A. **T**HE left *Kidney* entire.

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

B. The Right *Kidney* opened, to shew 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 c c, in *Man* to the several *Papille*, where their *Orifices* open and empty themselves into the *Pelvis*.

c. c. The said *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 *Glandulae Renales*.

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

d. The *Celiac Arterie*.

d. The *Arteria Mesenterica superior*.

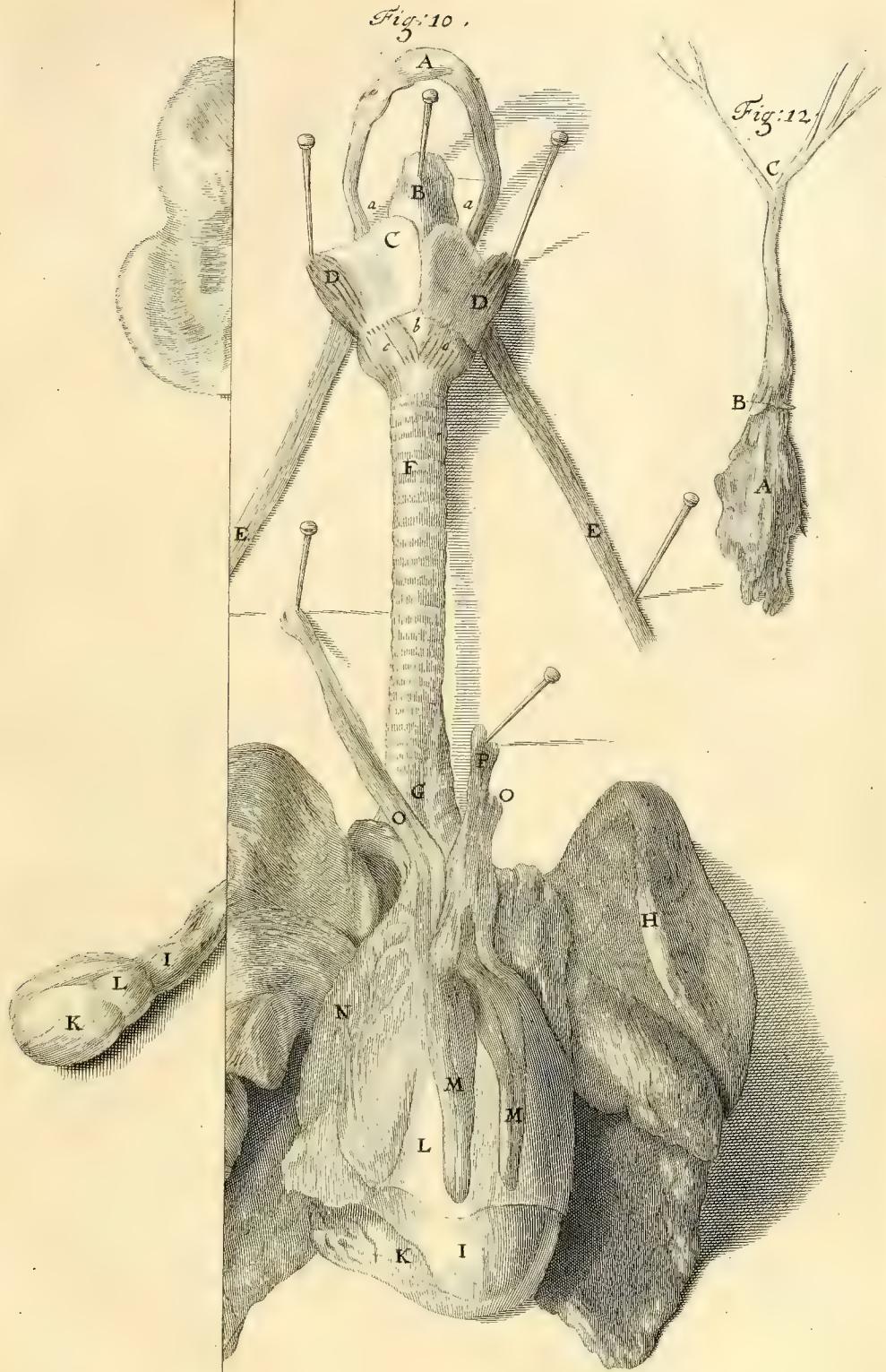
g. The *Arteria Mesenterica inferior*.

E. The Descending Trunk of the *Vena Cava*.

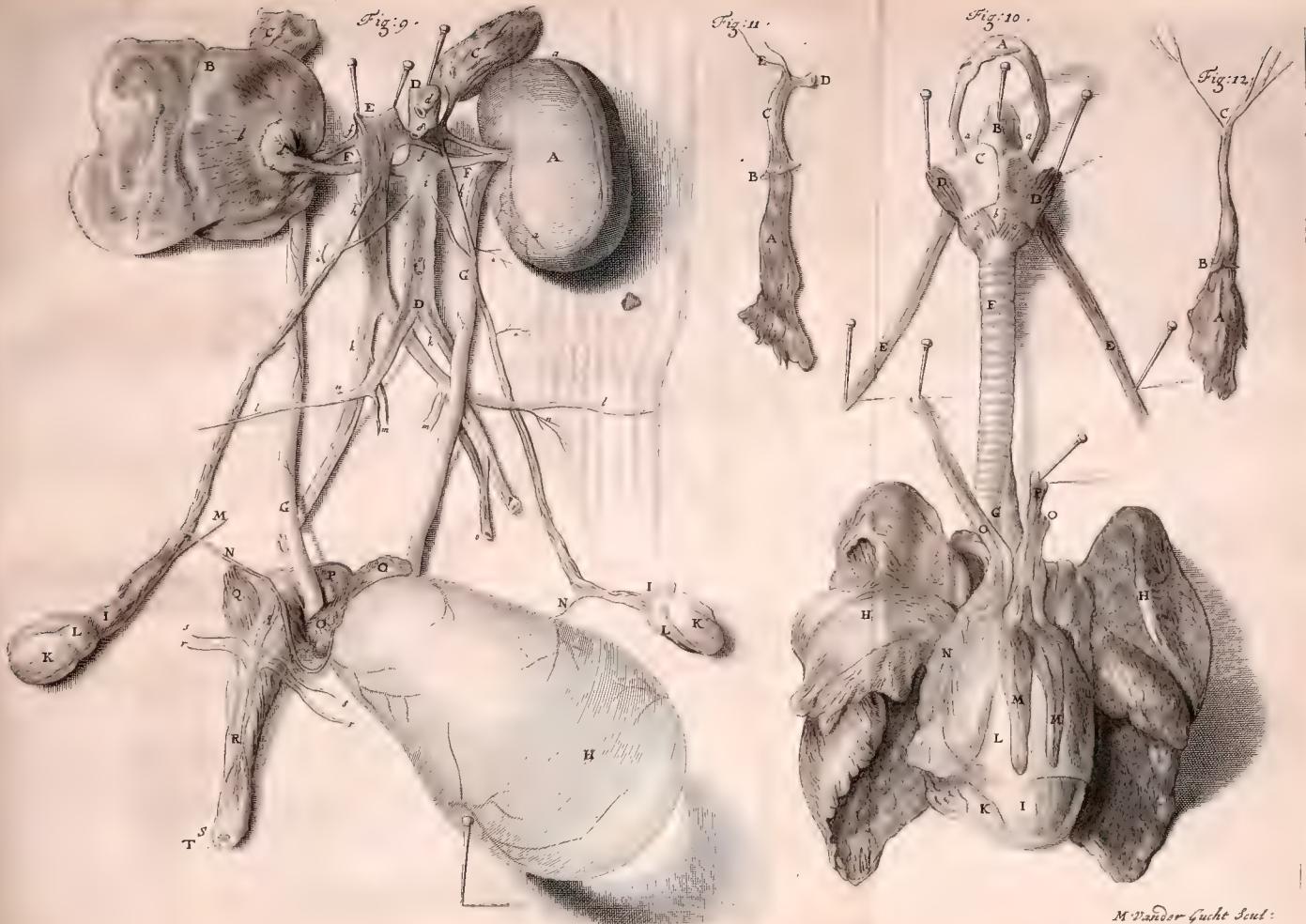
F. F. The *Emulgent Arteries*.

f. f. The *Emulgent Veins*.

G. G. The



M. Vander Gucht Scul:



M. Baader Gucht Scul:

- G. G. The Ureters.
H. The Bladder of Urine.
h. h. The Spermatick Veins which discharge themselves into the *Vena Cava*, and the left *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 Diferentia*.
O. O. The *Vesiculae Seminales*.
P. The *Prostates* or *Corpus Glandosum*.
Q. 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*.
l. l. 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 *Iliac Vein* and *Arterie*.
p. The external *Iliac Vein* and *Arterie*.
q. The *Vena Pudenda seu Penis*.
r. r. The *Nerves* of the *Penis*.
s. s. The *Arteries* of the *Penis*.

The tenth Figure

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

- A. **T**HE 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 *Annular Cartilage*.
D. D. The *Musculi Hyothyroidei*.
E. E. The *Musculi Sternothyroidei*.
c. c. The *Musculi Cricothyroidei*.
F. The *Arteria Aspera*, or *Wind-pipe*.
G. Its division, where it passes to the right and left *Lobes* of the *Lungs*.
H. H. The *Lungs*.

J. 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 Ventricle of the Heart.

A. **T**HAT 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 pass'd 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. **T**HAT part contained in the Ventricle.

B. The Impressions made by the Valvulae 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 Nerves and Arteries cut off.

A. **A.** **T**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 Medullæ Spinalis, or that part of the Caudex Medullaris,

Fig. 16



M'vander Gucht Scul:

Fig. 13.

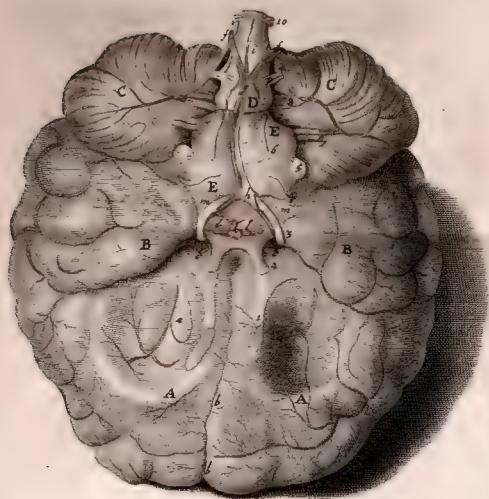


Fig. 14.

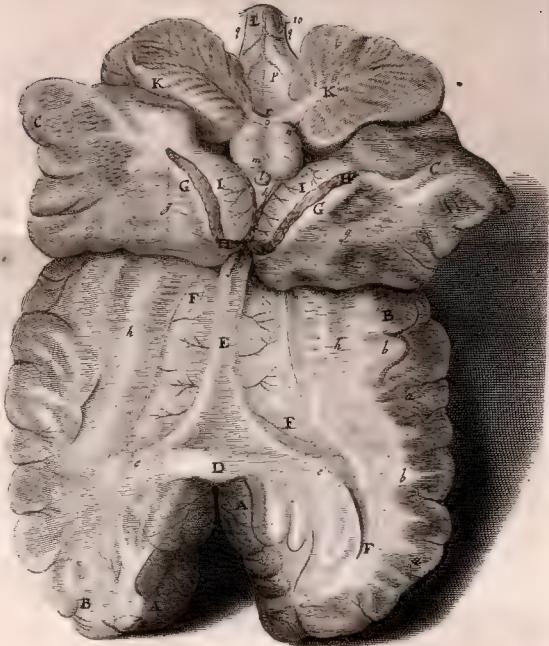


Fig. 16.



Fig. 17.



Fig. 15.



dularis, 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 *Glandulae due albæ pone Infundibulum*, , or rather two *Medullary Protuberances* there.
- m. m. Parts of the *Crura Medullæ Oblongatæ* before they unite under the *Pons Verolij*, or *Annular Protuberance*.
- 1. The *Olfactory*, or first pair of Nerves.
- 2. 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 sixth 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 reflected 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 two first *Ventricles* of the *Brain*.
 - G. G.* Parts of the *Corpora Striata*, entire.
 - g. g.* The *Striae* as they appear in this Section in the *Corpora Striata* in the lower part of the *Brain*.
 - h. h.* The same *Striae*, 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 *Protuberantiae orbicularis*.
 - l.* 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.
 - q. q.* The *Accessory Nerves*.
 - 10.* The tenth pair of Nerves.
 - r.* The *Foramen posterius* or *inferius*, that leads to the Cavity under the *Protuberantiae orbicularis*.
 - s.* The *Rima* or *Foramen*, that leads to the *Infundibulum*.
-

The fifteenth Figure

Is a Copy of the *Figure* that *Nicholans Tulpins* gives of the *Orang-Outang* that was brought to *Holland* from *Angola*.

The sixteenth Figure

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

The seventeenth Figure.

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

F I N I S.

A
PHILOLOGICAL
ESSAY
Concerning the
PYGMIES,
THE
CYNOCEPHALI,
THE
SATYRS and SPHINGES
OF THE
ANCEINTS,

Wherein it will appear that they were all
either A P E S or M O N K E Y S; and not
M E N, as formerly pretended.

By *Edward Tyson* M. D.

A

Philological Essay

Concerning the

P Y G M I E S

O F T H E

A N C I E N T S.

HAVING 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 afford 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 confess, 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 left 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

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 Achievements, 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 said to inhabit; and it's present *Stature* likewise tallying so well with that of the *Pygmies* of the Ancients; these Considerations put me upon the search, to inform my self 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 assert amounts to a Probability, 'tis 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 *Græcians*, to the great Noise of the *Cranes*, going to fight the *Pygmies*: he saith (a),

(a) *Homer. Iliad. lib. 3. ver. 4.*

"Αἱ τὸ ἐπεὶ ἔν χειμῶνα φύγον, καὶ αὐτοφαλον ὄμβρεγν
Κλαγγῆ ταῖ γε πέτονται ἐπ' ὀντανοῦ ποάων
Ἄνδρες πυγμαίοισι φόνον καὶ μῆρα φέροσσι. i. e.

*Quæ simul ac fugere Imbras, Hyememque Nivalem
Cum magno Oceani clangore ferantur ad undas
Pygmæis pugnamque Viris, cædesque ferentes.*

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

*Postquam sub Ducibus digesta per agmina stabant
Quæque suis, Equitum turmæ, Peditumque Cohortes,
Obvia torquentes Danais vestigia Troës
Iabant, sublato Campum clamore repletos :
Non secus ac cuneata Gruum sublime volantum
Agmina, dum fugiunt Imbras, ac frigora Brumæ,
Per Cœlum matutino clangore feruntur,
Oceanumque petunt, mortem exitiumque cruentum
Irrita Pigmæis moturis arma ferentes.*

By αὐδεξίοι πυγμαίοισι 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 significant, 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*, εἰ δὲ οὐτοις τοπικῶν λέγεται, αὐτὸς δὲ οὐδεὶς οὐ πεψεώς χάρειν, That he said it, not thro' Ignorance, but to please and delight: Or, as in another place he expresses himself (d), εἰ δὲ οὐτοις ἀγνοιαῖς διορθίζειν τολμητέον γένεσθαι τοις αὐτοῖς τερρυγωδίαις χάρειν. Homer did not make this slip thro' Ignorance of the true *History*, but for the Beauty of his *Poem*. So that tho' 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 *Pygmean 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 redditæ ab Helio Eobano Hessæ.
(d) Strabo ibid. p. m. 30.

(c) Strabo Geograph. lib. I. p. m. 25.

flat and low, and lessened the grandeur of the Battle. But this *Periphrasis* of them, ἀνδρες πυγμαῖοι, raises 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*, ἐνεργήσαντί τοῦ Ομηρίων τῷ Πυγμαῖον γεγονόταχίαν τριπλάσιες εἰποτες, for reviewing the Homerical Fight of the *Cranes* and *Pygmies*, which he looks upon only as a fiction of the Poet. But this had been very unbecoming Homer to take a *Simile* (which is designed for illustration) from what had no Foundation in Nature. His *Betrachomymachia*, 'tis true, was a meer Invention, and never otherwise esteemed: But his *Geranomachia* hath all the likelyhood of a true Story. And therefore I shall enquire now what may be the just Occasion of this Quarrel.

Athenæus (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 Goddesses, at which they grew enraged; and to punish her for her Insolence, *Athenæus* 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 *Pygmies* 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 interitus Pygmaei, minutum genus, & quod pro satis frugibus contra Grues dimicando, defecit*. 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 justify 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) *Athenæi Deipnosoph.* lib. 9. p. m. 393. (g) *Ælian. Hist. Animal.* lib. 15. cap. 29. (†) *Pomp. Mela de situ Orbis,* lib. 3. cap. 8. (h) *Pliniij Hist. Nat.* lib. 7. cap. 2. p. m. 12

agmine ad mare descendere, & Ova, Pullosque carum 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 Oneiscritus (i), Περὶ τὸς τριαντάμες πόλεμον εἰ τοῖς Γεργίοις (οὐ οὐ "Ουρωροῦ διλοῦν) ή τοῖς Πέρδησ, ἢ χνομεγίθεις εἰ). τέττας δ' ἐπλέγειν αὐτῷ τὰ ὄξα, η φθείρειν εἰναι τὸν ὀλοκενὸν τοὺς Γεργίους δίπερ μιδαμεῖς μιδ' οὐδὲ ἐγκατεῖσαι Γεργίων, μηδὲ εὐ νόθια· 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 success to the Combatants; sometimes with great slaughter of the long-necked Squadron; sometimes with great effusion of Pygmaean 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 quatire: sed illic,
Quanquam eadem affidue spectantur Prælia, ridet
Nemo, ubi tota 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 (l) 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 Pygmaemachia 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. (l) Aristotle. Hist.

'Tis not therefore the Poet that is to be blamed, tho' they would fother 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 *Athenaeus* from *Basilis* an *Indian Historian* tells us ; for, saith he (*m*), Βάσιλις Ἰνδίων, οἱ μυεγλ, φνῶν, ἀνδρες δι τοῖς Γερεγένοις διαπολεμεῖντες Πέρδεξ ὁχήματι χρώνται. For presently afterwards he tells us from *Meneclès*, that the *Pygmies* not only fight the *Cranes*, but the *Partridges* too, Μενεκλῆς Ἰνδίων τοῦ πατρὸς τῆς σωματογένης οἱ πελματοι, φίτι, τοῖς πέρδεζ, καὶ τοῖς Γερεγένοις πολεμεῖν. This I could more readily agree to, because *Onescritus*, 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 Quere.

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*)) *in sedentes Arietum Caprunculae dorsis, armatis sagittis, veris tempore universo agmine ad mare descendere*. And *Onescritus* in *Strabo* tells us, That a *Crane* has been often observed to fly from those parts with a brass Sword fixt in him, πλεισάντος δὲ κατιθεν γεγενού χαλκοῦ ἐχροαν αἰδεῖς διπό τῷ σκειδεῖν πλειστανταν (*o*). 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 sort of *Monkeys*, as I shall shew) that live in those Countreys, but higher up in the Mountains : But he makes no mention of any such 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 αἰδεῖς a Sword ; it may be any other sharp pointed Instrument or Weapon, and upon second Thoughts, shall suppose it a sort 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*), Πάδιον δὲ τοῖς Ήνιώδει, καὶ Ομήρῳ πεδύστειν ἡρωλογεῖσι, καὶ τοῖς τερεγηνοῖς πομπαῖσι, ἢ Κλιοπε τε καὶ Ήρεδότει, καὶ Ελλανικῷ, καὶ ἄλλοις τοιετοῖς i. e. That one may sooner believe *Hesiod*, and *Homer*, and the Tragick Poets speaking of their

(*m*) *Athenaei Diepnsoph.* lib. p. 9. m. 390. (*n*) *Pliniij Nat. Hist. lib. 7. cap. 2.* p. 13. (*o*) *Strabo Geograph.* lib. 15. p. 489. (*p*) *Vide Photij Biblioth.* (*q*) *Strabo 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); Απαντες μὲν τοῖν τοι περὶ Ἰνδίων γεγράφασσιν δέ τὸν τολμὸν φύσεων γεγόνασι, καὶ τὸν τραπέων τὸν Δημάχον, τὰ δὲ διάπερα λέγει Μεγασθένης, Ὁνταιρίστε τοὺς Νέαρχούς, οὐδὲντος πιεστοῦ· 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 Theopompos, as bragging, Ὄπις μάθεται εἰ ταῖς Ἰσοερίαις ἐπειτίτοιν, οὐδὲντος Ηρόδοτον, οὐδὲντος Κλοῖαν, οὐδὲντος Ἐλλάδιον, οὐδὲντος τὸν Ἰνδὸν συγγεγράψαντα. That 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,

— — — Et quicquid Græcia mendax
Audet in Historia (t).

Aristotle (u), 'tis true, tells us, Ὄλως δὲ τὰ μὲν αἴγρια αἴγριωτερα εἰ τῆς Ἀσίας, αἱρεότερα δὲ τῶν πάντων τὰ εἰ τῆς Εὐρώπης, τολμυρρότερα δὲ τὰ εἰ τῆς Λι-
βύης οὐδὲντος δὲ τῆς παρεγίμηας, ὅπις δὲν φέρει τὴν λιτένην κρινόν· 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 effigies monstriferas, circa extremitates ejus gigni, minime mirum, artifici ad formanda Corpora, effigiesque cælandas mobilitate igneâ*. 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 *Ctesias*, 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 *Ctesias*, 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 true, from something of Resemblance of their shape, ἄνδρες: 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. vers. 174. (u) Aristotle Hist. Animal. lib. 8. cap. 28. (w) Plin. Nat. Hist. lib. 6. cap. 30. p. m. 74. and

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.

Ctesias'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 :

"Οτι ἐν μέσῃ τῇ Ἰνδιᾳ ἄνθρωποι εἰσ μέλαρες, οὐ καλοῦνται πολυμάνοι, τοῖς ἀλλοῖς διμούλωσοι ἱνδοῖς μηνεγί δέ εἰσ λίσαν· οἱ μακρότελοι αὐτῷ πηχέων δύο, οἱ δὲ πλεῖστοι, ἑνὸς ἡμίσεω πηχώς, νόμιμοι δὲ ἔχοντες μακρότάτων, μέχει οὐ δῆπε τὰ γόνατα, οὐ ἐπ. κατώτερον, οὐ τῶν χωρῶν μέγιστον πάνταν ἀνθρώπων· ἐπειδὴν δὲ τὸν τῶν χωρῶν μέγα φύσων, ζεντὶ αἱμοφίννωσι τοῦτον ἡμέτον: ἀλλὰ τὰς τρίχας, τὰς μὲν ὅπερ περιστάνεται, ἐποιεῖν καθίσταται τολύν ηὔτα τῷ γονάτων· τὰς δὲ ἐν τῷ τῶν χωρῶν, ἐμπεριεῖν μέχει τοδῶν ἐλαμένας. Ἐπειτα περιποιοῦσά μενοι τὰς τρίχας περὶ ἄπαν τὸ σῶμα, ζώννεισται, χρώμενοι αὐταῖς αἵτινι μαλισ. αἰδεῖσον δὲ μέγα ἔχοντες φάνεται τῷ σφυρῶν αὐτῷ, οὐ παχύ. αὐτοῖς οιμοί τε οὐδὲ αἴχροι. τὰ δὲ ποδῶσατα αὐτῷ, εἰς ἄρρενας. οὐ δι βόες οὐ δι ὄνοι, ἀλλὰ δύον περιτοι. οὐ δι πτωοι αὐτῷ οὐ δι ἡμίονοι, οὐ τὰ ἀλλα πάντα ζῶα, εἰδὲν μείζω κατέλεν. ἐποιηται δὲ τῷ βασιλεῖ τῷ Ἰνδῶν, τέταν τῷ πολυμαίων ἄνδρες τελεχίλιοι. σφράγεται γάρ εἰσι τοξόται· διαισταῖτοι δέ εἰσι καὶ νόμοισι χεῶνται ωταρε καὶ οἱ Ἰνδοί. Λαγωθες τε καὶ ἀλώπεκος θηρόμεστον, & τοῖς πιστοῖς καὶ κόρεσῖ καὶ ικτῖσι καὶ πορφύραις καὶ δεστοῖς.

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

Narrat præter ista, in media India homines reperiri nigros, qui Pygmæi appellantur. 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, quam apud ullos hominum. Quæ quidem ubi illis promissor esse cœperit, nulla deinceps veste uti: sed capillos multo infra genua à tergo demissos, barbamque præter pectus ad pedes usque defluentem, per totum corpus in orbem constipare & cingere, atque ita pilos ipsos 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 nihil esse nostris arietibus majora. Tria horum Pygmæorum millia Indorum regem in suo comitatu habere, quod sagittarij sint peritissimi. Summos esse justitiæ cultores, iisdemque quibus Indi reliqui, legibus parere.

(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 Cloaths, 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 Ankle, and the thickness is proportionable. They are flat nosed, and ill favoured. Their Sheep are like Lambs; and their Oxen and Asses scarce as big as Rams; and their Horses and Mules, and all their other 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 *Laws* 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 *Ctesias* 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 πάρνον, 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 *Elian*, *Pliny*, *Solinus*, *Mela*, *Philostratus* and others. And *Photius* concludes *Ctesias's Account of India* with this passage; Ταῦτα γεγένενται μυθολογῶν Κτηνῶν. λέγει τὸν ἀνθρώπαλα γεγένενται πάνταν ως τὰ μὲν αὐτὸς ἴδων γεγένει, τὰ δὲ παῖς αὐτῷ μαδῶν τῷ εἰδόταν. πολλὰ δὲ τέτανται αἱλα θαυμασιώτερα παραλιπεῖν, διὰ τὸ μὴ δέξαντας μὴ ταῦτα διασαριέντος ἄπιστα συγγράψεν. 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 saith; for he tells us that *Ctesias* has wrote of *India*, "Α μήτε αὐτὸς εἶδε, μήτε ἀλλας εἰπούις οὐκέτε, What he neither saw himself, nor ever heard from any Body else. And Aristotle tells us plainly, he is not fit to be believed: 'Εν τῷ τῆς Ινδίας ὡς φησι Κινόις, εἰς τὸν ἀξιόπιστον (b). And the same Opinion *A. Gellius* (c) seems to have of him, as he had likewise of several other old Greek Historians which happened to fall into his hands at *Brundusium*, 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 inaudita, incredula, Scriptores veteres non parvæ authoritatis, Aristaeas Proconnesius, & Isagonus, & Nicænensis, & Ctesias, & Oneiscritus, & 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 Βίθαν, 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 seem very surprising to one, that had never seen 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 *Ethiopia*, gives of his Travels. I will transcribe the Passage, as I find it in *Photius* (e), and 'tis as follows:

"Οτι δὲ τὸν φρεστὰν πλέοντι τῷ Νοννῷ, οὗτοι οὐχίτων τῷ νησῷ νησιώντων πάντες θεοὶ τοῖς συνέβη, θαῦματα ήτονται. εὑτυπεῖ γάρ ποι μορφαὶ μὲν οὐδέτεραι εἴχονταν αὐθεωπίνων, βερεχυλάτοις τῷ τῷ μέγεθος, οὐ μέλαιοι τῷ χρέων. τοῦτο τοῖς τρεχῶν δεδασουμένοις διὰ παντὸς τῆς σώματος. ἐπειδὸν τῷ τοῖς αὐδεροῖ ηὔγειαῖς παρεπομένοις ηὔπαιδερα εἴτι βερεχύποροι, τῷ παρὸν αὐτοῖς αὐδερῶν. υμιοὶ δὲ οἵσιν ἀποτελεῖσθαι πλευραὶ διεματιτοῦ μηρῷ τῷ αὐδῷ περιεργάλυπτον, οἱ περιβεβηκότες δροῖοις αὐδερεσ τῇ καὶ γυναικίς. ἄγροιον δὲ εἰδὲν ἐπεδεικνυσθεὶς ἀνθεμερού ἀλλα καὶ φωνὴν εἴχον μὲν αὐθεωπίνων, ἀλλαζοῦν δὲ παντάπαιοι τῷ

Naviganti à Pharsa Nonnoſo, &
ad extremam usque insularum delato,
tale quid occurrit, vel ipso auditu ad-
mirandum. Incidit enim in quosdam
forma quidem & figura humana, sed
brevissimos, & cutem nigros, totūm-
que pilosos corpus. Sequebantur viros
æquales feminæ, & pueri adhuc bre-
viores. Nudi omnes agunt, pelletan-
tum brevi adultiores verenda tecti,
viri pariter ac feminæ: agrestè nihil,
neque efferum quid præ se ferentes.
Quin & vox illis humana, sed omni-
bus, etiam accolis, prorsus ignota lin-
gua, 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 Noctes Attic. lib. 9. cap. 4.* (d) *Henr. Stephani de Ctesia Historico antiquissimo disquisitio, ad finem Herodoti.* (e) *Photij Bibliothec. cod. 3. p. m. 7.*

διάλεκτον τοῖς τὲ περιοίσι ἀπασι, οὐδὲ πολλῷ πλέον τοῖς περὶ τὸ Νοννόσου, διέξων τὸν ὄχην θαλασσῆν οὔσην, οὐδὲ χθύνων, τὸ δέποτε θαλάσσας εἰς τὸν οὖν οὐπορρήπτομένων. Θάρεος τὸν εἶχον οὐδὲν. ἀλλὰ οὐ δρῶντες τὰς καθ' ήμας αὐθεώπες ὑπέπλισαν, ὥστε οὐ μεῖς τὰ μεῖς τῷ Σηκαρ.

é mari ad insulam projectis. Audaces minimè sunt, ut nostris conspectis hominibus, quemadmodum nos visa ingenti fera, metu perculsi fuerint.

' 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 fierce or wild ; they had a Humane Voice, but their *Dialect* was altogether unknown to every Body that lived about them ; much more to those that were with *Nonnosus*. They liv'd 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.

Φωνὴν εἶχον μὲν αὐθεωπίνων 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 observed 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 natus 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 latrantium 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 *Bruntes* 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, Οἱ Γαεγμαύλες ἔτοι τὰς τρεψυλοδύτας Αἰδίοντας Ιηδούσαι τὰς τελείωποισι. Οἱ γέ

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

Τρωγλοδύται αἰδίοπες πόδις, τάχισοι ἀνθρώπων πάντων εἰσὶ, τῷ δὲ καὶ πέρι λόγῳ διπλεργέμενοι ἀκέρομεν. Σιλεύσι τὸν Τρωγλοδύτην ὅφις, οὐ Σαῦρος, οὐ τὰ τοιῶντα τῷ Ερπετῷ. Γλῶσσαν τὸν ἀδεμαῖον ἄλλη παρομοίων νεομήκοσι, ἀλλὰ τελέυτας καθάπερ αἱ ρυτοειδεῖς. 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, Τρωγλοδύται δὲ εἰσὶ τὸ βλόβ. And so Philostratus (*k*), Τοὺς δὲ τούματος οἰκεῖν μὲν τούτοις. And methinks Le Compte's Relation concerning the wild or savage Man in Borneo, agrees so well with this, that I shall transcribe it: for he tells us, (*l*) That in Borneo this wild or savage 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 we do Stags here: and this sort of hunting is the King's usual diversion. And Gas-sendus 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 ἄνδρες μικροὶ μελέιων ἐλάσοντες ἀνδρῶν which the Nasamones met with (as Herodotus (*m*) relates) in their Travels to discover Libya, were the Pygmies; I will not determine: It seems the Nasamones neither understood their Language, nor they that of the Nasamones. However, they were so kind to the Nasamones as to be their Guides along the Lakes, and afterwards brought them to a City, εἰ τὴν πάντας εἰ τῶν ἄγρων τὸ μέγεθος, χρῶμα δὲ 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 frightened 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 Ctesias 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. Tyanei, 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

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 Tyanæus* 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 *Pygmies* were a sort 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 awkwardly, 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 asserted, that the *Pygmies* were a sort 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* (faith 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; ‘Εαγνὰς μὲν οὐδὲν θεῖται τῷ πίστεως ἀξιῶν ἀνδρῶν’ i. e. No Man worthy of belief did ever see them. And upon all occasions he declares the same. So *Julius Cæsar Scaliger* (s) makes them to be only a Fiction of the Ancients, *At hæc omnia* (faith he) *Antiquorum figmenta & meræ Nugæ, si exstant, reperirentur. At cum universus Orbis nunc nobis cognitus sit, nullibi hæc Naturæ Excrementa reperiri certissimum est.* And *Isaac Casaubon* (t) ridicules such as pretend to justifie them: *Sic nostra ætate* (faith 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 cuiusdam Galli Scripta, qui se vidisse diceret. At non ego credulus illi, illi inquam Omnium Bipedium mendacissimo.* I shall add one Authority more, and that is of

(n) *Plini Nat. Hist. lib. 10. cap. 49.* (o) *Porphyrius de Abstinentia, lib. 3. pag. m. 103.*

(p) *Si qui Homines sunt Silvestres, sicut Pygmæus, non secundum unam rationem nobiscum dicti sunt Homines, sed aliquod habent Hominis in quadam deliberatione dicit Loquela, &c. A little after adds, Voces quadam (sc. Animalia) formant ad diversos conceptus quos habent, sicut Homo dicit Pygmæus; & quædam non faciunt hoc, sicut multitudo fere tota aliorum Animalium. Adhuc autem eorum quæ ex ratione cogitativa formant voces, quædam sunt succumbentia, quædam autem non succumbentia. Dico autem succumbentia, à conceptu Anima cadentia dicit mota ad Naturæ Instinctum, sicut Pygmæus, qui non, sequitur rationem Loquela sed Naturæ Instinctum; Homo autem non succubit sed sequitur rationem.* Albert. Magn. de Animal. lib. 1. cap. 3. p. m. 3.

(q) *Ulys. Aldrovandi Ornitholog. lib. 20. p. m. 344.* (r) *Strabo Geograph. lib. 17. p. m. 565.*
(s) *Jul. Cæs. Scaliger. Comment. in Avist. Hist. Animal. lib. 8. §. 126. p. m. 914.* (t) *Isaac Casaubon Notæ & Castigat. in lib. 1. Strabonis Geograph. p. m. 38.*

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 παρὰ ποὺγερά ditti à statu, quæ ulnam non excedunt. Verùm ego Poetarum fabulas esse crediderim, pro quibus tamen Aristoteles minimè haberi vult, sed veram esse Historiam.* 8. Hist. Animal. 12. *asseverat.* Ego quo minus hoc statuam, tum Authoritate primùm *Dochissimi Strabonis* 1. Geograph. coactus sum, tum potissimum 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, nullibi tamen tam parvam Gentem à se conspectam tradidit, sed Populum esse Medicis 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 off. To lessen it's Authority they have interpolated the *Text*, by foisting 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 unfair 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) :

Μελά μὲν τὸν φθινοπωσιν τὸν Ἰονίου εἰ-
αν, ὃν τὸ Πόντος οὐ τῷ Φυχρῷ φέρεται
τὸν Ἐπιώνα χειμῶνα· μελά δὲ τὸν ἐφε-
ντινον, ὃν τῷ Σεπτέμβρῳ, εἰς τὸν τόπον τὸν
Φυχρὸν, φεύγεται τὰ πάντα τὰ μὲν,
οὐ τὸν ἔχον τόπον παίζεται τὰς
μετασολάς, τὰ δὲ, οὐ τὸν ἔχαταν, ὡς
εἰπεῖν, οἵδιοι γέγονοι ποιεῖσθαι. Μελ-
βάντες γοῦν τῷ Σεπτέμβρῳ εἰς τὰ Ἑλ-
λάδας ἄνω τῆς Αἰγαίου, οἱ δὲ δια τὸ Νεῖλον
Ἐσι δὲ τὸν Ἐρημὸν οἱ πάντα

Jane ab Autumnali Ἡequinoctio ex
Ponto, Locisque frigidis fugiunt Hye-
mem futuram. A Verno autem ex
tepida Regione ad frigidam sese con-
ferunt, αἴτιος metu futuri: Et alia de
locis vicinis discedunt, alia de ulti-
mis, prope dixerim, ut Grues faci-
unt, quæ ex Scythicis Campis ad Pa-
ludes Ἡgypto superiores, unde Nilus
proficit, 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. Animal.*
lib. 8. cap. 12.

οι καλοκαιρινοὶ ἐγένετοι τοῖς τοῦ πόντου μὲν θεοῖς,
ἀλλ' εἴ τι κατὰ τὴν αἰλίθειαν. Γένθ. μι-
κηγὸν μὲν, ὥστε λέγεται, ὡς αὐτοὶ ἦσαν
ἰωποὶ. Τρεπόμενοι δύται δὲ εἰσὶ τὸν βίον.

fabula est, sed certè, genus tum hominum, tum etiam Equorum pusillum (ut dicitur) est, degunque in Cavernis, unde Nomen Troglodytæ à subeundis Cavernis accepere.

In English 'tis thus: 'At the Autumnal *Hæquinox* they go out of *Pontus* and the cold Countreys to avoid the Winter that is coming on. At the Vernal *Hæquinox* 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 *Hægypt*, 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 certè Genus tum Hominum, tum etiam Equorum pusillum*. *Aristotle* only saith, *Τέρατα μικρὰ μὲν, ὥστε λέγεται, ὡς αὐτοὶ, ὡς οἱ ιωποὶ*. He neither makes his *Pygmies* Men, nor saith 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 *Hægypt*, where he tells us the *Pygmies* are. *Cardan* (x) therefore must certainly be out in his guess, that *Aristotle* only asserted the *Pygmies* out of Complement to his Friend *Homer*; for surely 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

(x) *Cardan de Rerum varietate*, lib. 8. cap. 40. p. m. 153. . . . (*) Apparet ergo (saith *Cardan*) *Pygmæorum Historiam esse fabulosam, quod & Strabo sentit, & nostra etas, cum omnia nunc ferme orbis mirabilia innoverint, declarat. Sed quod tantum Philosophum decepit, fuit Homeris Autoritas non apud illum levius.*

(y) *Bocharti Hierozoic. S. de Animalib. S. Script. part. Posterior. lib. 1. cap. II. 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* (faith he in the Translation) *id est fabula, sed reverâ, ut aiunt, Genus ibi parvum est tam Hominum quâne Equorum.* Julius Caesar 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, & *ἡδὲ τὰς μῆθας, ἀλλ' εἰς καὶ τὸν ἀληθεῖαν,* this he leaves wholly out, without giving us his reason for it, if he had any: And Scaliger's (z) insinuation in his Comment, viz. *Negat esse fabulam de his* (sc. Pygmies) Herodotus, *at Philosophus semper moderatus & prudens etiam addidit, ωτε λέγεται,* is not to be allowed. Nor can I assent to Sir Thomas Brown's (a) remark upon this place; *Where indeed* (faith he) Aristotle plays the Aristotle; *that is, the wary and evading Assertor;* *for tho' 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.* And 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 surreptitious, 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 so short a passage, contradict himself; and after he had so positively affirmed the Truth of it, presently doubt it. His *ωτε λέγεται* therefore 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 asserting or confirming any thing of the fabulous Narrations that had been made about the Pygmies. He does not say that they were *ἀρδεσσοι*, or *ἀνθρώποι μικροί*, or *μέλαῖοι*; he only calls them *πυγμαῖοι*. 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 faith, *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 such Creatures as Pyg-

(z) Scaliger. Comment. in Arist. 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 asserts the *Being* of them, and assures us, That *this is no Fable, but a Truth.*

I shall therefore now enquire what sort 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, Καὶ γὰρ οἱ ὄφες οἱ τοιχομεράδεες, καὶ οἱ λέοντες καὶ τέττας εἰσὶ, καὶ οἱ ἐλέφαντες τε καὶ ἄρνει, καὶ αὐτίδες τε καὶ ὄντες τὰ μέγατα ἔχοντες οἱ οὐρωνέραλοι (in the Margin 'tis *Acephali*) οἱ εὖ τοῖσι σῆθοι τοῖς ὀφθαλμοῖς ἔχοντες (as δὲ λέγεται γέ τοῦ λιβύων) καὶ ἄλλοι ἄνδρες, καὶ γυναικεῖς ἀγέλαι, καὶ ἄλλα πόνθει πολλὰ θηλεῖα ἀγαλαζόμενα : 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 Beasts that are not fabulous. 'Tis evident therefore that *Herodotus* his ἄγελαι ἄνδρες, καὶ γυναικεῖς ἀγέλαι are only *θηλεῖα* or wild Beasts ; and tho' they are call'd ἄνδρες, 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 think 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 *Ethiopia* and *Egypt*, tells us (d), Βόσπορος ἦ τὸ θηλεῖα οἴα γχέτιραδι. καὶ αὐθρώπες μετανεασας, δὲ μὴ ἀλλαγῇ πίπεισγι. Πυρμα-
χοὶ τε εὖ αὐτοῖς ἔθνη, καὶ ὑλακτέντων ἀλλο ἄλλη. i.e. Here are bred wild Beasts
that are not in other places ; and black Men, which no other Country affords :

(b) *Gesner. Histor. Quadruped.* p. m. 835. (c) *Herodot. Melpomene seu lib.4.* p. m. 285. (d) *Phi-*
lostratus in vita Apollon. Tyanæ, 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 Cælius 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. Ἀρδης ἄγειοι, or Orang-Outang, is alike to me ; and I am better pleased with Homer's ἀρδης πυγμαῖοι, than if he had called πίθαι. 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 finding 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 Ἀμύντες or Ἀφῆνες, 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 prominent. The Ἐρυθραιται, whose Ears reach down to their Heels, on which they lye and sleep. The Ἄσομοι, that have no Mouths, a civil sort 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 Μορόμυλοι or Μορόζθαλμοι, 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 Σπιρόζθαλμοι, that have Eyes in their Breasts. The Πάναι σφινκτέροι with Heads like Wedges. The Μακροπέρατοι, with great Heads. The Ξερέροι, who live a Thousand years. The ὁἰώποδες, so swift, that they will out-run a Horse. The διπλωδόκηλοι, that go with their Heels forward, and their Toes backwards. The Μακροπονελεῖς, The Στεγανόποδες, The Μονοπονελεῖς, 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) *Cælij Rhodiginij Legion. Antiq. lib. 17. cap. 13.*

Now *Strabo* (f), from whom I have collected the Description of these Monstrous sorts 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 such 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 such *Men Pygmies*; and do readily agree with him, that no *Man* ever saw 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 Reasons 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*. In all Countries, and in all Ages, there has been now and then observed such *Miniture* of Mankind, or under-sized Men. *Cardan* (h) tells us he saw 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 *Egypt* 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* sent to a Duke of *Savoy*, when he married his Daughter to him, an *Ethiopian Dwarf* but three Palms high (k). And *Thevenot* (l) tells us of the Present made by the King of the *Abyssins*, to the *Grand Seignior*, of several *little black Slaves* out of *Nubia*, and the Countries near *Ethiopia*, 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, tare 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. &c. 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) *Hapelinus in Relat. curiosis*, N°. 85. p. 677.

(l) *Thevenot. Voyage de Levant.* lib. 2. c. 68.

(m) *Jo. Harduin Notæ in Pliniij 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 Πυγμαῖοι seu *Cubitales*; and that the *Cranes* did use to fight them. 'Tis true, as a *Poet*, he calls them ἄνδρες, which I have accounted for before. Now if there cannot be found 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 *Fiction*.

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 Pygmæis*; 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 before in his *Variarum & Reconditarum Rerum Thesaurus* (o), from whom he has borrowed most of this *Traſt*. 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*. The second *Chapter*, *De Pygmæi nominibus & Etymologia*. The third *Chapter*, *Duplex esse Pygmaeorum Genus; & primum Genus aliquando dari*. He means *Dwarfs*, that are no *Pygmies* at all. The fourth *Chapter* is, *Altérum Genus, nempe Gentem Pygmaeorum 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 (faith Bartholine) eos (sc. Pygmæos) in Septentrionali Thraciæ Parte reperiſi, (quæ Scythia est proxima) atque ibi cum Gruibus pugnare. And Joh. Cassanius (q) (as he is here quoted) faith,

(n) Caspar. Bartholin. Opusculum de Pygmæis. (o) Jo. Talentonij Variar. & recondit. Rerum Thesaurus, lib. 3. cap. 21. (p) Joh. Laurent. Anania prope finem tractatus primi sue 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 eandem fere Sententiam tradidisse; eò adducor ut Pygmæos fuisse inficiari non ausim. He next brings in *Jo. Talentonius*, to whom he is so much beholden, and quotes his Opinion, which is full and home, *Constat 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 sint.* But were there such Men Pygmies now in being, no doubt but we must have heard of them; some or other of our Sailors, 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, se forte 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*: so 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 *Ctesias*, must be look'd upon as the same Evidence with himself; the number of the *Testimonies* produced need not much concern us, since 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 Varior. & recondit. Rerum Thesaurus*, lib. 3. cap. 21. p. m. 515. (s) *Job Ludolfi comment. in Historiam Æthiopic.* p. m. 71.

and others extreamly little, he infers, *Quæ certè cum in Animalibus & Vegetabilibus fiant ; cur in Humana specie non sit probabile, haud video : imprimis cum detur magnitudinis excessus Gigantæus ; 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 fabuous. 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 posse. 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 sixth 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 indubie in Pygmæis non omnes ejusdem magnitudinis.* 2. The Place and Country : As *Ctesias* (he saith) places them in the middle of India ; *Aristotle* and *Pliny* at the Lakes above Egypt ; *Homer's Scholiast* in the middle of Egypt ; *Pliny* at another time saith they are at the Head of the Ganges, and sometimes at Gerania, which is in Thracia, which being near Scythia, confirms (he saith) *Anania's Relation*. *Mela* places them at the Arabian Gulf ; and *Paulus Jovius* docet Pygmæos ultra Japanem 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, since they do not live in Houses, but in Tents, so 'tis no wonder that the Pygmies often change theirs, since instead of Houses they live in Caves or Huts, built of Mud, Feathers, and Eggshells. And this mutation of their Habitations he thinks is very plain from *Pliny*, where speaking of Gerania, he saith, *Pygmæorum Gens fuisse (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 injuriâ dicti sunt olim Pygmæi, Terre filii*, is wholly new to me, and I have not met with it in any Author before: tho' he gives us here several other significations 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*, *Juvenal*.

The seventh Chapter in Bartholine has a promising Title, *An Pygmæi sint homines*, and I expected here something 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 *Sueffanus* (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 *Bœotians*, *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 *Sueffanus*'s next Argument, that they want Religion, Justice, &c. this, he saith, 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 *Pigmies* 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. *Imprimis Geographici quos non puduit in Mappis Geographicis loco Pygmæorum simias cum Gruibus pugnantes ridiculè dipinxisse.*

(u) *Cardan. de Rerum varietate*, lib. 8. cap. 40. (w) *Sueffanus 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 eorum qui Pygmæorum Historiam fabulosam censem, 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*, *Budæus*, *Aldrovandus*, *Fullerius* 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 saith) is, that they live but eight years, whence several Inconveniences would happen, as *Cardan* shews; he answers that no good Author asserts 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 *Calin-gæ* 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 *Artemidorus* 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 saith, 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 seen, yet must not deny. And he instances in three; As the *Formicæ Indicæ*, 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 so 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) *Respondeo* 1. *Contrarium testari Mercatorum Relationem apud Ananiam supra Cap. 4.* 2. *Et licet non inventi essent vivi à quolibet, pari jure Monoceyota &c alia negare liceret.* 3. *Qui maria pernavigant, vix oras paucas maritimis lustrant, adeò non terras omnes à mari diffitas.* 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 Anris vitam tolerare dicantur.* 7. *Si vel maximè omni ab omnibus diligentia quesiti fuissent, nec inventi; fieri potest, ut instar Gigantum jam desierint nec sint amplius.*

(b) *Pliniij 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 fuerunt ; 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 *Aethiopic 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 dissent 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 Acceptation, that is not Men of the least, but of the largest size ; 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 πυγμὴ, which signifies the Cubit measure, 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 Hist. Aethiopic. 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 aique ipse Latratus magis Bestias quam Homines contentur? Sed omnia Genera Hominum, quæ dicuntur esse, esse credere, non est necesse.* And afterwards so fully expresses himself in favour of the Hypothesis I am here maintaining, that I think it a great Confirmation of it. *Nam & Simias* (saith he) *& Cercopithecus, & Sphingas, si nesciremus non Homines esse, sed Bestias, possent isti Historici de sua Curiositate gloriantes velut Gentes aliquas Hominum nobis impunitâ 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 asserts 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* (saith (e) he) *ad Avalitem Sinum esse Pygmæos Veterum multa probant.* He gives us five Reasons to prove this. As , 1. The Authority of *Hesychius*, who saith Νοβαὶ Πυγμαῖοι. 2. Because Homer places the Pygmies near the Ocean, where the Nubæ 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 Nubæ ; but afterwards adds, *Quos tamen absit ut putemus Staturâ fuisse Cubitali, prout Poetæ 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 Cranes ; 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 possessed 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 Nubæ ; for then the Nubæ must have understood their Language, which the

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

Text saith, none of the Neighbourhood did. And because the *Nubæ* 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 sort 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 *Pygmies*. How far *Bochartus* may be in the right, in guessing 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 *Avalite*, 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 Philo-*
sophus, Pusillos Homines in iis 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 E-*
quorum; which had *Bochartus* considered, he would not have been so fond it may be of his *Nubæ*. And if the Νῶοι Πυγμαῖοι in *Hesychius* are such *Pygmies* as *Bochartus* makes his *Nubæ*; *Quos tamen absit ut putemus staturā*
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 cuiusdam Græculi sive,*
qui Jacobo Isaacifilio, Sigariensi fertur ita narrasse. Navigabam aliquando
in mari Zingitano, & impulit me ventus in quandam Insulam. In cuius
Oppidum cum devenisset, reperi Incolas Cubitalis esse staturæ, & plerosque Co-
clices. Quorum multitudo in me congregata me deduxit ad Regem suum.
Fuji is, ut Captivus detinerer; & in quandam Caveæ speciem conjectus sum;
eos autem aliquando ad bellum inservi cum viderem, dixerunt Hostem immi-
nere, & fore ut propediem ingrueret. Nec multò post Gruum exercitus in
eos insurrexit. Atque ideo erant Coclites, quod eorum oculos hæ confodissent.
Atque Ego, virgâ assumptâ, in eas impetum feci, & illæ avolârunt atque au-
fugerunt; 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 Hierozoci 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 *Generallissimo*; but our Author is modest in not declaring what they were.

Isaac Vossius seems to unsettle all, and endeavours utterly to ruin 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 serio affirmet non esse fabellam, quæ de Pygmæis & Bello, quod cum Gruibus gerant, narrantur.* *Si quis toiam per vadat Africam, nullas vel Grues vel Pygmæos inveniet.* Now one would wonder more at *Vossius*, that he should assert this of *Aristotle*, which he never said. And since *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), Σπείρεν ὁ τεν μὲν Γέραξ οὐ ποιῶντις τὸ λιβύον μελαχωρῆν. '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*) saith, Αἱ γέραιοι δὲ Αἰγυπτίοις ὡραὶ δέρπες ἀφίσαμεναι, εἰκὸν αὐτοχόμεναι τῷ Θάλπῳ, τεινασσαι τὰ πυγαὶ ωταρεῖστα, φέργυλαι διὰ τὸ ἀερόν, ἐνθῦ τῷ Σηνθῶν γῆς. i.e. Grues per astatem ex Aegypto abscedentes, quia Calorem pati non possunt, alis velorum instar expansis, per aerem ad Scythicam plagam rectâ 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 considerable 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* (saith (k) he) *ut solent fabellæ non de nihilo finci & 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 gerant bellum.* *Præcipuum quippe Eboris commercium in regno magni Macoki 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 (*l*) in his *Commentary* on his *Aethiopick History* remarks, That there was never known a Nation all of Dwarfs. *Nani quippe* (saith Ludolphus) *Naturæ quodam errore ex aliis justæ staturæ hominibus generantur. Qualis verò ea Gens fit, ex qua ista Naturæ Ludibria tantâ copiâ proveniant, Vossium docere oportebat, quia Pumiliones Pamiles alias non gignunt, sed plerunque steriles sunt, experientia teste; ut plane non opus habuerunt 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 sort of Men in that Country of less Stature than ordinary. And Dapper in his History of Africa, from whom *Vossius* takes this Account, describes such in the Kingdom of Mokoko, he calls *Mimos*, and tells us that they kill *Elephants*. But I see 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 encountr'd an *Elephant*, were as vain an Attempt, as the Pygmies were guilty of in *Philostratus* (*m*), 'who to revenge the Death of *Antæus*, having found Hercules napping in Libya, mustered up all their Forces against him. One Phalanx (he tells us) assauted his left hand; but against his right hand, that being the stronger, two Phalanges were appointed. The Archers and Slingers besieged his feet admiring the hugeness of his Thighs: But against his Head, as the Arsenal, they raised Batteries, the King himself taking his Post there. 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 *Eurysthenes*. This *Antæus* 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 *Antæus*'s Sepulchre to be opened, and found his Corps full threescore 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 Fiction 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

(*l*) Job Ludolphus in *Comment. in Historiam Aethiopicam*, 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*; *fabula de Geranomachia* *Pygmæorum* *seu pugna cum Gruibus* *etiam aliquid de vero trahere videtur*, *si pro Gruibus Condoras intelligas*, *Aves in interiore Africa maximas*, *ut fidem 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 nominarit*, *sicuti Plautus Picos pro Gryphibus*, & *Romani Boves Iucæ pro Elephantis dixerunt*.

'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 *Pygmy*, as our *Kites* can with a *Chicken*, there might be some pretence for *Ludovicus's Condor* or *Cundor*: 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 sèvâ 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 *Mouse*, and eat them up into the bargain; now I never heard the *Cranes* were so cruel 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

(o) *Job Ludolphus Comment. in Historiam suam Äthiopic.* p. 73. (p) *Job Ludolphus ibid.* pag. 164.
(q) *Garcilasso de la Vega Royal Comment. of Peru.* (r) *Juvenal Satyr.* 13. vers. 167.

when

when they are, they often appear single, 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 Aethiopum veniunt, Nilique fluenta
Turmatim Palamedis Aves, celsaque per altum
Aera labentes fugiunt Athlanta nivosum,
Pygmæos imbelli 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, Polunque,
Et Genus hoc Hominum natura imbelli, quietum,
Mite, facit Mavors pugnax, immane Cruentum.*

Having now considered and examined the various Opinions of these learned Men concerning this Pygmaomachia ; and represented the Reasons they give for maintaining their Conjectures ; I shall beg leave to subjoyne 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 πρῶτον Ιδεῖαι, and rendered this Story so difficult to be believed, I find hath been the Opinion that has generally

(s) *Oppian. lib. i. de Piscibus.*

obtained:

obtained, that these *Pygmies* were really a Race of *little Men*. And tho' they are only *Brutes*, yet being at first call'd *wild 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*. And tho' Homer, who first mentioned them, calls them *ἄνδεις πυγμαῖοι*, 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 assigning what might be the true Cause of this Quarrel between the *Cranes* and *Pygmies*, and by divesting it of the many fabulous Relations that the *Indian Historians*, and others, have load-ed it with, I have endeavoured to render it a true, at least a probable Sto-ry. I have instanced in *Ctesias* and the *Indian Historians*, as the Authors and Inventors of the many Fables we have had concerning them: Par-ticularly, 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* ha-ving 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 assert the Truth of their *being*, from a *Text* in *Aristotle*; which being so positive in af-firming 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 Pyg-mies*, 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 *wild Beasts* that breed in those Countries: For tho' by *Herodotus* they are call'd ἄνδρες ἄγρων, and *Philostratus* calls them ἀθρόποις μέλανας, yet both make them θνήτα 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, εἰ δὲ ταῦταις οὐκέντις ἄνδρες ἄγρεις, but when he comes to describe them, tells us that they had no Speech;

(t) *Pausanias in Atticis*, p. m. 21.

that

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*, since '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 fight *Cranes*.

Having premised this, I have taken into consideration *Casspar Bartholine Senior* his *Opusculum de Pygmæis*, and *Jo. Talentonius's* Dissertation 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 side, is so far from favouring this Opinion, that he doubts whether any such 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 Cæsar Scaliger*, and *Isaac Casaubon*, and *Adrian Spigelius* utterly deny the Being of *Pygmies*, and look upon them as a Figment only of the Ancients, because such little Men as 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 slighteth 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, quam Homunciones esse.* And the Moderns too, being byassed and misguided by this Notion, have either wholly denied them, or contented themselves in offering their Conjectures what might give the first rise to the inventing this Fable. And tho' *Albertius*, as I find him frequently quoted, thought that the *Pygmies* might be only a sort 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 ἄνδρες ἄγροι*, what can they be else, than *Homines Sylvestres*, or *wild Men*? as they are now called. And *Homer's ἄνδρες πυγμαῖοι*, are no more an Humane Kind, or Men, than *Herodotus's ἄνδρες ἄγροι*, which he makes to be *Δρεῖα*, or *wild Beasts*: And the *ἄνδρες μυρεὶ* or *μέλαινες* (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 so, (as I have shewn in the *Anatomy*) the Ancients had a very plausible ground for giving them this denomination of *ἄνδρες* or *ἄνθεπτοι*, but commonly they added an Epithet; as *ἄγροι*, *μυρεὶ*, *πυγμαῖοι*, *μέλαινες*, or some such 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 engrift 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 *ἄνδρες* or *ἄνθεπτοι*, 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 said. But it may be objected that the *Orang-Outang*, or these *wild* or *savage Men* are not *πυγμαῖοι*, or *Trissithami*, 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

this he thinks might give the rise to the Story of the Pygmies. For, saith he (u), Τὰ δὲ βοσκήματα αὐτοῖς εἰσὶ μινέραι, περγάλαι καὶ ἄλιες, καὶ κύνες μινέραι, τεργέχεις δὲ μαίχημοι (οἰκεῖτες μινέραι ὄντες) τάχα δὲ καὶ τὰς πυγμαῖς διπότες τὰς μινέραις εἰπενόσταν, καὶ αὐτοὶ πατασταν. 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 (saith he) from the μινέραια 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 saw them; because he fancied, as a great many others have done, that these Pygmies must be real Men, and not a sort of Brutes. Now since the other Brutes in this Country are generally of a less size than in other Parts, why may not this sort of Ape, the Orang-Outang, or wild Man, be so likewise. Aristotle speaking of the Pygmies, saith, Καὶ μινέραιοι μὲν καὶ αὐτοὶ, καὶ οἱ ἵπποι· 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-Outang be. This that I dissected, which was brought from Angola (as I have often mentioned) wanted something of the just stature of the Pygmies; but it was young, and I am therefore uncertain to what tallness it might grow, when at full Age: And neither *Tulpus*, 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 else. I will give you his own words: *Ultra Lapones* (saith he) *in Regione inter Corum & Aquilonem perpetuâ oppressa Caligine Pygmæos reperiri, aliqui eximiæ fidei testes retulerunt ; qui postquam ad summum adoleverint, nostratis Pueri denum annorum Mensuram vix excedunt. Meticulosum genus hominum, & garritu Sermonem exprimens, adeo ut tam Simiæ propinqui, quam statuâ ac sensibus ab justæ 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 supposing, 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 waft 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 sort 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 Simiis magnis & parvis, hominibus simillimis, hos capiunt Venatores & totos depilant, nisi quod in barba & in loco secreto Pilos relinquent, & occisis speciebus Aromaticis condunt, & postea desiccant, venduntque Negotiatoribus, qui per diversas Orbis Partes Corpora illa deferentes, homines persuadent Tales Homunciones in Maris Insulis reperiri.* *Joh. Jonston* (x) relates the same thing, but without 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 observed 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 Muscovitar. lib. p. m. 489.* (†) *M. Pauli Veneti de Regionibus Orientalib. 3. cap. 15. p. m. 390.* (x) *Jo. Jonston. Hist. Nat. de Quadruped. p. m. 139.*

selves;

selves ; 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, οὐ τὰ δέρδεα αἱ πίπειδες, ἀντὶ γεργυοῖ πίθηνοι. And he calls them the People of *Apes* ; ἐλέγονται πίθηνων οἰκεῖν δῆμοις εἰς μυχοῖς τὰς ὄψες. *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 Tavern, 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 Tyanae*, lib. 3. 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.

TIS 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 sufficiently confessed. That which induces me to mention them, is to shew how fond the *Ancients* were of inventing *Fables*; and *Ctesias*, who hath told us such fine Stories of the *Pygmies*, whom he makes to be *little Men*, tho' indeed they are only a sort of *Apes*; when he comes to discourse of the *Cynocephali*, which are a sort 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 asserting 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 *Ctesias'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

"Ἐν τοῖς δὲ τοῖς ὄρεσι φυοῖν ἀνθρώποις
βιοῦσιν, κακῶς ἔχοντας περάλιων.
Ἐδῆταις δὲ φορέσιν εἰς τὴν ἀγρίων θη-
τίων: φωνὴν δὲ διαλέγοντας ἐδεμίαν,
ἀλλ' ὡφελοῦντας ὕπαρξεν πόνες καὶ γέτω συ-
νιάσιν αὐτῷ τὸ φωνεῖν. Οδόντας δὲ
μετέξεσθαι τοῖς κακοῖς, καὶ τὰς ὄνυχας διμοι-
ωσι, κακῶν, μακρογλύφες δὲ καὶ σεργυ-
λούλερες. Οἰκέσι δὲ τοῖς ὄρεσι μέχεται
τὰς ἴνδας πολαμάς. Μέλανες δέ εἰσι καὶ
δίκριτοι πάνται, ὕπαρξεν δὲ οἱ ἄλλοι Ἰνδοί,
οἵ [καὶ] ὑπερίγνυνται. Καὶ συνιάσιν
μὲν τὰ παῖδες σκέπτονται λεγόμενα, αὐτοὶ
δὲ δύνανται διαλέγεσθαι: ἀλλὰ τῇ
ὄρυγῇ καὶ ταῖς χεροῖς, καὶ τοῖς δεκτύλοις
οπιασινούσιν, ὕπαρξεν οἱ παροί καὶ ἄλλοι·
καλούνται δὲ τοῦτο τῷ ἴνδῃ καλύπτεσθαι,
ὅπερ ὅτινα ἐλλαστικά πιστοπέραλοι. Τὸ
δέ ἐσθιν ὅτινα, ἔως δώδεκα μυριά-
δων.

que gentis capita numerari ad centum & viginti millia.

And a little afterwards he adds,

"Οἱ οἱ πιστοπέραλοι οἰκοῦσι τοῖς
ὄρεσιν, εἰς ἐργαζούσιν: δύτῳ θήσεσθαι δὲ
οἴστησιν. "Οτι τὸν [δὲ] δύτοντείνων αὐτῷ,
οἴστησιν πέριτος τὸν ἥλιον. Τρέφεται δὲ καὶ
περέβατο πολλά, καὶ αἶγας, καὶ ἔις. Πι-
νεται δὲ γάλα καὶ ὀξύγαλα τῷ περγα-
τῶν. Ἐδίσαι τοῦτο τὸ καρπὸν τὰ σπα-
χόρες, αφ' εἰς τὸ ἥλεκτρον: γλυκὺς γάρ
ὅτι καὶ ξυρεψίνοντες αὐτάς, απειδίας
συρράπτεσθαι, ὕπαρξεν τοῖς ἐλληνοῖς τιν-
σταρίδαι. Οἱ δέ πιστοπέραλοι χεδίαν
πιοντάμενοι, καὶ ὑπερίστειταις, απάγουσι
φόρον τέττα. Καὶ τοῦ πορφύρας τὸ ἀν-
δρος καθαρεῖν ποιούσαις, καὶ τὰ ἥλεκτρα
καὶ σ' τάλαντα τὰ εἰναιτέοντας καὶ γέτω

Degere iisdem hisce in montibus
homines memorat canino capite, qui
ferarum pellibus vestiantur. Sermo-
ne hos nullo uti, canum tantum more
latratum edere, atque ita mutuò sese
intelligere. Dentes illis esse quam
canibus maiores, & caninos similiter
ungues, sed longiores, ac rotundio-
res. Montes incolere ad Indum flu-
vium usque, & colore esse nigro, in-
signesque justitiae cultores, ceterorum
Indorum more, inter quos versentur.
Intelligere quoque quae ab Indis di-
cantur, licet ipsi loqui minimè possint,
ut propterea latratu, manibus, atque
digitis signa dent, quemadmodum ferè
surdi ac muti solent. Vocari hos ab
Indis Calystrios, quod Græci dice-
rent πιστοπέραλος, id est, Canicipites,
[carnibus eodem vesci crudis] totius-

Narrat insuper hos Cynocephalos in
montibus habitantes nullum exercere
opificium; sed de venatione vivere,
ferasque quas occiderint ad solem tor-
rere. Magnam nihilominus pecoris co-
piam alere, caprarūmque & ovium:
quarum quidem ovium lac atque oxy-
gala pro potu illis sit. Vesci tamen eti-
am Sipachoræ fructu; è qua, uti dictum
est, arbore succinum emanat. dulcem
enimi illum esse. Hunc item illos fru-
ctum arefactum in corbes constipare, ad
eum modum quo uvas passas Græci.
Eosdem illos Cynocephalos ratem quoq;
extemporariam construere, qua imposta-
tum hujus fructus onus, ut & purpuræ
(sed purgato prius ejus flore) itemque
electri, ad ducenta & sexaginta talen-

(a) Photij Bibliothec. Cod. 72. de Indicis, p. m. 149, &c.

τὸ φοινίκιν βάσπει τὸ φρεμαῖκα, ἐπεργ-
τοσχῶται. Καὶ ἡλέκτρα χίλια τάλαντα
ἀπάγει καὶ εἰκατόν ταῦ Ινδῶν Βρο-
λᾶ. Καὶ ἐπεργῇ καταγούσες πωλεῖ-
σι τοῖς Ινδοῖς, πρὸς ἄρτας ἢ ἀλεπίτα ἢ
ξύλινα οὐαίνα. Πωλεῖσι ἢ ἢ ξύρη, οἷς
χρῆσι πρὸς τὴν θηλεῖαν ἀγέργη, ἢ
τοῦτο ἢ αὐτοῖς. Πάντα γὰρ ἢ δενοί εἰ-
σιν ἀνοτίζειν ἢ τοξόνειν. Απολέμπ-
τοι δὲ εἰσὶ, διὰ τὸ οἰκεῖον αὐτὸς ὅρεα ἀ-
βεῖται ἢ ὑψηλά. Διδύσι ἢ αὐτοῖς διὰ
πέμπτος ἔτους δῶρον δὲ Βρολᾶς, λέ μὲν
μυριάδες τέσσερα, ἢ ἀνοτίων τοσαῦτας,
πελτῆς ἢ δῶρον ἢ ξύρην ἢ πενταπο-
μόζια. Τέτοις τοῖς κινεοκράτοις ὧν
εἰσὶν οἰκίζοι, ἀλλὰ εἰς απολάσιος δικυτῶν. Οἱ
Θραύσιοι ἢ πὰ Σινεία, τοξόνοντες ἢ
ἀνοτίζοντες, ἢ διώνοντες καταλαμβά-
νοται παχὺ γὰρ τρέχοντι λέων. Εἴ τοι
γυναικεῖς αὐτῷ ἀπαξ τὸ μυνὸς, ὅπερ
τὰ καταμίνια αὐτῆς ἐλάσῃ ἀλλοτε δὲ
ἢ. Οἱ ἢ ἀνδρεῖς ἢ λέων. Μὲν, τὰς δὲ
χειροῖς ἀπονίζοντο. Ελαῖροι δὲ χρῶντο
τεῖς τὸ μύωδες, ταῦ δὲ τὸ γαλλαῖον
γνωμένω, ἢ σκιεῖσον δέρμασι. Τὰ
φιλῶν τὴν μασθληματάν, ὡς λεπτό-
πάταν, ἢ αὐτοῖς ἢ αἰ γυναικεῖς αὐτῷ.
Οἱ δὲ πλεσιώτατοι αὐτῷ, λίνα φορε-
σιν ἔτοι δὲ εἰσὶν ὀλήγοι. Κλῖναι δὲ αὐ-
τοῖς ἐκ εἰον, ἀλλὰ σισάδες ποιεῖν. Οὐ-
τοὶ δὲ αὐτῷ πλεσιώτατοι νομίζει-
σι, ὡς ἐν πλείστα περίσσεται ἢ : ἢ δὲ
ἀλληλοίσι, παρεπλονία. Οὐραὶ δὲ
ἐχοτες πάντες ἢ ἀνδρεῖς ἢ γυναικεῖς,
τοῦτο τὴν ιχύν. οἵαν περιεκτὸν μεί-
ζονα δὲ ἢ διεσυτέρεγν. Καὶ μίσγοντο
ταῖς γυναικὶ πλεγποδισὶ, ωστε οἱ νύ-
νες. ἀλλας δὲ μαγνῶν αὐτοῖς, οἵτινι αἰ-
χεῖν. Δίργαιοι δὲ εἰσὶ, ἢ μακρογο-
τατοι πάνται ἀνθρώπων: ζῷοι γὰρ εἴη-
ποι ἢ οἱ. Εὗνοι δὲ αὐτῷ ἢ τό.

ta quotannis avebunt; additis ta-
lentis totidem illius Pigmenti, quo
infectores puniceum colorem inducunt.
Electri præterea mille talenta quotan-
nis ad Indorum regem advehere. Im-
mō & alia plura devehere ad Indos
venalia, pro quibus vicissim panes,
farinam, & xylinas vestes accipiant.
Habere quoque enses venales, quibus
ipse ad venatum utuntur, cum arcubus
& jaculis. Peritissimos enim esse jacu-
landi atque sagittandi: & præterea
etiam, quod montes habitent altos at-
que inaccessos, bello insuperabiles. Re-
gem ipsis pro munere quinto quoque an-
no præbere trecenta arcum, totidem
que jaculorum millia; jam peltarum
centum viginti, & gladiorum quin-
quaginta millia. Nullas item apud
hos esse domos, sed in antris degere.
In venatione jaculis potissimum feras,
vel sagittis petere; easdemque perse-
quendo, quod cursus velocitate præ-
stent, etiam assequi. Horum uxores
semel duntaxat per mensem, cum men-
strua patiuntur, lavare; aliás nun-
quam. Neque viros unquam omnino
lavare, sed manus tantummodo ab-
luere. Oleo tamen ex latte confecto ter-
saltem mensibus singulis ungi, & pel-
libus deinde abstergi. Veste ad hæc uti,
non villosa, sed è glabris maceratisq;
pellibus quam tenuissimis, ipsos æquè
atque uxores. Exceptis fortè ditissi-
mis inter eos, & iis quidem paucis,
qui lineos gestent amictus. Nec item
lectorum novisse usum eos, qui extem-
poraneos sibi toros exstruant. Hunc a-
pud eos ditissimum haberi, qui plurim-
um habeat pecoris, ac reliquas opes
his propemodum esse similes. Caudam
insuper habere omnes, tam viros quam
mulieres, supra clunes, caninæ, similem, nisi quod major sit, & pilis den-
sior. Quadrupedes item bos, canum more, cum mulieribus congregati aliūm-
que congregandi modum omnem pro turpi habere. Justissimos eosdem 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 *Ctesias*) 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 signifie 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 roast 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 sixty 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 sell to the *Indians*; for which they receive Bread, and Meal, and Cotton Garments. And the *Indians* sell 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 hunting 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 not hairy, but Skins macerated smooth, and made very thin. The 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 amongst them, who hath most Sheep, or such like Substance. They have all, both Men and Women, Tails on their Rumps, like Dogs, but larger and more hairy; and, like Dogs too, they lye with their Women on all four, and they think it unbecoming to do otherwise. They are just,

' just, and the longest lived of any Men, for they live an Hundred and
' seventy, and some of them Two hundred years.

Had not *Ctesias* made such a Solemn Assertion of the Truth of all that he had wrote, that Apology that *Strabo*(b) makes for the Poets, might excuse him, Φεύγει γάρ (saith *Strabo*) ἐνθεος δη μάθει παρεπιδημοτικον εἰπόντες· εἰν αὐτοίς τῷ εἴπων, ἀλλὰ πλάσαι τῷ αἰδηνάτων, περιείλας οὐ τεφέως κρίειν· i.e. Statim enim appetet eos fabulas admiscere, non ob verorum ignorationem, sed delectationis causa, monstra & alia quæ esse non possunt, fingentes. For our *Historian* had as good a Talent at Fiction as any of the Poets. And tho' *Hesychylus*, 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 κυνοπέρσωποι, 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 Oásin 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 absurdâ eorum (quamquam Hominum) hoc in loco existimanda est mentio. Nam & Sermonis usu carent, & acuto quodam stridore sonant. Barbam infra supraque os gerunt, Dracorum quadam similitudine. Manus eorum validis & acutissimis unguibus armantur. Corpus omne hirsutum est, hoc etiam instar Canum. Sunt autem perniciissimi, & aquas Regionis norunt; atque eam ob causam, difficiles captu.

Now tho' *Ælian* 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 Indiae tractu, ubi Canthari (†) jam dicti, Cynocephali etiam reperiuntur: quibus à facie & Corporis specie nomen inditum, cætera fere humana habent: & vestiti pellibus ferarum ingredinuntur. Justi sunt, Hominum nemini molesti aut injurij, non Sermone sed ululatu sonant. Indorum tamen linguam intelligunt. Venatione Animalium ferorum vivunt, quæ ut sunt celerrimi, facile consecuti interrimunt, & frustatim divisa ad solem assunt. Capras etiam & oves alunt, ut

(b) *Strabo Geograph.* lib. 1. p. m. 29. (c) *Ælian. Hist. de Animal.* lib. 10. cap. 25. p. m. 601. (d) *Ælian. Hist. de Animal.* lib. 4. cap. 46. p. m. 239. (†) These *Canthari* are that sort of *Scaribæus* we call a *Lady-Cow*, and I have formerly given a Figure of, in *Philosop. 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 *Ælian* out of *Ctesias*.

ex lacte potu fruantur. Horum inter Animantes rationis expertes non temere mentionem feci, articulato enim, discretoque & humano Sermone non nuntiatur.

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 *Ægyptians* in the time of the *Ptolomies* took more care of them ; and as the same *Ælian* 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) *Ælian*, as *Gesner* translates him ; *Animalia Discipline idonea hæc esse percepi. Regnantibus Ptolomeis Cynocephalos Ægyptij literas, & saltare, & pulsare Citharam docebant. Tum verò unusquisquam 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 seems their particular Character : For saith *Aristotle*, as I have quoted him already (f), Καὶ οἱ κυνοκέφαλοι δὲ τῶν αὐτῶν ἐχόσι μορφὴν τοῖς πιθίνοις, πλεύ μειζόνες τὸ εἰσὶ, οὐ, ἵχυρες τε, οὐ τὰ περιστάτα ἐχόντες νυνοειδεῖς εἰσί. Ἐπὶ δὲ ἀγελώτεροι τε τὰ ἄλλα, οὐ τὰς ὁδόντας ἐχόσι νυνοειδεῖς εἰς, οὐ, ἵχυρες. 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*, Efferior *Cynocephalis* Natura sicut *Satyris* : And (h) *Solinus*, *Cynocephali* & ipsi sunt ē numero simiarum, in *Æthiopiacē* 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 : Οἱ δὲ ὄνομαζόμενοι κυνοκέφαλοι τοῖς μὲν σώμασιν ἀνθρώπων δυσειδεῖσι παρεμφερεῖς εἰσὶ, ταῖς δὲ φωναῖς μηγμάτος ἀνθρώπινος προσίεν. Ἀγελώταλα δὲ τῶν ταῦτα ζῶα, οὐ παντελῶς ἀπίθινα λακοδεσώτα, τινὲς δὲ τῷ ὅρρῳ περισσοῦν αἰσθαντείς εἰχεν ταῖς δὲ ἀπλεῖαις διώταλον συμβαίνει, τὸ τῶν μῆτερν ἔμπορος τὰ σώματα & πέρων ἀπαντα τὸ χρόνον. i. e. Qui *Cynocephali* (à Canino Capite) dicuntur, Corporis aspectum Hominum deformium instar habent, quorum vocem missitatione tantum exprimunt. Apprimè ferox est hoc Animal, nec ullo circumventione pacto admittit, & vultum à superciliis anterioribus præfert. Singulare quiddam fæmellis accidit ; quod vulvam perpetuè extra Corpus projectant habent. And *Agatharcides* in (k) *Photius* gives just the same description of them : 'Ο δὲ κυνοκέφαλος (saith he) τὸ μὲν σῶμα ἀνθρώπου δυσειδῆς τρο-

(e) *Ælian. Hist. de Anim.* lib. 6. cap. 10. p. 331. (f) Vid. pag. 3. &c. 7. of the Anatomy. (h) *Plinijs Hist. Nat.* lib. 8. cap. 54. p. 243. (i) *Solini Polyhistor.* cap. 27. p. m. 39. (j) *Diodori Siculi Biblioth. Histor.* lib. 3. p. m. 168. (k) *Photij Biblioth.* Cap. 38. Cod. 250. p. m. 1364.

γεῖτει, τὸ περὶ οὐρῶν δὲ κανός φωλεῖ δὲ ἀρίστη μεγαλώποσταν ἄγειρον
δὲ οὐρθολῆγον τελείως ἀπιθάσιον, καὶ τὸν ἔφιν ἐμφαῖνον δύο ταῦτα τὸν ὄφρυν καὶ
τὰν ὄμματαν αὐτονεργά. Περὶ μὲν τὸν ἄρρενα ταῦτα. Τῷ δὲ θήλαι περὶ σουει^τ
καὶ τὸ τῶν μήτερον ἔξω τὸ σώματα φορεῖν, καὶ οὕτω διαγίνεσθαι πάντα τὸ ζέν.
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: vultusque à superciliis & oculis austere
rum 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 so many and noted Authors too, seems somewhat 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 *Ctesias* saith 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 *Ænigmatical* and *Mythological* Representations. Many times there is something of Truth contained in their Relations, but 'tis under such Vails, that you will not discover it, till you have taken them off. And tho' there are no such 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 sort 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 sort of *Monkeys*, and not *Men*, as formerly represented.

(1) *Salmasij Exercitat. Plinian. Cap. 27. p. 267.*

A

Philological Essay

Concerning the

S A T Y R S

O F T H E

A N C I E N T S.

Of the SATYRS of the Ancients.

TULPIUS 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 several 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 such Beings in Nature. The Learned (a) Casaubon is clearly of this Mind, *Quicquid de Satyris legimus* (saith he) *ex Poetarum Pictorumque fingendi Licentia Originem ducere. Nihil hujus revera in Rerum Naturâ existere.* So (b) Isaac Vossius speaking of the *Hægipanes* tells us, *Sanè neque in forma hujus monstri convenient, si tamen monstribus accensenda sunt ea, quæ sunt mera Græculorum Commenta.* And the Learned (c) Bochartus saith, *Abst interim ut ex his locis Quisquam colligat, ullos aut jam extare, vel unquam extitisse in Rerum Natura Satyros.* However, I do not doubt but to make it plainly appear, that there were

(a) *Casaubon de Poeti Satyrica lib. i. cap. 2.* (b) *I. Vossij Comment. ad Pompon. Melam. lib. i. c. 8. p. m. 46.*
(c) *Bocharti Hierozoic. seu de Animal. Sacra. Scripturæ, part. post. lib. 6. cap. 7. p. 829.*

such Animals in *Africa* which the Ancients called *Satyrs*. And tho' they sometimes called them *Men*, and for the most part worshipped them as *Gods*, yet I shall shew, that they were only a sort of *Monkeys*, and likewise Evince, that the *Orang-Outang* was not this sort 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 asserted. 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*, *Hægipan*, *Sylvanus*, *Silenus*, or any other Name they have given of this sort 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 *Demons*; 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 Αἰγίποδες ἄνδρες, as *Herodotus* expresses it. And *Pliny* (as I shall shew) where he describes them as *Brutes*; and saith, they are sometimes *Quadrupeds*, sometimes *Bipeds*, yet tells us, they are *Humanæ Effigie*. *Diodorus Siculus* (d) informs us, that when *Osiris* went into *Aethiopia*, ἀχθῖναι λέγοι περὶ αὐτὸν τὸ τῷ Σατύρων γένος, ἐς φαῖνεν δὲ τῆς ὁστοῦ ἐχειν πόμας, &c. i. e. Dum in *Aethiopia* versatur (*Osiris*) Gens Satyrorum ei adducitur, quas pilos in lumbis (*Osphye*) habere ferunt. *Risus enim amator erat Osiris & Musicæ Choreisq; gaudebat, &c.* *Satyri* igitur quia ad tripudia, & decantationem *Carminum*, omnemque hilaritatem & lusum apti erant, in partem *Militiae* venerunt. He makes them likewise the Companions of *Bacchus*, and for the same reason (e), Τοὺς δὲ Σατύρους ταῖς περὶ γέλων συνεγένεσις δημιούροις χεωμένοις, παραπολιζεῖν τῷ Διονύσῳ τὸν ἐνδιάμονον οὐ περχασκούσον βίον i. e. Ita *Satyri* ludicris & ad risum compositis gestibus & actionibus, vitam *Dionysio* 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 horrore : subire tacitam*

(d) *Diodorus Siculus Bibliothec. Hist.* lib. 1. p. m. 16. (e) *Diodorus Siculus ibid.* lib. 4. p. m. 213.
(f) *Pliniij Hist. Nat.* lib. 5. cap. 1. p. m. 523.

Religionem animos propriūs 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 Sonitu strepere. And then adds, *Hæc celebrati Authores prodidere.* And so (g) Pomponius Mela, *Ultra hunc sinum Mons altus (ut Græci vocant) Θεωρία, 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, nullæ habitantium Sedes, nulla Vestigia, solitudo in diem Vasta, & silentium Vastius, nocte crebri ignes micant, & veluti Castra late jacentia ostenduntur, Crepant Cymbala & Tympana, audiunturque Tibiae Sonantes majus humanis.* Where we may observe that what Pliny calls *Ægipanes*, Mela calls here *Panes*. And the *Satyrs* being commonly called *Fanni*, 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, *Ἐν δὲ τῇ νυκτὶ φέβεος σφίσιν ἐντίπλαι Πάνινές. Τὰ δὲ δύο αὐτίας ἀδεμάτις δέμος ταῦτα φασὶ γίνεσθαι* i. e. *Et nocte Panicus illos incessit terror. Terrores enim nulla ex causa Ortos ab eo (sc. Pane) immitti aiunt.* And so (i) Euripides:

Κερνίς Πανὸς τερρερεῖ μαίσιγι φοβῆ.

Saturnij (Senis) Panis tremendo flagello (Ictus) trepidas.

And so (k) Dionysius Halicarnassus speaking of the *Fannus*, says, *Τέρῳ δὲ αὐτιπέδαις τῷ δείμοι Ρωμαῖοι πὲ Πάνινα, οὐ τοι φάσιατα ἢ δὲ αἱλοίας ἵχοια μορφαῖς, εἰς δὲ θεόν αὐθεώπων ἐξεχει, δείμοια φέγγια* i. e. *Huic enim Romani Panicos terrores adscribunt, & quæcumque alia Spectra, quæ 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 situ Orbis*, lib. 3. cap. 9. p. m. 63.
(k) *Dionysij Halicarnass. lib. 5. cap. 3.*

(h) *Pausanias in Phocicis.*
(l) *Ovid in Phœdra.*

(i) *Euripides in*

kind,

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, "Εἰ δὲ τὸ πανικὸς λέγεται παρεχάς τὰς ἀφοδίσες, οὐ ἀλόγες, ὅταν γέρε πως οὐ αὐγήλας, οὐ τὰ αἴπολα πλοεῖται, οὐπε τινὸς δέ οὔλης, οὐ τῷ θεάντερον οὐ φρεγγώδειν τοπων ἀκοστεύει· 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 ē Sylva, aut ex Antris aut ex Terra 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 Echoing of the whistling boisterous Winds amongst those hideous Rocks: For speaking of *Echo's*, he tells us (*n*),

Sex etiam, aut septem loca vidi reddere voces
Unam cum jaceres: ita colles collibus ipsos
Verba repulsantes iterabant dicta referre.
Hæc loca Capripedes Satyros, Nymphasque tenere
Finitimi fingunt, & Faunos esse loquuntur;
Quorum noctivago strepitu, Ludoque jocanti
Adfirmant volgo tacitura silentia rumpi,
Chordarumque Sonos fieri, dulcisque querelas,
Tibia quas fundit digitis pulsata canentum:
Et genus Agricolam late sentiscere, cum Pan
Pinea semiferi Capitis gelamina quassans,
Uoco sæpe labro calamos percurrit bianteis,
Fistula Silvestrem ne cesseret fundere Musam.
Cætera de genere hoc monstra, ac Portenta loquuntur,
Ne looa deserta ab Divis quoque forie putentur
Sola tenere: 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 self have known
Some Rocks and Hills return six words for one:
The dancing words from Hill to Hill rebound,
They all receive, and all restore the sound.
The *Vulgar*, and the Neighbours think, and tell,
That there the *Nymphs*, and *Fauns*, and *Satyrs* dwell;

(m) *Phurnutis de Natura Deorum. Cap. de Pane*, p. m. 70. (n) *T. Lucretij de Rerum Naturâ, lib. 4. vers. 581.*

And

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 Ruricola, Sylvarum Numinia, 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*,

— — — *Deos qui novit agrestes
 Panaque, Silvanumque Senem Nymphasque Sorores.*

And (*s*) *Plutarch* tells us that what the Greeks called *Hegipan*, the Romans called *Silvannus*. And (*t*) *Pausanias* expressly tells us, that when the *Satyrs*

(*o*) *Ovid. Metamorph.* lib. 6. vers. 392.

(*p*) *Ovid. Metamorph.* lib. 14. verl. 637.

(*q*) *Ovid. I.1.*

(*r*) *Virgil. Georg. l.2. vers. 494.*

(*s*) *Plutarch. in Parallelis.*

(*t*) *Pausan. in Attic. p.m. 21.*

grow

grow old, they are called *Silene*: Τὰς γὰρ ἡλικίας τῷ Σαλέπῳ περγίνοντας ὄνομαζοι Σειληνάς. And by Virgil's Expression *Nymphasque Sorores*, 'tis very evident, that the *Nymphs* likewise were of this Family, and nearly related. *Ovid* (u) joyns them together.

*Sunt mihi Semidei, sunt Rustica Numina Nymphae,
Faunique, Satyrique, & monticulae 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*, *Hægipan*, *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 busines, 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 oftentimes to be overcredulous, οὐδὲ μὲν εἰς πιστὰ λέγοντες, οἱνέν τε εἶπεν αἴγαποδας ἀρδεξες· 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*, saith (y) *Mela*. *Pliny* gives us a larger description of them; *Sunt & Satyri* (saith (z) he) *subsolanis Indorum montibus* (*Catharcludorum dicitur Regio*) *perniciössimum Animal*: *Cum Quadrupedes tum recte incedentes, humanam effigie, propter velocitatem, nisi Senes aut ægri, non capiuntur*. *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 *Iælian* is a little more express: *Finitimos Indiae montes* (saith (a) he) *transmittenti, ad intimum latus densissimas corvalles videri aiunt, & Corudam locum nominari: ubi Bestiae 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. Quum autem Venantium strepitum sentiunt, & Ca-*

(u) *Ovid-Metamorph.* lib. 1. vers. 193. (w) *Herodot. in Melpomene*, p. m. 229. (x) *Solinus Po-lybiſt. cap. 34.* (y) *Pomp. Mela de ſitu Crbis*, lib. 1. cap. 8. p. 11. (z) *Plinij Hift. Nat. lib. 7. cap. 2.* (a) *Iælian. Hift. Animal.* lib. 16. cap. 21.

num latratus exaudiunt, in Montium vertices incredibili celeritate excurrunt: nam per montes iter confidere assuetæ sunt. Contra eos qui se inse- quuntur pugnant, de summis montibus saxa devolentes, quorum impetu saepe multi deprehensi pereunt. Itaque difficultè capiuntur: Et ex iis non nullæ, sed ægerrimè tandem, aut ægrotantes nimirum, aut gravidæ comprehenduntur. Illæ quidem propter morbum; hæ verò ob gravitatem. Captæ autem ad Praesios 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; Περὶ τὸν Σαλύρων (saith (b) he) οἱ πτερες εἰσὶν, ἐπέρης πλέον ἐδέλων ὑπίσαδει, πολλοῖς αὐτῷ τάχτων ἔνεγκε ἐς λόγγος ἥλιδον. Ἐφεντος Καὶ ἀντὶ πλέων ἐς Ἰταλίαν ἀμαρτεῖν τὸν ἀνέμων τὸ πλέον, οὐκ ἐς τὴν Ἑλλὰν θάλασσαν, ἐς δὲ ἐκεῖνην πλέοντι Κένεντον Νήσος τὸν ἔνεγκε μὲν ἐφίμετος πολλὸς, εἰ δὲ τάχταις οἷον ἄνδρες ἀγείρεις ἀλλαζοῦσι τὸν ἐδέλων νήσοις περιστέψαντες, οἵα περιποτέ τοις περιστέψαντες, οὐδὲ εἰοίνων τοις ἀπείρων ἐχούσας. Βιβλίων δὲ τοῖς τούτοις τοῖς τάχταις καλεῖσθαι μὲν τὸν τὴν ναυτικὸν Σαλυρίδας, εἴ δὲ τὰς εὐοκεῖνας οὐ περίπετες, οὐδὲ πιπων τοις πολὺ μείον ἐχειν ὅποι τοῖς ιχθύοις σεργάσασι. Τάχταις δέ διονοιο καταδεχμόντας ὅποι τὴν ναυτικήν, φωνὴν μὲν ἐδεμπλεύνειν, τάχταις δὲ γυναικῶν ὕπικειμένην ταῖς εἰς τὴν νησί. Τέλος δὲ δείσιαν τὰς ναυτάς, βάρεσσαν γυναικῶν ἐκβαλεῖν ἐς τὴν νησίον. Εἰς ταύτην ἐν δέσμοις τὰς Σαλύρες, & μόνον δὲ καθίστηκεν, ἀλλὰ ταὶ τὸ πᾶν δυοτος σῶμα. Which (c) Conrad. Gesner. I find hath thus translated; Cæterum de Satyris, quinam sint, cum plura quām alij scire laborem, cum multis ea de re sum collocutus: Dixit autem Euphemus Car, se quām in Italianam 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 deflectere recusasse, quod antea quoque eō appulsi, Incolarum Inhumanitatem essent experti. Tempestatis denique violentia eō pervenisse. Insulas eas à Nautis vocari Satyrias. Incolas inesse rubicundos, & caudas imo dorso habere, Equinus non multò minores. Hōs, ubi senserant, ad navigium accurrisse, nullamque vocem edidisse, sed mulieribus Navi unā adiectis manus injecisse. Nautas verò timore correptos, Barbaram Mulierem in Insulam tandem projecisse. Eam Satyros, non solum qua parte consuetudo permittat, verū etiam toto corpore libidinosè violâsse, 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 δὲ τοτο (sc. Satyrus) πίστης, ἐρυθρὴ τὸ περιστόν, οὐ γοργὸς τὸν κίνσον, οὐ δεξὺν ἐχων. i. e. That a Satyr is a sort of Ape with a red face, swift of motion, and ha-

(b) Pausanias in Attica, p. m. 21. (c) Gesner. de Animal. p. 865. (d) Philostorgij Hist. Ecclesiast. 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 sort of *Apes*. So that *Bontius* was mistaken in calling it a *Satyr*. And *Tulpinus* was too hasty in laying down this Conclusion, *In summa* (faith (g) he) *vel Nullus est in Rerum Naturâ Satyrus: aut si quis est, erit proculdubio illud Animal, quod in Tabellâ hic à nobis depictum.* Had *Tulpinus* 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 observes, of his drinking, and going to bed: For, *Efferatior Cynocephalis Natura, sicut Satyris*, faith (h) *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* (faith (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 *Tulpinus*, and *Bontius*, and *Dap-* perimagined.

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 sort 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 *Dæmons*, 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.* (f) *Vid. Anat. of the Orang-Outang*, pag. 94.
 (g) *Nic. Tulpij Observ. Med. lib. 4. cap. 56. p. m. 274.* (h) *Pliny Nat. Hist. lib. 8. cap. 54. p. 243.*
 (i) *Plinij 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 (l) Bochartus) *narrationi Magni Scriptoris, in qua Satyrius introducitur Antonium in Eremo rogans, ut pro se communem Deum deprecetur, tanquam Salutis in Christo particeps futurus.* Non alios servat Christus, quam quos assumpit. At non assumpit Angelos, multo minus Dæmones ant Satyros qui nusquam sunt, sed semen Abraxæ. And tho' St. Jerome, to confirm this Relation, adds, That in Constantine's time one of these Monsters was seen alive at Alexandria in Egypt, 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 I shall insert his own words; Καὶ ἄλλαι πολλῶν ζωῶν εἰδεῖς τῆς πιθηκᾶς μορφῆς ὑπεριμνυμένοις οὐ δύλοι τῶν θεῶν, πολλῶν εἰς ἵματα πομπομένων, οἱ Θεοὶ δὲ οὐδὲ οἱ Πάντες ὑπεριμνυμένοις οὐδὲ προσελήνοις, τῶν δὲ ποιλίαν οὐ τὸ σέρνον οὐ τὰς χεῖρας καθαρές πιθηκοί, οὐ οὐδὲ τὴν Ἰνδῶν Βροτλόῦς Κῶνσαντιώ απεξάλκει. Τέτοιος τὸ ζῷον οὖν μὲν φερόμενον ἀχει πινδὸς ἐν την πλέγματι διὰ τὸ θηρεύδεις εἰργμένον, ἐπεὶ δὲ ἀπέθανε, παριχθόσαντες αὐτὸν οἱ πομπούντες, θεάματοι παρερχεῖν ασωθῆτες εἰμίαν, μέχρι τῆς Κωνσαντίου διεσώσαντο πόλεως. Καὶ μοι δοκεῖ τὸ ζῷον τέτοιος Ελλήνες πάλαι ιδεῖν, οὐ διπλαγόντες τῷ ξένῳ τῆς Δίας, Θεῶν σπίου νομίσαν, εἰδιττέοντο αὐτοῖς τὰ παραχθόδηα θεοποιεῖν. Οὐτεροῦ οὐτε Σάτυρον. 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 its Loins downwards Goat's Legs; but in its Belly, Breasts, and Hands was a pure Ape. Such an one the King of India sent to Constantius. This Animal lived for some time, and was carried about inclosed in a Cage, being very wild. When it died, those that looked after it, having embalmed it to make a shew of this unusual sight, 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 πιθηκοί 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 its 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-

(l) *Bochart. Hierozoic. part. poster. lib. 6. cap. 7. p. 829.* (m) *Philostorg. Hist. Ecclesiastical. lib. 3. cap. II.*

nels 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.

— *Capripedium Satyrorum acutas.*

But by this Account it likewise appears, that *Pan* was a Name of this sort of *Monkey*; and *Philostorgius*'s Remark at the Conclusion of this Passage, I think is very just: for 'tis certain that this *Animal* was worshipped in *India* as a *Deity*, as a *Dog* was by the *Egyptians*; and 'twas Death for any Body to kill one of them: For thus saith (p) *Diodorus Siculus*, Τίς τε γὰρ αὐτὸς οἵτις οἱ πένθοι καλῶν τοῖς ἀνθρώποις, θεοὶ παρ' αὐτοῖς νομίζομενοι, καθάπερ παρ' Αἰγυπτίοις οἱ νύνες ἐν τῷ παρεσκευασμένῳ εἰς τοῖς ταμείοις τὴν ζώα τὰς τρεφόμεναν ἀκαλύτως διπέτε βέλοισθ. Καὶ τὰς προσηγορίας δὲ ἐπίθεσται γονεῖς τοῖς παῖσι κατὰ τὸ πλεῖστον διπά τῷ πιθίων, ὥστε παρ' ἡμῖν διπά τῷ θεῷ. Τοῖς δὲ ἀποκτείνεται τέτο τὸ ζῷον, ὡς ἡτοπικόν τὸ μεγίστα, Θάνατον φέρειο πρέστημεν. Διὸ δὴ παρὰ παῖν εἰλύστεν εἰ παρεγίμνις μέγεται λεγόμενον ὅπερ τῷ ἀνθειόμενων, ὅπερ πιθίας ἀμφε πολίστεαν. i.e. Eadem enim domus *Simiae* quas Homines frequentant; & pro Diis habentur apud illos, ut apud *H̄gyptios Canes*; paratos etiam in *Cellis penariis cibos*, quando libet, nemine prohibente, ha bestiae sumunt, nominaque ut plurimum à *Simis*, ut apud nos à *Diis*, Parentes *Liberis suis* imponunt. Qui Animal hoc interficerint, in eos, ut nefariæ Impietatis reos, supplicio capititis animadvertisit. Ideo apud nonnullos Proverbij vicem obtinuit, quod in magnifice se efferentes dicitur; *Simiae Cruorem bibisti*. And in another place (q) *Diodorus* tells us, that *Pan* was in the greatest Veneration amongst the *Egyptians*, and his Statue was in every *Temple*. And (r) *Juvenal* remarks,

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 diswaded from it by their Bishop *Gasper*, 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) *Phurnutus de Nat. Deorum. Cap. de Pane.* p. m. 71. (o) *Horace Odarum*, Lib. 2. Ode 19.

(p) *Diodor. Sicul. Biblioth. Hist. l. 20. p. m. 793.* (q) *Diodor. Sicul. ibid. l. 1. p. m. 16.* (r) *Juv. 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. l. 9. cap. 46. p. 180.*

same

same 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; *Sanè famum est Simiæ dicatum: Cujus duntaxat Pecori in victimarum usum custodiendo, Porticus miram in longitudinem excurrit, Columnarum Septingentiarum è Marmore, tantæ magnitudinis, ut Agrippæ Columnas, quæ in celeberrimo quondam omnium Deorum Templo Romæ visuntur, sine dubio adæquent.* 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 *Satyr*s 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*, *Protagenes*, *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 *Chimera*, than a real Being.: You may see his words in the Citations.

(u) *Joh. Pet. Maffeij Hist. Indic. lib. I. 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, & efficitur dimidium. Hoc afferunt in Diversis habitare Aethiopie; & aliquotiens captum & in Alexandriam deductum, & mortuum sale infusum & in Constantinopolin delatum.

Of

Of the SPHinges of the Ancients.

WE 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, Ἡεγεσίαν μὲν Ἐχῖδναν λιώ, Παλέας δέ, Τυφῶνας, εἰχε δέ περοπον μὲν γυναικός, σθόντη δέ καὶ Βάσιν καὶ σέξεν λέοντας, καὶ πέρυσας ἐφύθε. That Sphinx was 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 penitus, pedibus fera, fronte Puella.*

But as their Fancies 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 unguis, Alas Avis, illam habuisse* scripsit. *Palephatus* (d) is somewhat different in his Account, where he tells us, Περὶ τῆς Καδμείας Σφίγγος λέγουσον ως Διηγεῖν ἔχειν, σῶμα μὲν ἐχοντας κανεὶς, κερατίων δέ, καὶ περοπον κόρης, πέρυσας ἐφύθε, φωνή δέ ἀνθρώπους. 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, περοπον παρδένς σθόντη δέ καὶ πόδες λεοντίδες ἔστεν. So the *Scholiast* upon (f) *Aristophanes*, οἱ δέ Σφίγγες πόδες λεοντίδες ἔστεν. And *Euripides* himself, as he is quoted by (g) *Aelian*, makes her to have the Tail and Feet of a Lion, in that Verse,

Οὐεργὸν δέ Σφειλάσσον ταῦτα λεοντόπεν βάσιν.
Caudam remulcens ad Leoninos pedes.

Where we may observe that *Aelian* tells us here that the *Egyptian 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 *Sphinx* with wings; for as (h) *Aelian* 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) *Palephatus de incredibilibus Historiis Cap. de Sphinge. p.m. 14.* (e) *Eurip. in Phenissis.* (f) *Aristophan. in Ranis.* (g) *Aelian. de Animal. l. 12. c. 7.* (h) *Aelian. de Animal. l. 12. cap. 38.*

us, *Sphingem quicunque vel Picturæ vel Plasticæ operam dant, fingere alatam solent.*

But our chief Busines is to enquire, how *Nature* hath formed them ; and not how the *Poets*, *Painters*, or *Statuaries* have, according to the Luxuriancy of their Fancie, feigned or figured 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 sort 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 so hairy as on the rest of their Body ; and are of a mild and gentle Nature. For thus (*i*) *Pliny*, *Lynas vulgo frequentes, & Sphinges, fusco Pilo, mammis in Pectore geminis Æthiopia generat.* And so (*k*) *Solinus*, *Inter Simias habentur & Sphinges, villosæ comis* (*Salmasius* reads it *vilosæ omnes*) *mammis prominulis ac profundis, dociles ad feritatis oblivionem.* *Ælian* (*l*) places them amongst the wild Beasts of *India*, where he tells us, *Naturali quodam Ingenio & Prudentia valent etiam apud nos Animalia, non totidem tamen, quot sunt in India : illic enim hujusmodi sunt, Elephantus, Psittacus, 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 ; *Αἱ σφίγες οἱ Κυνοκέφαλοι οἱ Κῆροι παρεπέμπονται τοῖς τριῶν Ἀλεξανδρείαν εἰς τὴν Τρωγλοδύτικην, οἱ τὸν Αἰδιοπίτας εἰσὶ οἱ μὲν Σφίγες ταῖς γεφρομέναις παρέμοισι. Πλλων ὅπι πᾶσαι διασεία, οἱ ταῖς ψυχαῖς ἡμεραι οἱ περέοι. Καὶ πανεργίας ποιῶνται πλεῖσται, διδασκαλίας τε μετόδος Λιμῆς ὅπι ποσὸν ἀπότονται, οἵτε τριῶν ἐνρυθμοί εἰς πᾶσι θεωμαζένειν.* 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 *Agatharchides* borrowed his from him : for he tells us, *Αἱ τοῦ Σφήγεων γένονται μὲν περὶ τὰ τριῶν Τρωγλοδύτικα, οἱ τριῶν Αἰδιοπίταν, ταῖς ἡμέραις ἔτεράρχους ἐπι ἀνόμοιο ταῖς γεφρομέναις, μόνον τοῖς δασύτοις διαλλάττονται. Ταῖς τοῦ ψυχαῖς ἡμέραις ἔχονται οἱ πανεργίες, οἵτινες πλεῖσται διδασκαλίαν μετόδομοι ἀποδεχονται.* i. e. *Sphinges circa Troglodyticam & Æthiopiam existunt, formâ his non absimiles, quæ Arte Pictorum exhibentur, nisi quod hirsutia tantummodo differentunt. 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*) *Plinius 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. l. 3. c. 11. p. 41.*

no more Authorities to prove what I have here laid down, that these *Sphinges* were only a sort of *Ape* or *Monkey*. I will therefore give you his own words, which are these; Καὶ μὲν ἡ Σφίγξ γένεται ποτίνων (αὐτὸς δὲ Δεσμόμενη γεγένθω) ἵν τὸ μὲν ἄλλο σῶμα λάσιον ὔστιν, ὡς τοῖς ἄλλοις πι-
δίνοις· τὸ δὲ σέρπερον ἀχειρεῖσθαι τὸ τερεχήλιον ἐψίλωτον, μαίζεται δὲ γυναικίως ἔχει.
Ἐφεβες πνὸς βεραχτῆσθαι καὶ χρειδόεις ἐπικατέκυνται. ἀπαντεῖν εἰναί τοι γεγεννώμενον τὸ σώματον περιθεονται, οὐδὲ εἰς πολλών πινακίδας ἐνπρέπειαν αἰθρωπορανεῖ
ἔντι ταῦτα εἰν μέσω χρύσαλι σωματεῖον. Τὸ δὲ περίστοπον ἐνεργεῖται μᾶλλον,
οὐδὲ εἰς ἄρθρον διατίραμέν, ἀλλὰ τῷ περιθετῷ. οὐδὲ μετά τοντον ὄργην τε οὐδὲ ἀχθο-
δοντον δονιαν ἀπορθεγομένην περιστεκτὴν βαρύτερην τε μᾶλλον ὔστιν ὁξυομένην
ἄγρεον τε τοι δεινῶς τὸ θηλεῖον, οὐδὲ πανεργύτατον, οὐδὲ φασίν πιθωνεύμενον.
i. e. A Sphinx is a sort of Ape (I shall write what I saw my self) 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 Mammæ or Breasts 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 precipitate; 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
same description of one he saw at Verona. Harum ego unam (saith he)
Veronæ quum essem vidi; Mammis illi & Glabris & Candidis, à Pectore
propendentibus. Circumducet 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 prioribus, 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 subcisia & sive Meditat. Hist. Cent. 1. Cap. 71. p. m. 325.*

An Advertisement

Of some Discourses and Observations made by Dr. Edw. Tyson, and where published.

PHOCAE NA, or the *Anatomy* of a *Porpois*, dissected at Gresham-Colledge ; with a Preliminary 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 4^o.

Vipera Caudisoma Americana ; or the *Anatomy* of a *Rattle Snake* ; dissected at the Repository of the Royal Society, Jan. 1682. vide *Philosoph. Transactions* N° 144. p. 25.

Lumbricus Latus, or a Discourse read before the Royal Society of the Joyned 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 Difficulty, 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.

Tajacu, sive Aper Mexicanus Moschiferus ; or the *Anatomy* of the Mexico Musk-Hog. Vide *Philosoph. Transact.* N° 153. pag. 359.

Lumbricus Hydropicus, or an Essay to prove, that *Hydatides* often met with in Morbid Bodies, are a Species of Worms, or imperfect 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.* N° 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^o.

Embrionis Galei levius 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. 305.

Vide Thom. Bartholini *Acta Medica & Philosophica Hafniensia*, Vol. 5.
ubi,

Observ. 26. *Vomica Pulmonis*.

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- Observ. 27. *Hydrops Thoracis, & difficultatis spirandi rara Causa.*
Observ. 28. *Hemoptoe, Tussis, Pleuritis & Empyema à duobus claviculis,
fortuitò in Pulmones delapsis.*
Observ. 29. *Polypus omnes Corporis totius Venas & Arterias occupans.*
Observ. 30. *Polypus Bronchiarum & Tracheæ.*
Vide ejusd. 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. N° 142. pag. 1035.*

An Anatomical Observation of four *Ureters* in an Infant; and some Remarks on the *Glandulae 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. N° 150. pag. 281.* and *Dr. Plot's Natural History of Staffordshire*, pag. 272.

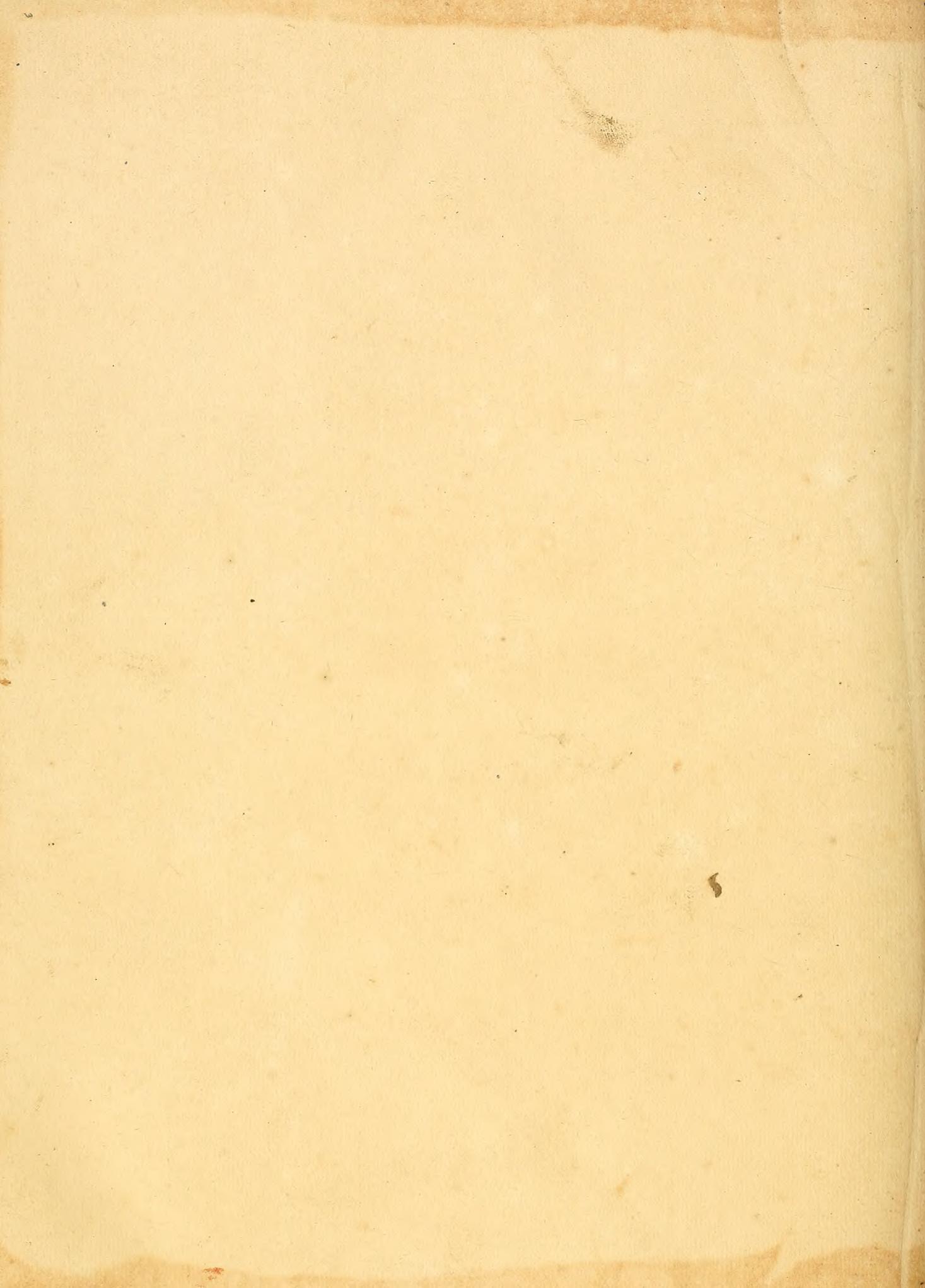
The Figure of the *Cochineal Fly*. *Vide Philosoph. Transact. N° 176. pag. 1202.*

An Observation of *Hydatides* found in the *Vesica Urinaria* of Mr. Smith. *Vide Philosoph. Transact. N° 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. pag. 533.*

An Observation of one *Hemisphere* of the *Brain* sphacelated; and of a *Stone* found in the Substance of the *Brain*. *Vide Philosoph. Transact. N° 228. pag. 535.*





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