James Orr Burns.

TYSON (Edward) Orang-Outang, sive Homo Sylvestris: or, the Anatomy of a Pygmie compared with that of a Monkey, an Ape, and a Man, to which is added a Philological Essay concerning the Pygmies of the Ancients, *London*, 1699; *with* 17 *curious figures on* 8 *plates*, 4to, original calf, RARE, £4, 15s 371

Tyson. ORANG-OUTANG 1699

Resewn on 5 raised cords - h.b. flyleaves and end papers of Roger Powell paper. Linen hinges - Tight back. Extensive repairs to all plates. Scotch calf to spine. Gold finished. H.m. papers to boards

Flour paste and animal glue used throughout

Montreal, 1st april, 1965 H.P. Cantlie

Lumsden's observing of the Covenant
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1884

would indicate that it was the custom, even in those days, to post-date a book printed late in the year.

SCOTTISH HIST
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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 pygmei [no diphthong in this case om.], yet in the Septuagint it is no more than watchmen, and so in the Arabic and High Dutch. In the Chaldee, Cappadocians; in Symmachus, Medes; and in the French, those of Gamad [i.e. gammadim om.]. Theodotion 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. [No quote marks om.] Nor do men only dissent in the translation of the word, but in the exposition of the sense and meaning hereof; for some by Gammadims understand a people of Syria, so called from the city Gamala; some hereby understand the Cappadocians, among the Medes; and hereof Forerius hath a singular exposition concerning the watchmen of Tyre might well be called pigmies, the towers of that city being so high, that unto men below they appeared in a cubital stature.

. . . . . .

There is a foot-note which refers to the latter part of the above paragraph, (which I have not thought it essential to quote), ~~[illegible]~~ as follows:— "The least I suppose that ever was seen and lived long, was Lucius Augustus his dwarfe, who was bypedali minor, librarum septendecim, sed vocis immensae. — Suetonius in Octavio, §53. Certainly few apes come under this hight." (sic)

Again, I say, exact testimonies, in reference unto circumstantial relations so diversely or contrarily delivered. Thus the relation of Aristotle placeth them above Egypt towards the head of the Nile in Africa. Philostratus affirms they are about Ganges in Asia, and Pliny in a third place, that is,

Sir Thomas Browne's Vulgar Errors, Book IV. Chap. 11. "Of Pigmies."

"By pigmies we understand a dwarfish race of people, or lowest diminution of mankind, comprehended in one cubit, or as some will have it, in two foot or three spans; not taking them single, but nationally considering them, and as they make up an aggregated habitation. Whereof, although affirmations be many, and testimonies more frequent than in any other point which wise men have cast into the list of fables, yet that there is, or ever was such a race or nation, upon exact and confirmed testimonies, our strictest enquiry receives no satisfaction.

I say 'exact testimony', first, in regard of the authors from whom we derive the account; for, though we meet herewith in Herodotus, Philostratus, Mela, Pliny, Solinus, and many more, yet were they derivative relators, and the primitive author was Homer; who, using often similes, as well to delight the ear, as to illustrate the matter, in the third of his Iliads, compareth the Trojans unto Cranes, when they descend against the pigmies; which was more largely set out by Ossian, Juvenal, Mantuan, and many poets since, and being only a pleasant figment in the fountain, became a solemn story in the stream, and current still among us.

Again, many professed enquirers have rejected it. Strabo, an exact and judicious geographer, hath largely condemned it as a fabulous story. Julius Scaliger, a diligent enquirer, accounts thereof but as a poetical fiction. Ulysses Aldrovandus, a most exact zoographer, in an express discourse hereon, concludes the story fabulous, and a poetical account of Homer; and the same was formerly conceived by Eustathius, his excellent commentator. Albertus Magnus, a man oftimes too credulous, herein was more than dubious; for he affirmeth if any such dwarfs were ever extant, they were surely some kind of apes; which is a conceit allowed by Cardan, and not esteemed improbable by many others.

Note by D.W.P. In this edition I quote from, – Lond. 1852, edited by Simon Wilkin F.L.S., there is a foot-note, following on "Cardan", to this effect: "Rightly does he quote Cardan, who in the 8th book, de Varietate, cap. xi. p. 527, approves of Strabo's judgment of Homer's fiction: and concludes they were mistaken, being no other than [then sic orig.] apes. – Wr." [The underling of "apes" is also in original. "Wr." is explained thus by Mr. Wilkin in his Editor's Preface to Pseudodoxia (i.e. Vulgar Errors, &c.] – "In speaking of the notes which accompany it ["the present edition"], I must first mention those marked Wr. They were written by Dr. Christopher Wren, Dean of Windsor, and father of the architect of St. Paul's, on the margins of a copy of the first edition."

There are, I confess, two testimonies, which from their authority, admit of consideration. The first of Aristotle, whose words are these, ἔστι δὲ ὁ τόπος, &c. That is, Hic locus est quem incolunt pygmaei, non enim id fabula est, sed pusillum genus ut aiunt. Wherein indeed Aristotle plays the Aristotle, that is, the wary and evading assertor; for though with non est fabula he seems at first to confirm it, yet at the last he claps in ut aiunt, and shakes the belief he put before upon it. . . . . .

The second testimony is deduced from Holy Scripture†, thus rendered in vulgar translation: Sed et Pygmaei qui erant in turribus tuis, pharetras suas suspenderunt in muris tuis per gyrum; from whence notwithstanding

† Ezek. XXVIII. 12.

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 pygmei [no diphthong in this case om.], yet in the Septuagint it is no more than watchmen, and so in the Arabic and High Dutch. In the Chaldee, Cappadocians; in Symmachus, Medes; and in the French, those of Gamad [i.e. gammadim om.]. Theodotion 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. [No quote marks om.] Nor do men only dissent in the translation of the word, but in the exposition of the sense and meaning hereof; for some by Gammadims understand a people of Syria, so called from the city Gamala; some hereby understand the Cappadocians, many the Medes; and hereof Forerius hath a singular exposition concerning the watchmen of Tyre might well be called pigmies, the towers of that city being so high, that unto men below they appeared in a cubital stature.

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Lastly, I say, confirmed testimonies; for though Paulus Jovius delivers there are ~~[illegible]~~ pigmies beyond Japan, Pigafeta, about the Moluccas, and Olaus Magnus placeth them in Greenland, yet wanting frequent confirmation in a matter so confirmable [?], their affirmation carrieth but slow persuasion, and wise men may think there is as much reality in the pigmies of Paracelsus, that is, his ~~[illegible]~~ non-adamical men, or middle natures betwixt men and spirits.

[Another paragraph here]

Lastly, if any such nation there were, yet it is ridiculous what men have delivered of them; that they fight with cranes upon the backs of rams or partridges; or what is delivered by Ctesias, that they are negroes in the midst of India, whereof the king of that country entertaineth three thousand archers for his guard, which is a relation below the tale of Oberon; nor could they better defend him than the emblem saith, they offended Hercules whilst he slept, that is, to wound him no deeper than to awake him."

[This concludes the chapter, the greater part of which I have quoted: omitting some, brevitatis causa. DWR, Phil. Inst. 23/12/86.)

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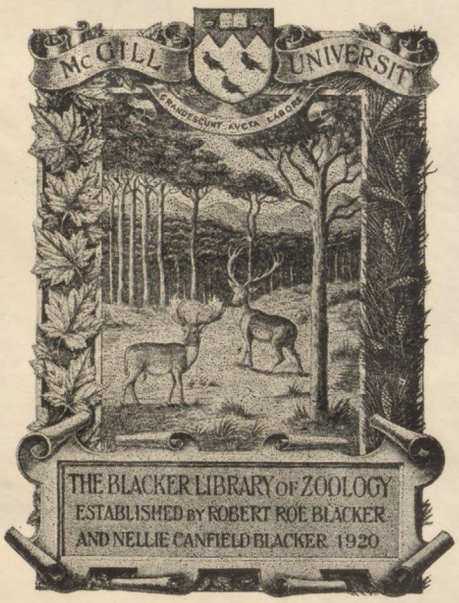
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Gerania in Scythia; some write they fight with cranes, but ~~[illegible]~~ Menecles,

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Gerania in Scythia; some write they fight with claws, but ~~[illegible]~~ Menecles,

17° *Die Maij*, 1699.

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

John Hoskins *V. P. R. S.*

Orang-Outang, sive Homo Sylvestris:

OR, THE ANATOMY OF A PYGMIE

Compared with that of a

Monkey, an *Ape*, and a *Man*.

To which is added, A

PHILOLOGICAL ESSAY

Concerning the

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

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

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

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

John Fisdall

Gerania in Septria' some wide they fight with Cancer, but Menecles
in Athens [illegible]

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,

THE 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 succesful Application to the

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

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 Admiration; That from Minerals, to Plants; from Plants, to Animals; and from Animals, to Men; the Transition is so gradual, that there appears a very great Similitude, as well between the meanest Plant, and some Minerals; as between the lowest Rank of Men, and the highest kind of Animals. The Animal of which I have given the Anatomy, coming nearest to Mankind; seems the Nexus of the Animal and Rational, as your Lordship, and those of your High Rank and Order for Knowledge

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 Business more, to find out the *Truth*, than to enlarge in the *Mythology*; to inform the *Judgment*, than to please the *Phancy*. And the *Orang-Outang* (whose *Anatomy* I here give) being a Creature so very remarkable, and rare; and not only in its External Shape, but much more in the Conformation of a great many of the inward *Viscera*, 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

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

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 Ἄνδρες Ἄγριοι, Μικροὶ, Πυγμαῖοι, Μέλανες; ſo the Ἄνθρωποι Κυνοπρόσωποι, &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 θηρία, *Wild Beaſts*; and if ſo, no doubt but they were of the *Quadru-manus* kind; *i. e.* either *Apes* or *Monkeys*. And ſuch were likewiſe the *Satyrs*, the *Fauni*, *Pan*, *Ægipan*, *Sylvanus*, *Silenus*, and the *Nymphæ*, as alſo the *Sphinges* of the Ancients.

But ſo many *Romances* have been made about them, that not only *Strabo* formerly, but the moſt noted Men of Learning of late, have looked upon them as meer 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*.

Had

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 Importunity of my Friends, who constantly urged the Publication, I sent my Papers Sheet by Sheet to the Press, as I had time to transcribe them; so that I had not a view of them together, till they were printed. If I have discovered the Truth, 'twas what I aimed at, which always appears best, when least disguised; and it has been my chief Care in this Undertaking to pull off those Vails and Masks, wherewith the Poets and Poetical Historians have hitherto obscured it.

Orang-

Orang-Outang sive Homo Sylvestris:

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 Sylvestris*, The *Wild Man*; *Orang-Outang*, or a *Man* of the *Woods*; by the *Africans Quoias Morron*; 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 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 ἢ τῶν ζώων ἐπαμφοτερίζει τὴν φύσιν, τῷ τε ἀνθρώπῳ καὶ τοῖς τετράποσιν, οἷον πίθηκοι καὶ κῆβοι, καὶ κυνοκέφαλοι. (b) Ἔστι δ' ὁ μὲν κῆβος, πίθηκος ἔχων οὐράν. (c) Καὶ οἱ κυνοκέφαλοι ἢ τὴν αὐτὴν ἔχουσι μορφὴν τοῖς πιθήκοις, πλὴν μείζονές τ' εἰσὶ, καὶ ἰσχυρότεροι, καὶ τὰ πρόσωπα ἔχοντες κυνοειδέστερα. Ἔτι ἢ ἀγριώτερά τε τὰ ἤθη, καὶ τοὺς ὀδόντας ἔχουσι κυνοειδεστέρους καὶ ἰσχυροτέρους. (d) Οἱ δὲ πίθηκοι, δασεῖς μὲν εἰσι τὰ πρανῆ, ὡς ὄντες τετράποδες· καὶ τὰ ὕπτια ἢ ὡσαύτως, ὡς ὄντες ἀνθρωποειδεῖς. Τοῦτο γὰρ ὅτι τῶν ἀνθρώπων ἐναντίως ἔχει καὶ ὅτι τῶν τετραπόδων, καθάπερ ἐλέχθη πρότερον. Πλὴν ἡ τε θρὶξ παχεῖα, καὶ δασεῖς ἐπ' ἀμφότερα σφόδρα εἰσὶν οἱ πίθηκοι. (e) Τὸ ἢ πρόσωπον, ἔχει πολλὰς ὁμοιότητας τῷ τοῦ ἀνθρώπου. Καὶ γὰρ μυκτῆρας, καὶ ὦτα παραπλήσια ἔχει· Καὶ ὀδόντας, ὥσπερ ὁ ἄνθρωπος, καὶ τοὺς προσθίους καὶ τοὺς γομφίους. (f) Ἔτι ἢ βλεφαρίδας, τῶν ἄλλων τετραπόδων ἐπ' ἀμφότερα ἐχόντων, οὗτος ἔχει μὲν, λεπτὰς ἢ σφόδρα, καὶ μᾶλλον τὰς κάτω, καὶ μικρὰς πάμπαν· τὰ γὰρ ἄλλα τετράποδα ταύτας οὐκ ἔχει. (g) Ἔχει ἢ ἐν τῷ στήθει δύο θηλὰς μαστῶν μικρῶν. (h) Ἔχει δὲ καὶ βραχίονας, ὥσπερ ἄνθρωπος πλὴν δασεῖς καὶ κάμπτει καὶ τούτους καὶ τὰ σκέλη ὥσπερ ἄνθρωπος, τὰς περιφερείας πρὸς

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

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

 ἀλλήλας

ἀλλήλας ἀμφοτέρων τῶν κώλων. (i) Πρὸς δὲ τούτοις, χεῖρας καὶ δακτύλους καὶ ὄνυχας ὅμοιως τῷ ἀνθρώπῳ· πλὴν πάντα ταῦτα ὅτι τὸ θηριωδέστερον. (k) Ἰδίους δὲ τοὺς πόδας· εἰσὶ γὰρ οἷον χεῖρες μεγάλαι. Καὶ οἱ δάκτυλοι, ὥσπερ οἱ τῶν χειρῶν· ὁ μέσος, μακρότατος· καὶ τὸ κάτω τοῦ ποδὸς, χειρὶ ὅμοιον· πλὴν ὅτι τὸ μῆκος τῆς χειρὸς ὅτι τὰ ἔσχατα τείνον, καθάπερ θέναρ. (l) Τοῦτο δὲ ἐπ' ἄκρου σκληρότερον, κακῶς, καὶ ἀμυδρῶς μιμούμενον πτέρνην. Κέχρηται δὲ τοῖς ποσὶν ἐπ' ἄμφω, καὶ ὡς χερσὶ, καὶ ὡς ποσὶ, καὶ συγκάμπτει ὥσπερ χεῖρας. (m) Ἔχει δὲ τὸν ἀγκῶνα καὶ τὸν μηρὸν βραχεῖς, ὥσπερ πρὸς τὸν βραχίονα καὶ τὴν κνήμην. (n) Ὀμφαλὸν δ' ἐξέχοντα μὲν οὐκ ἔχει, σκληρὸν δὲ καὶ κατὰ τὸν τόπον τοῦτον τοῦ ὀμφαλοῦ. (o) Τὰ δ' ἄνω τῶν κάτω πολὺ μείζονα ἔχει, ὥσπερ τὰ τετράποδα. Σχεδὸν γὰρ, ὥσπερ πέντε πρὸς τρία ὄντι, καὶ διά τε ταῦτα, καὶ διὰ τὸ τοὺς πόδας ἔχειν ὁμοίους χερσὶ, καὶ ὥσπερανεὶ συγκειμένους ἐκ χειρὸς καὶ ποδὸς· ἐκ μὲν ποδὸς, κατὰ τὸ τῶν πτέρνης ἔσχατον· ἐκ δὲ χειρὸς, τἄλλα μέρη. Καὶ γὰρ οἱ δάκτυλοι ἔχουσι τὸ καλούμενον θέναρ. (p) Διατελεῖ δὲ τῷ πλείω χρόνον τετράποδι ὂν μᾶλλον ἢ ὀρθόν. (q) Καὶ οὔτε ἰσχία ἔχει ὡς τετράποδι ὄν, οὔτε κέρκον ὡς δίποδι, πλὴν μίκρον τὸ ὅλον, ὅσον σημείου χάριν. (r) Ἔχει δὲ καὶ τὸ αἰδοῖον ἡ θήλεια ὅμοιον γυναικός· ὁ δ' ἄρρην, κυνοειδέστερον ἢ ἀνθρώπου. (s) Οἱ δὲ κῆβοι, καθάπερ εἴρηται πρότερον, ἔχουσι κέρκον· τὰ δ' ἐντὸς διαιρεθέντα, ὅμοια ἔχουσιν ἀνθρώπῳ πάντα τὰ τοιαῦτα.

hominis brachia, nisi hirta essent. Quæ etiam sicut & crura hominis modo inflectat. Nam & horum, & illorum curvaturas inter se habet contrarias. (i) *Tum manus, digitos, ungues, quasi humanos. Verùm hæc omnia ferinam ad naturam potiùs vergunt.* (k) *Suus quidam modus pedibus, ac peculiaris. Etenim quasi manus quædam magnæ sunt. Quippe & digiti in iis, veluti manuum, medio longissimo. Et planta manui similis, quanquam porrectior ad extremum usque, sicuti vola.* (l) *Cujus postremum callosius est: inepta, atque inexplanata calcanei similitudine. Pedum usus, & pro manibus, & pro pedibus: flectit enim eos manuum modo.* (m) *Superior brachij pars, & coxa, breves: si ad ulnæ, & tibiæ magnitudinem referantur.* (n) *Umbilicus non prominet: sed durum quiddam ibi invenias.* (o) *Superæ partes inferis majores: quasi si quinarium cum ternario conferas. Hoc autem tum ex quadrupedum natura: tum propterea quòd pedes & manibus similes habet, & quasi ex pedum, manuúmque constitutione compositos. Nam calcanei postrema pedem, cæteræ partes manum repræsentant. Habent enim digiti id, quod volam appellamus.* (p) *Quadrupedis habitu frequentiore est.* (q) *Proque eo nates non habet: neque caudam, quoniam bipes. Sed perpusillam omnino illam, & notæ tantúm gratia.* (r) *Fœminæ genitale muliebri specie est: maribus canina potius, quàm humana.* (s) *Cebi, sicuti diximus, caudati sunt. Universo 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.

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

Πίθηκος, *&c.* The Philosopher here does not enumerate all the several *Species* that are contained under the *Ape* and *Monkey*-kind; they are a very numerous and a large *Classis* of Animals. *Scaliger* upon the Place mentions several he had observed of both kinds; and all our *Zoographers*, and most Journals of Travels give a Description of a great many sorts of them. But for want of well distinguishing them, and ranging them into a Methodical *Series*, their *History* as yet is very confused and perplext. Mr. *Ray* (3) places these Animals under this general *Title*, *Animalia Pede unguiculato multifido*, πλατυώνυχα & ἀνθρωπόμορφα. 'Tis call'd *Pithecus*, παρὰ τὸ πείθεσθαι ὑφ' ἡμῶν, *quia facilè 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 *Cercopithecus*, 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

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

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

(5) *Conradus Gesner* thinks, that this *Cebus* of *Aristotle*, which he describes only as having a Tail, must be the *Cercopithecus* or Common *Monkey*, since he mentions not the *Cebus* any where else, and the *Cercopithecus* no where. (6) *Harduinus*, in his Notes on *Pliny*, advises not to mistake the *Cepus* in *Pliny*, for the *Cebus* in *Aristotle*. (6) *Pliny*'s words are these; *Pompeij Magni primum Ludi ostenderunt Chama, quem Galli Rufium vocabant, Effigie Lupi, Pardorum maculis. Iidem ex Æthiopia quas vocant κήπους, 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 δὲ φησι καὶ σφίγγες, καὶ κυνοκέφαλοι, καὶ κῆποι, λέοντος μὲν πρόσωπον ἔχοντες, τὸ δὲ λοιπὸν σῶμα πάνθηρος, μέγεθος δὲ δορκάδος. 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 κῆπος, ὠνόμασται μὲν ἀπὸ τῆς περὶ ὅλον τὸν ὄγκον ὡραΐας, καὶ προσηνοῦς ἡλικίας. Τὸ δὲ πρόσωπον ἔχων ὅμοιον λέοντι, τὸ λοιπὸν σῶμα φέρει πάνθηρι παραπλήσιον, πλὴν τοῦ μεγέθους, ὃ πασσεῖται δορκάδι. Which *Laurentius Rodomanus* thus renders. " Cepus, *i. e.* Hortus (quem vocant) à totius " Corporis decore & staturæ venustate nomen accepit, facie Leonem imi- " tatur, & reliquo Pantheram, præter magnitudinem, qua Dorcadi par " est. (9) *Ælian* hath given a Description of the same Animal from *Pythagoras*, from whom, 'tis thought, it first received this Name; and he is more particular. His Account, tho' 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 secundùm " Mare Rubrum procreari & Cepum, hoc est Hortum appositè idcircò " nominari, quòd tanquam Hortus variis coloribus distinguatur. Cùm " existit confirmata ætate, pari magnitudine est cum Herythriensibus " Canibus. Jam porro ejus Colorum varietatem, sicut ille scribit, ani- " mus nobis est explicare. Ejus caput & posticas partes ad caudam usque " prorsus valde igneo colore sunt, tum aurei quidam Pili disseminati " spectantur, tum album rostrum, inde ad Collum 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, Rostri formæ Cynocephalo recte

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

" com-

" comparari poteſt. The *Cepus* therefore of *Pliny*, *Strabo*, *Diodorus Siculus*, and *Ælian*, 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) *Ælian* they are call'd ἄνθρωποι κυνοπρόσωποι; tho' (11) *Galen* tells us, they are much leſs like a *Man*, than an *Ape* is: For they can ſcarce ſtand upright, much leſs walk or run ſo. (12) *Philoſtorgius* mentions the *Aegopithecus*, the *Arctopithecus*, the *Leontopithecus*, as well as the *Cynocephalus*, and then adds, καὶ ἄλλαις πολλῶν ζωῶν εἰδέαις τῆς πιθηκείας μορφῆς ἐπιμιγνυμένης. 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 courſe, and thick ſet.*

The Place that *Ariſtotle* refers to, is this. (13) Ἔστι δὲ τῷ μὲν ἄλλων ζώων τῷ ἐχόντων τρίχας, τὰ πρανῆ δασύτερα, τὰ δ' ὕπτια, ἢ λεῖα πάμπαν, ἢ δασέα ἧττον. ὁ δ' ἄνθρωπος τουναντίον. i. e. *That in Brutes the Back or upper Parts are more hairy, the Belly or under Parts either ſmooth or leſs hairy: In a Man is obſerved the contrary.* But in our *Pygmie* we obſerved it different; for here all behind from the Head downwards, 'twas very hairy, and the Hair ſo thick, that it covered the Skin almoſt from being ſeen.

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

But

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 Commentaries of *Peru*. lib. 1. cap. 3.

Years,

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

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

Pliny (17) 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 ſimilitèr flexa. In manibus, ungues,
" digitos, longioremque medium. Pedibus paulùm differunt, ſunt
" enim, ut manus, prælongi, ſed veſtigium Palmæ ſimile faciunt. Pol-
" lex 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 flatting it againſt her Shoulders; becauſe 'tis ſo univerſal in them all.

(17) *Natur. Hiſt.* lib. 11. 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 justifie; or I do not take his meaning aright: Tho' he has much the same Opinion a little before. (18) Where he tells us, Καὶ βλεφαρίδας ὁ μὲν ἄνθρωπος ἐπ' ἄμφω ἔχει, καὶ ἐν μαχάλαις ἔχει τρίχας, καὶ ὑπὸ τῆς ἥβης. Τῶν δ' ἄλλων οὐδὲν ὅτε τούτων ἐδίτερον, ὅτε τὴν κάτωθεν βλεφαρίδα, ἀλλὰ κάτωθεν τοῦ βλεφάρου ἐνίοις μαναὶ τρίχες πεφύκασιν. Which *Scaliger* thus renders: *Ac Palpebras homo utrâque in Genâ habet tum & in Alis, & in Pube Pilos. Cæteræ Animantes 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 *Palpebræ* and *Gena*, in his Translating this Text of *Aristotle*, different from what commonly they signifie now. For by *Palpebræ* he means, what *Aristotle* and *Hippocrates* call βλεφαρίδας, *i. e.* the *Hair* on the Rim of the *Eye-lids*, *à palpitatione*; and *Festus* calls *Cilia*, *quia oculos celent & tueantur*: And by *Gena*, he understands the *Eye-lid*; as appears from that Passage of *Pliny* I have just now quoted, , *Palpebris quas solæ Quadrupedum in inferiore habent Genâ*. And so *Scaliger* uses these words in this Translation of *Aristotle*: And he makes *Cilium* to signifie, *Summum 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.

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The *Philosopher* here observes, That the *Ape-kind*, common with *Humane*, have the *Mammæ* 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 μαςοὺς δύο, ἀλλ' οὐκ ἐν τῷ ςήθει, ἀλλὰ πρὸς τῷ ςήθει. *Juxta Pectus potius, quàm 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, καὶ γὰρ ὁ ἐλέφας ἔχει τοὺς μαςοὺς δύο περὶ τὰς μαχάλας. *Sub Armis*, as *Gaza* renders it; *ad Axillas*, as *Scaliger*, where he further tells us, That the *Male* as well as *Female Elephant* have these *Teats*; but they are very small, in respect of the Bulk of it's Body, and so placed that side-ways, you can't 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 *Mammæ* there, and four *Teats*, as a *Cow*; and a *Lioness* but two there.

But *Apes* and *Monkeys* have their *Teats* upon the *Breast*, as *Women* have; and (21) *Albertus Magnus* gives this Reason for it, *Mammillas autem habet in Pectore sicut Mulier, eò quòd manus dedit ei Natura, quibus ad Pectus potest elevare partum, sicut Mulier*. Our *Pygmie* was a *Male*, yet here the two *Papillæ* or *Teats* appeared very plain, and were exactly situated as they are in Men. The *Mammæ* or *Breasts* were small and thin, and not protuberant. The *Female Orang-Outang* of (22) *Bontius* is pictured with pendulous large *Breasts*, and they are so described by (23) *Tulpius*. And (24) *Gassendus*, in the Life of *Peiresky*, speaking of the *Barris*, saith, *Huic Mammæ 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* (saith (25) *Pliny*) *item Ursis & simiarum generi, ob id minime pernicibus.* I shall examine this Place of *Pliny* in the *Osteology.*

(*i*) Arist. *Besides they have Hands, Fingers, and Nails like a Man's, but all these somewhat ruder.*

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

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

(*k*) Arist. *The Feet are particular; for they are like great Hands, and the Toes like Fingers; the middlemost being the longest: And the Sole of the Foot like the Palm of the Hand, but more extended, or longer.*

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

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

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

(25) Plinij *Nat. 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 animadvertit, quam vix Oculis deprehendas. Tactu tamen subesse intelligas, quam si attractare tentes, promptâ miraque celeritate sese subtrahit, 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 temerè; 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, & minùs fere omnibus aliis Beſtiis.* *Galen* (29) is much more in the right, who acknowledges a very great ſimilitude between an *Ape* and a *Man*, both in the outward and inward Parts, where he tells us, Καὶ ὁ πίθηκος ἁπάντων τῶν ζώων ὁμοιότατος ἀνθρώπῳ, καὶ σπλάγχνοις, καὶ μυσὶ, καὶ ἀρτηρίαις, καὶ φλεψὶ, καὶ νεύροις, ὅτι καὶ τῇ τῶν ὀστῶν ἰδέᾳ. Διὰ γὰρ τὴν τούτων φύσιν ὅτι τε δυοῖν βαδίζει σκελοῖν, καὶ τοῖς προσθίοις κώλοις ὥσπερ χερσὶ χρῆται, καὶ στέρνον πλατύτατον ἁπάντων τῶν τετραπόδων ἔχει, καὶ κλεῖς ὡσαύτως ἀνθρώπῳ, καὶ πρόσωπον στρογγύλον, καὶ τράχηλον μικρόν. i. e. *An* Ape *is the moſt like a Man of any Quadruped: In the* Viſcera *and the Muſcles, and in the Arteries, and Veins and Nerves, becauſe 'tis ſo in the ſtructure of the Bones. For 'tis from their make, that it walks on two Legs, and uſes its fore-limbs as Hands. It hath the largeſt Breaſt of any Quadruped, and Clavicles or 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 Enſiformis*, was Sixteen Inches; over the Loins 'twas Ten Inches about. The Compaſs of the Head over the Eyes and Ears, Thirteen Inches and a half. The aperture of the Eye-lids, three quarters of an Inch. From one corner of the Mouth, to the other, Two Inches and a quarter. From the middle of the upper Lip to the 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 Enſiformis* to the Navel, Three Inches and a half. From the Navel to the *Penis*, Three Inches. The diſtance between the two Teats, Three Inches

(28) Albertus *De Animal.* lib. 22. p. 224. (29) Galen. *de Anat. Adminiſtr.* 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 Sole 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 ſtraitneſs of the *Back*, and how it ſpreads. At the *Os Coxygis* there is a little Protuberance, but nothing like a *Tail*.

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

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

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

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

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

Aures verò nihil discrepare, ab humanâ formâ. Uti neque pectus; ornatum utrinque mammâ prætumidâ (erat enim sexûs fœminini); venter habebat umbilicum profundiorem; & artus, cum superiores, tum inferiores, tam exactam cum homine similitudinem: ut vix ovum ovo videris similius.

Nec cubito defuit requisita commissura: nec manibus digitorum ordo: nedum pollici figura humana: vel cruribus suræ: vel pedi calcis fulcrum. Quæ concinna, ac decens membrorum forma, in caussâ fuit, quod multoties incederet erectus: neque attolleret minùs gravatè, quàm transferret facilè, qualecunque, gravissimi oneris, pondus.

Bibiturus prehendebat canthari ansam, manu alterâ; alteram verò vasis fundo supponens, abstergebat deinde madorem labiis relictum, non minùs adpositè, ac si delicatissimum vidisses aulicum. Quam eandem dexteritatem observabat utique cubitum iturus. Inclinans quippe caput in pulvinar, & corpus stragulis convenientèr operiens, velabat se haud alitèr, ac si vel mollissimus illic decubuisset homo.

Quin imò narravit aliquandò affini nostro, Samueli Blomartio, Rex Sambacensis, Satyros hosce, præsertim mares, in Insulâ Bornæo, tantam habere animi confidentiam, & tam validam musculorum compagem: ut non semel impetum fecerint, in viros armatos: nedùm in imbellem, fœminarum, puellarumve, sexum.

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

Dapper, who hath transcribed this Account of *Tulpius*, (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 gros et pesant, les bras nerveux, ils n'ont point de quevë, et Marchent tantôt tout droit, et tantôt à quatre pieds. Les Animaux se nourrissent 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 toûjours dans les Forêts. 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 altogether different; for he makes them exactly like *Humane Feet*, and nothing like *Hands*, which is so Remarkable a thing in all these *Animals*, that this Mistake of it 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 mistrust the whole *Representation*. But because he hath express'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* clap't on, which sits untowardly enough, which must be surely an Addition of the *Painter*; or if there is any such Creature in Nature, it must be of another Family, different from ours.

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

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

the Descriptions they give of them, it sufficiently justifies my Complaint of the uncertainty we have of the true *Animal*, that they are discoursing about; 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 *Tulpius* or *Bontius*; or even whether that of *Bontius* be the same with that of *Tulpius*. For *Bontius* his Account is so very imperfect, that from thence one cannot make a safe Conclusion; and I rather suspect the contrary: For *Bontius* describes it with soft, tender Passions; *Tulpius* and *Dapper* make it Warlike and Fighting. *Bontius*'s words are these: (34) *Ast quod majorem meretur admirationem, vidi ego aliquot utriusque sexûs erectè incedentes, imprimis eam (cujus Effigiem hic exhibeo) Satyram femellam, tanta verecundia ab ignotis sibi hominibus occulentem, tum quoque faciem manibus (liceat ità dicere) tegentem ubertimque lachrymantem, gemitus cientem, & cæteros humanos actus exprimentem, ut nihil ei humani deesse diceres, præter loquelam. Loqui verò eos easque posse, Javani aiunt, sed non velle, nè ad labores cogerentur: ridicule mehercules. Nomen ei indunt* Ourang Outang, *quod Hominem Sylvæ significat, eosque nasci affirmant è Libidine Mulierum Indarum, quæ se Simiis & Cercopithecis detestandâ 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 Insulâ 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 Aulâ Regis Succodanæ viderent. Cauda autem illis est prominentia quædam ossis Coccygos, ad quatuor, aut paulò ampliùs, digitos excrescens, eodem modo, quo truncata cauda (quos nos* Spligiones *vocamus) sed depilis.*

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

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

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

hare

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 mediæ*; 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, barbâ procerâ, canâque, & pexâ propemodùm venerabileis, incedere ipsos lentè, ac videri sibi præ cæteris sapere: qui maximi sunt, & Barris dicuntur, pollere maximè judicio; semel duntaxat quidpiam docendos; veste indutos illicò bipedes incedere; scitè ludere fistulâ, Citharâ, alisque id genus (nam quod everrant domum, convertant veru, pinsant in mortario, aliaque ratione famulatum præstant, haud 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: *Incidit nempè quâdam die in Nigritam Canibus venantem Homines ut visum, Sylvestreis. Capto, cæsoque illorum uno, inhumanitatem Nigritæ increpuit, qui in suum genus ità sæviret. Ille verò, falleris, inquit, nam hic non est homo, sed bellua homini persimilis. Quippe solâ pascitur herbâ, intestinaque Ovina habet, quod ut credas meliùs, rem ecce; simulque abdomen aperuit. Sequenti die rursus venatum, captique mas & fœmina: huic Mammæ ad pedis longitudinem: cæterà mulieri simillima fuit; nisi quod Intestina quoque herbis oppleta, & cujusmodi Ovis, habuit. Totum utique pilosum Corpus, sed pilo brevi, ac satis leni.*

Our *Animal* was not so bearded, as that of *Natalis*; and what *Arcosius* relates of his *Wild Man*, or *Barris*; as it's feeding upon Grass, and having it's *Intestines* like a *Sheep*'s, all this is far different from ours; tho' as to it's docility and capacity of performing those Actions mentioned, I can't but think our Subject might easily have been taught to do them; and, it may be, others too of the *Ape*-kind, tho' different: As there are wonderful Instances of this kind given of them by *Nierembergius* (36) and others. *Dapper*'s (37) Description is much the same. *There is a 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. Jar-" ricus 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

" eam imponuntur, quæ aquam à fluviis in Hydriis capite domùm defe-
" rant, ità tamen ut ubi primùm domûs fores attigerint, illicò Hydriis
" exonerandæ ſint, alioqui eas excidere, caſuque iſto frangi, atque tùm
" 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 *Botanie*. For how great Diligence hath been uſed of late, to ranſack both the *Indies*, to pry into all the Corners of the World, both inhabited, and uninhabited, to find out a new *Plant*, not before deſcribed? And with what great Expence, and how magnificently are their *Figures* Printed? And how little hath been done in the Improvement of the *Hiſtory* of *Animals*? Not that I any ways diſlike the former, but the latter being a *Nobler* Subject, I can't but recommend it, as deſerving the Labours of the *Curious* likewiſe; and if any, this kind, I think, which comes ſo near to a Man, may beſpeak the preference.

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

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

They

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

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

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

It marches naturally upon it's two hind Feet, which it bends a little, like a Dog's, that hath been taught to Dance, it makes use of it's two Arms as we do; it's Visage is in a manner as well favoured, as theirs of the Cape of Good Hope; *but the Body is all covered with a white, black, or grey Wool: As to the rest, it cries exactly like a Child; the whole outward Action is so Humane, and the Passions so lively and significant, that dumb Men can scarce express better their Conceptions and Appetites. They do especially appear to be of a very kind Nature; and to 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 slight is incredible; it is Pleasure beyond expression to see them run up the Tackling of a Ship, where they sometimes play, as if they had a particular knack of Vaulting to themselves, or as if they had been paid, like our Rope-Dancers, to divert the Company.

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

In

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 adhæſion was at the *Linea alba*, and in the *Palms* of the Hands, and the *Soles* of the Feet, and in the *Fingers* and *Toes*; as it is in *Men*. In the *Skin* of the *Arm-pits*, I obſerved thoſe *Glandulæ Cutaneæ Axillares*, which ſecrete that *Orange*-coloured *Liquor*, which in ſome Men ſtains the Shift here, with that colour. I call them *Cutaneæ*, to diſtinguiſh them from thoſe larger *Glands*, that lie bedded under in the Fat, and are call'd *Glandulæ Axillares*. For theſe I have obſerved to be *Lymphatic Glands*; and have traced the *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 signifie 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 illness, we come now to the *Muscles*. But I shall reserve my self to treat of them in the *Myology*. Next under the *Muscles* was the *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 *Entero-cele*: If of the *Omentum*, *Epiploocele*. 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, *Anat. Animal.* cap. 33. pag. 109, *&c.*

formed

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) *eodem modo hic se habet, ac in Cane. Datur & hic facilis via stylo ex ventre in Processum dictum inserendo.* And the *Parisians* have remarked the same in the *Monkeys* they dissected, which is a notable difference of our *Pygmie's* from the *Ape-kind*, and an agreement with the *Humane*. Hereafter, whenever I mention *Blasius*, unless I specifie otherwise, be pleased to take notice, that I refer to this Quotation.

The *Omentum* or *Caul* in our *Pygmie* was very thin and large, falling over and covering most parts of the Guts. 'Twas fastened a little to the *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 *Octavo*, p. m. 253.

receive in running. It is true, that the Membranes of the Epiploon *were entire and continued, as in* Man, *and not perforated like a Net, as they are in the generality of Brutes.* The *Epiploon* or *Caul* in our *Pygmie* was very large, yet I have 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 fundo & 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 *Excrementitious*; this is only to be met with in *Animals*, and in all of them. But yet I find there are intermediate *Species* of *Beings* between *Vegetables* and *Animals*, as the *Zoophyta:* the *History* of which I could extreamly 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 distingished 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) expresly 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 cecidère: 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 fleshy 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. *Noct. Attic.* lib. 17. cap. 11. (48) *Vid. Anut. Fœsii Oeconom. Hipp. in verbo.* (49) Arist. *Hist. Anim.* lib. 1. cap. 10. §. 108. p. m. 89. & *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.

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the inward Membrane here more rugous than in a Man; so that it seemed somewhat Analogous to a *Valve*. *Drelincourt* describes it, in the *Female Ape* he dissected, thus. *Orificium ejus superius, nullâ Valvulâ clausum; sed interceptum duplici 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 inferiour Orifice being very large and low; for it was not elevated so high as the superiour, as it is in a Man.* I did not observe this in our *Pygmie*. So *Drelincourt* tells us in the *Female Ape*, *Ventriculus rugis interiùs nullis gaudet*; and some other Particulars he takes notice of. But there was nothing in ours, that I observed, different from a *Man's*.

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

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 cenſentur.* *Pa-zahar*, he tells us a little before, ſignifies in the *Perſian*, *contra venenum*, whence may come the word *Bezoar*. *Joh. Georg. Volchamerus* (45) takes notice of one he had from *Grimmius* out of the *Baboon*-kind, as big as a Wallnut. And in the *Scholium* on that Obſervation, *Joh. Bapt. Tavernier*'s (55) Travels are quoted, where he prefers two Grains of this, before 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 probè ciere, quod tempore ingentis illius peſtis, quæ Anno* 1624 *&* 1625. *Leydam, Patriam meam & reliquas Hollandiæ Civitates, miſerandum in modum vaſtabat, in penuriâ Lapidis Baſaartici, nos exhibuiſſe memini, & Sudorificum (auſim dicere) melius & excellentius inveniſſe, cum admixtâ 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 *Venæ Lacteæ*, 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 Garciæ ab Orto*, cap. 45. p. m. 48. (54) *Miſcell. Curioſa German. Decuriæ ſecundæ annus ſecundus An.* 1683. *Obſerv.* 189. p. 420. (55) Jo. Bapt. Tavern. *lib.* 2. Itin. Indic. *cap.* 24. (56) Bontius *ibid.* in cap. 46. p. m. 48.

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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 Ecphysin Commune Ductui Bilario & Wirzungiano, præcise pollex est Mathematicus; ab illo autem foramine intra duplicem Ecphyseos tunicam stilus gracillimus intrusus est in prædictam 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 saith, *retorquetur variè antequàm 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 *Crassa*: The *Tenuia* are subdivided into the *Duodenum*, *Jejunum*, and *Ileon*; The *Crassa*, 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 *Crassa*. '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 *Rabit*, '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 saith, *Processus Vermiformis in totum hic desideratur.* And so *Drelincourt*, *Cæcum caret Epiphysi Vermiformi, qualem 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*, *Manûs 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 *Humane Bodies*.

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

I have likewise seen, by injecting the *Mesenterick Vessels*; that the *Mercury* has passed into the *Lymphæducts*; and so into the *Venæ* or *Vasa Lactea*. 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, numerosæ & planæ, magnitudinem Lentulæ, sed Ovales. Anastomoses frequentissimæ Venarum cum Venis & Arteriarum cum Arteriis in universo Mesenterij circulo.* And as that part of the *Mesenterie* which fastens 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* here, as 'tis in a *Man*.

The *Parisians* remark in the *Monkeys* they dissected, that *the Liver was very different from the Liver of a Man, having five Lobes as in a Dog*; viz. *two on the right side*; *and two on the left*; *and a 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 vesicula fellis, duo alij ventriculum amplectebantur, cum lobulo quinto se inserente 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 minimè, optimè cum Canino convenit, manifestissimè in lobos VII divisum, tantæ 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 pennis seu fibris (quos λόβους Græci vocant) commentantur; è Canum potiùs, & simiarum sectionibus, quàm hominum didicerunt. Humanum enim Jecur in fibras, Porcini, ac multò adhuc minùs Canini Jecoris modo, non discinditur.* And that he hints here at *Galen*, is plain, from what he expresses in his Epistle *ad Joachim Roelants*, (58) where he farther enlarges upon it. And *Galen* (59) himself tells us, that *Herophilus* was of this Opinion. So *Theophilus Protospatarius* (60) saith, that the *Liver* is divided into four *Lobes*; and gives us there a distinct Name for each. *Aristotle*, (61) 'tis certain, was much more in the right, where he saith, στρογγύλον δ' ἐστὶ τὸ τοῦ ἀνθρώπου ἥπαρ, καὶ ὅμοιον τοῦ βοείου. *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. It's adhæsion 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 *Vesica fellea* when inflated with wind, seemed more to represent an *Intestine* by it's *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.619. (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) *Væsani cujusdam 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 Tunicle of the Liver, so that they were apparent, and not hid in the* Parenchyma, *as they generally are.* But in our Subject the distribution of the *Ductus Hepaticus* was altogether the same as it is in *Man.* In the *Male Ape, Drelincourt* describing the *Bladder* of *Gall,* saith, *Vesicula fellea longa* $2\frac{1}{3}$ *pollicibus à fundo ad cervicem, ubi recurvitatem habet maximam, dimidiatè hæret mersa substantiæ Jecoris.*

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

At the *Simous* part of the Liver I observed the *Vena Porta* to enter, as likewise the *Epatic Arteries* and *Nerves.* And here in the Membrane about these Vessels, I observed a pretty large whitish *Gland.* The *Vena Umbilicalis* entered the *Liver* at the *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 *Peritonæum*; 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 figuræ est, exiguus admodùm respectu corporis, coloris nigricantis, læve equidem molleque valdè corpus, ast exteriùs inæquale, quasi ex globulis variis confectum, adeò ut etiam conglomeratis Glandulis Substantiam Lienis annumerare velle, tali in subjecto fundamentum aliquod agnoscat. Ex Ramo Splenico numerosos eosque insignes Ventriculo suppeditat ramos, magnitudinem & figuram externam Fig. 3ª. Tab. XI. exhibet.* But his *figure* of the *Spleen* was nothing like to that of ours. For I did not observe those inequalities in the *superfice* which he represents in his, to exhibit the *conglomerate Glands*. 'Tis true, having injected the Spleen of our *Pygmie*, the *Mercury* filling the *cellulated* 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 quàm in fœminâ, Pancreas excipiens.*

We shall therefore now proceed to the *Pancreas*, which in our *Pygmie* was situated, just as it is in a *Humane Body*; lying under the *Stomach*, transverse to the Spine, from the *Spleen* towards the *Liver*. It was about two Inches long, about half an Inch broad, of a white yellowish Colour; it's surface uneven, being made up of abundance of *Glands*; it's *Secretory 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 it's figure, which made it to resemble that of Man; it's connection, and insertion being wholly particular. For it was strongly fastened to the Spleen; and the insertion of it's* Ductus *into the Intestine (which in Man is always near the* Porus Bilarius*) was two Inches distant therefrom. Blasius* in his *Ape* describes it thus; *Pancreas ventriculo substratum, solidæ admodùm substantiæ est, nec adeò molle, quàm in Canibus aliisque Animalibus notatur. Longum itidèm 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 Caudæ, & extremo Reni sinistro. Ejus ductus inseritur octo lineis supra Porum Bilarium, contrà ac Canibus, substernitur immediatè Ventriculo, & supersternitur 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.*

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The *Glandulæ Renales* in our *Pygmie* were very large, and placed a little above the *Kidnies* as they are in *Man*. That on the right 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 Atrabilaria, *was very visible, by reason that the Kidney was without fat. This Gland was white, and the Kidney of a bright red; it's figure was triangular. Blasius* in his *Ape* tells us, *Glandula Renalis triangularis ferè figuræ est, notabilis valdè pro ratione Corporis*, and gives us a *figure* of it, which was nothing like ours. What *Drelincourt* remarks in the *Male Ape*, is, *Capsulæ Atrabilariæ triplicem Scrobiculum habent, quarum liquor expressus linguam non ità 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 Tunicâ communi 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.* 1. *Obs.* 1.

than

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 unciæ. Renalium venarum dextra longè elatior sinistrâ. Rene aperto Carnis discrimen ut in homine, exterior quidem nigricans lineis quatuor crassa, interior albicans lineis duabus.*

The *Pelvis* of the *Kidney* in our *Pygmie* was as 'tis usually in a *Man*; and the *Ureters* had nothing remarkably different in their Structure, from the common make. They were about the 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 subtùs vasis Spermaticis, quibus decussatìm substrati sunt etiam quibus vascula admittunt, sese reflectunt in Hypogastricam, decussantes ramos Iliacos & Ejaculatorios.* And in the *Female*, *Ureteris expansiones arcuatìm reflexæ ut in homine. Vasa habent supernè à Renalibus, infernè 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

Trunk

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; contrà 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, & adscendenti Cavæ incumbit.*

We come now to the *Parts* of *Generation*; and shall begin with the *Vasa Præparantia*; 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. *&* 1672. *Obs.* 36.

Aortæ paulò infra Emulgentem sinistram enascens sub Venâ Emulgente intercruciat Cavam ascendentem, quæ superinequitat, & conjungitur Venæ Consociali eò præcisè loci ubi Vena inseritur suum in truncum. Sinistra Vena Spermatica inseriturin Emulgentem juxta truncum Cavæ, & consocialem Arteriam 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* Lusitaniæ *de filiis ex muliere, ac simio natis, mulierem*

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

nempe

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

But to return to our Business. 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 shrunk, 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 musculorum Abdominis, quos vasa Spermatica transeunt, ac si iis uniti essent, sic ut potiùs in Inguine utroque collocatos eos dicerem, quàm ultra ossa Pubis a Corpore pendulos.* And so *Drelincourt* to the same purpose; *Scrotum pendulum nullum est, sest Testiculi utrinque juxta Ossis Pubis summa latera, vel Spinam summam ejus decumbunt extra prorsus Abdominis cavum, & proindè extra Musculorum Epigastrij Aponeuroses.*

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

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 Prostatæ were small*; *the* Parastatæ Cyrsoides *were in requital very large*; *they contained an Inch in length*; *their breadth was unequal*, *being four lines towards the neck of the Bladder, and a line and an half at the other end, differing herein from those of Man*, *who has them 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 valdè amplæ, quæ immisso flatu per ductum Seminalem Ejaculatorium insignitèr intumescunt. Quod si premantur, manifestissimè observamus Mate-*

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

riam

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 ductûs Seminales in simiâ constituendi. All that *Drelincourt* saith of them is, *Vasa ejaculatoria retrò Vesicam tendunt in Corpuscula prædura mirè anfractuosa, ut & ipsum 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 *Prostatæ*, 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, albidior solidiorque* represents another, at the Letters (H. H.) viz. *Glandula alia, major, rubicunda & plexu Nervorum, aliorumque vasorum prædita*; which is no *Gland*, but the *Bulb* of the *Penis.* *Drelincourt* in his *Ape* tells us, *Corpora Glandulosa duos velut Nates circa vesicæ cervicem suprà 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. *Dreclincourt*'s account of it in the *Ape* is this; *Genitale prorsùs 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, quâ parte Ligamenta Cavernosa desinant, & 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, exteriùs carnosæ naturæ, interiùs reticulari vasorum plexu refertum, interstitia ipsius materiâ 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 carnosa*; 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 *Analogy* I can't but think, they must be very like to those of a *Woman*, since they are so even in *Monkeys* and *Apes* in several respect; tho' in some, they imitate the Structure of these Parts in *Brutes*. Thus the *Parisians* observe, *The generative Parts of the Female had also a great many things which rendered them different from those of* Bitches, *herein resembling those of* Women; *there were some of them likewise which were as in* Bitches, *and after another manner than in* Woman; *for the exteriour Orifice was round and strait, as in* Bitches, *and the generality of other Brutes, and had neither* 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 Spongious Ligaments, which proceeding from the lower part of the* Os Pubis, *and obliquely advancing to the sides of these Bones, did unite to form a third Body, which was ten lines in length. It was formed by uniting of the two first, which a very strong Membrane joyned together, going from one of the Ligaments to the other, besides a hard and nervous Membrane which inveloped them. They terminated at a Gland like to that of the* Penis *of the Male. The little Muscles, which were fastned to these Ligaments, proceeded as usual from the tuberosities of the* Ischium. *These Ligaments were of Substance so thin and spongious, that the wind penetrated, and made them easily to swell, when blown into the Network of the Veins and Arteries which is in this place. This Network was visible in this Subject, being composed of larger Vessels than they proportionably are in Women. It was situated as usually under the second pair of Muscles of the* Clitoris. *It's figure was Pyramidal, ending from a very large* Basis *in a point, which run along the third Ligament to it's extremity towards the Gland.*

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The rest of the Parts of Generation were like to those of Women. The Neck of the Bladder had it's Muscles as in Women: For there were a great number of 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 extremity of the* Tubæ, *and which is called their Fringe.*

Drelincourt hath very little on this Subject, all he saith is, *Urethra rubicunda solida & brevis. Vagina admodum rugosa, monticulum habens in medio, Papillis extuberans ut in Palato, Pollicem longa, transversim scissa, Pollicem lata. Orificium interiùs valdè solidum. Cervix interior admodùm dura, & paulò 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, simiisque Venæ Cavæ Caudicem suffulcit, nunquam in homine observavi, & hunc illo destitui certo certius scio, quamvis interim* Galeni *locus in septimo de administrandis Dissectionibus mihi memoria non exciderit, quo inquit, quintum hunc Pulmonis Lobum eos non latêre, qui recte sectionem administrant; innuens* Herophilo *&* Marino *ejusmodi Lobum fuisse incognitum, uti sanè fuit, cùm illi Hominum Cadavera, non autem cum ipso, simiarum ac Canum duntaxat aggrederentur, in quibus præsenti 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 infimus omnium crassissimus, superior minùs crassus, intermedius reapsè medius situ & magnitudine. Quartus demùm crenam insculptam habet, quâ parte Cavæ fulcrum præbet. Pulmo sinister bifidus, & Lobus ejus superior bifurcatus.* So in the *Female Ape*, *Lobi Pulmonis dextri totalitèr divisi IV, quorum superior, bifidus totus, adeo ut sint quinque in eâ parte: sinister Pulmo bifidus totus, & Lobus superior ultrà dimidium sui 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, *Trachææ annuli se habent uti Intestinorum spiræ, nervosis 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

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 validissimè, amploque admodùm spatio connascitur, quod Hominibus est peculiare. Simiis quoque & Canibus & Porcis involucrum à septo multùm distat. Tantùm abest ut ipsi magnâ sui portione connecteretur, adeò sanè ut & hinc luce clarius constet, Galenum hominis viscera aut oscitantèr, aut neutiquàm spectâsse, 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 cujusdam Simij habens duo Capita.* And a little after, he denies the *Heart* to be a *Muscle*; *Jam autem erravit* (saith he) *qui existimavit, quòd sit Lacertus, quamvis sit similium rerum in eo, verùm motus ejus non est voluntarius.* The Person he hints at, I suppose, is *Hippocrates*, who so long ago asserted this; Ἡ καρδίη (saith (76) *Hippocrates*) μῦς ἐστιν κάρτα ἰσχυρὸς, ὁ τῷ νεύρῳ, ἀλλὰ πιλήματι σαρκός. *Cor musculus est validus admodùm non Nervo, verùm 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 *Trachæa* and *Bronchiæ* 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 interiour* 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 circà Ventriculum. Adeps circà ea nullus.*

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

There

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 *Trachæa* 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 & Cricoideæ craſſæ ſunt, & ſubnigricantes; & illas 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 there-*

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 Sphæno-Pterigo-Palatinus*; the Tendon of which last, passed over the *Pterigoidal Process*, which was to it like a *Trochlea* or *Pully*, and was afterwards inserted as in a *Man*.

The *Parisians* tell us that *the* Uvula, *which is in no other Brutes, was found in our Apes* (it should be *Monkeys*) *wholly resembling that of Man.* And so *Blasius*, *Uvula in Animalibus aliis 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 Sublinguales* as in *Man*.

Drelincourt observes in the *Ape*, *Linguæ basis non tantùm 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 cavæ, pertusæ & Scrobiculos habentes.*

The *Parotides* under each *Ear* in our *Pygmie* were large, and of the same Figure as in *Man*. *Parotis glandula contegit Musculum Sterno-Mastoideum, articulationem 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 tumefied by the Ulcerous Matter. These *Glands* were about an Inch long, and about half an Inch broad; and

and there were two other ſmall *Glands* a little diſtant from the head of the *Maxillary*. *Glandulæ 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 obtegit, quâ parte ſimiæ ſaccum formant, intra quem Eſculenta recondunt. 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 indeſenſim 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) *Plinij Hiſt. Nat.* lib. x. cap. 72. p. m. 466.

pil.

pil round and large: The *Crystalline Humour* Sphærical 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 *Casserius* (79) has given us of the *Eye* of an *Ape*. Neither the *Parisians*, nor *Blasius*, nor *Drelincourt* do give us any Remarks upon this *Part*.

We proceed now to the *upper Venter*, the *Head*, where at present we shall examine the *Brain*; that Part, which if we had proceeded according to the *Method of Nature* in forming the Parts, we must have began with. For I can't but think, as 'tis the first Part we observe formed, 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 Dram. 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 Pentæsthesion*, h. e. *de quinque sensibus. Vide de Organo visus.* Tab. 3. fig. 12, 13.

There

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 nimirùm constructione Simia, Canis, Equus, Felis, & Quadrupeda quæ hactenùs vidi omnia, & Aves etiam universæ, plurimaque Piscium genera, omni propemodùm ex parte Homini correspondeant: neque ullum secanti occurrat discrimen, quod secùs de Hominis, quàm illorum Animalium functionibus statuendum esse præscribat. Nisi fortè quis meritò dicat Cerebri molem Homini, Perfectissimo sanè quod novimus Animali, obtigisse maximam, ejusque Cerebrum etiam tribus Boum Cerebris grandius reperiri: & dein secundum Corporis proportionem mox Simiæ, dein Cani magnum quoque non secus obtingere Cerebrum, quàm si Animalia Cerebri tantum præstarent mole, quanto Principis Animæ viribus apertius viciniúsve donata videntur.*

Since therefore in all respects the *Brain* of our *Pygmie* does so exactly resemble a *Man's*, I might here make the same 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

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 *Arteriæ Carotides*, *Vertebrales*, and *Communicans*, and the whole of the *Blood Vessels* in our *Pygmie* to be the same as in a Man. Here was the *Infundibulum*, the *Glandulæ duæ albæ ponè 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 *Parisians* do tell us of the *Brain* in their *Monkeys* is this:

The Brain *was large in proportion to the Body: It weighed two Ounces and an half. The* Dura Mater *entered very far to form the* Falx. *The Anfractuosities of the External part of the Brain were very like those of Man in the Anteriour part; but in the inward parts before the Cerebellum, there was hardly any: they in requital were much deeper in proportion. The* Apophyses, *which are called* Mamillares, *which are great Nerves that do serve to the smelling, were not soft, as in Man, but hard and membranous. The* Optick *Nerves were also of a Substance harder and 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 anteriour and hinder part. Nor did I obſerve any difference in the *Mamillary Proceſſes* or *Optick Nerves*, or *Rete Mirabile*, but all, as in a *Man.*

The *Cerebellum* in our *Pygmie* was divided by *Circilli*, as in *Man.* It had likewiſe the *Proceſſus Vermiformes.* Dr. *Willis* (80) makes this Remark upon this Part : *Cerebellum autem ipſum, in quibuſvis ferè Animalibus, ejuſdem figuræ & proportionis, nec non ex ejuſmodi lamellis conflatum reperitur. Quæ Cerebrum diverſimodè ab homine configuratum habent, uti* Volucres *&* Piſces, *item inter Quadrupedes* Cuniculi *&* Mures, *quorum Cerebra gyris ſeu convolutionibus carent ; his Cerebelli ſpecies eadem, ſimilis plicarum 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 ſpatious. The *Corpora Striata*, the *Thalami Nervorum Opticorum* all alike. The *Plexus Choroides* the ſame ; as were alſo the three *Foramina* as in *Man* ; The *Glandula Pinealis* proportionably large. The *Protuberantiæ 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.

THE OSTEOLOGY, OR DESCRIPTION OF THE BONES.

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, σὺ δὲ εἰ μηδὲ τοιοῦτον μηδὲν δ' τύχοιας θεάσασθαι, πίθηκον ἕν ἀνατεμὼν, ἐπὶ αὐτῷ καλανόησον ἕκαστον τῶν ὀστῶν ἀκριβῶς, &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, ἁπάντων, ὡς ἔφην, τῶν ὀστῶν καλανοῆσαι χρὴ τὴν φύσιν εἴτ' ὄντι ἀνθρώπου σώματι, εἴτ' ἐν πιθήκου εἰ δυνηθείης· ἄμεινον δ' ὄντι ἀμφοῖν, εἶθ' ἑξῆς ὄντι τὴν τῶν μυῶν ἀναλομὴν ἐλθεῖν, 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 *Depulsio Vesani cujusdam 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 Andreâ 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 *Apologiæ 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* com-

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

Realdus Columbus was succeeded at *Rome* by *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 dubiis in rebus dissentire ab eo honestè non possumus, sed magis expedire, decereque putandum est, illo Duce errare, quàm 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 & veræ & caudatæ, quæ 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

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.*

CAP. 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 appareat vestigium. Propterea potiùs harmoniæ dici merentur, quam suturæ, quia rerum consutarum figuram non æmulantur. Attamen* Volcherus Coiter *suturas attribuit simiis, parum ab humanis discrepantes. In cercopitheco squamminformes desiderantur.* (c) Frontis Os *in calvariæ basis sede, ad conjunctionem Ossis sphenoidis, transversâ potius lineâ quàm 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 emittit, nonnihil ampliori, excavatum est. In ejus humiliori profundiorique sede, quatuor aut quinque alia foramina recta & lata cernuntur. In simia caudata* (e) Os Ethmoides *admodum profundè in nares descendit, paulò infra eam regionem ex qua nasus exoritur. Harmoniâ per medium dividitur, & utrimque ab Osse frontis, quod etiam profundè descendit effingi videtur.* (f) Superficies sellæ Sphenoidis *ad narium principium in Osse frontis non est plana & æqualis 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 Malleolus, Incus, & Stapes reperiuntur, quibus aliorum animantium aures instructæ sunt, si credimus* Casserio, *sed ego semper observavi.*

Os-

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

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

Maxilla inferior (p) *integra est, 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 condylωdis, 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 utrimque assident & accumbunt incisoribus. Singulas radices ut incisores habent, sed altiùs infixas robustioresque, minùs etiam ex anteriore parte, quàm posteriore pressas & angustas. Ac simia cynocephalos dentes caninos longiores prominentioresque, quam vera simia obtinet.* Molarium dentium numerus *in homine incertus est, authore* Galeno: *sæpius enim in utraque maxilla sunt sexdecim, interdum viginti, nonnunquam viginti quatuor.* At simiæ 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 discrepent, quia in simia primus inferior unum tantùm apicem obtinet: Attamen in posteriorum dentium mensis, secundum longitudinem maxillarum, profunda admodum linea exsculpta est. Quam lineam altera etiam transversa, quæ in quinto dente simiæ non caudatæ gemina est, intrinsecus & extrinsecus ad gingivam usque protractata intersecat. Quo fit, ut singuli ejusmodi dentes eminentias, ut plurimum quatuor in angulis (nam quinto sex sunt) tres verò foveas in medio habentes, duarum serrarum mutuò sibi occurrentium modo committantur: quod profectò accuratissius Author* Galenus *explicare minimè prætermisisset, si molares simiarum descripsisset.*

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

(a) The

(*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 *Ossa 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 *Squammous Sutures* very plain, tho' *Riolan* denies them; which likewise in our *Pygmie* was very apparent. Our *Pygmie* therefore in the Structure of the *Sutures* exactly resembled a *Humane Cranium*, and more than *Apes* and *Monkeys* do: For in them the *Coronary* and *Lambdoidal Sutures* were only in part *serrated*; and they had no *Ossa triquetra Wormiana*.

(*c*) In our *Pygmie* there was an *Os Cribriforme*, as in *Man*; 'twas about half an Inch long, and a quarter of an Inch broad; in it I numbred about Thirty *Foramina*; here was likewise that long ridge, (which is call'd *Crista Galli*) as in a *Man*, to which the *Dura Mater* was fastened.

(*d*) In

(*d*) In the *Cranium* of the *Monkey* there was no *Crista Galli*; and where the *Os Cribriforme* should have been, there was a hollow Passage which led towards the beginning of the Nostrils, at the end of which there might be a small *Os Cribriforme* perforated with four or five holes. But this Part appeared very different from the Structure of a *Humane Skull*, as likewise from our *Pygmie*; which was occasioned chiefly by the great bunching in of the Bones of the Orbit of the Eye, tho' our *Pygmie* too had these Bones more protruded in, than they are in a *Humane Cranium*.

(*e*) This appeared more in the *Cranium* of a *Monkey* than in our *Pygmie*; tho' here too 'twas somewhat more than in a *Man's Skull*.

(*f*) The *Sella Equina* in our *Pygmie* was exactly like a *Man's*. In a *Monkey* I observed it more rising and higher. In the middle of the *Sella Turcica seu Equina* of our *Pygmie*, I observed a *Foramen*; and the same I found in a *Humane Cranium* I have by me.

(*g*) In our *Pygmie* I did not observe those two *Cavities* under the *Sella Turcica* which are to be met with in a *Humane Skull*. But the Bone here was very spungy and cavernous, and might answer the same end, tho' not formed perfectly alike.

(*h*) These Cavities in our *Pygmie*, were nothing so large as they are in a *Monkey*, but conformable to the Structure of this Part in an *Humane Skull*. And in our *Pygmie* too, I observed the *Pterigoidal Processes* as they are in *Man*, but I did not find them in the *Monkey*.

(*i*) The *Ossa Bragmatis* and *Temporum* in our *Pygmie* were very plainly distinguished by an *indented Suture*. In the *Cranium* of the *Monkey* these Bones were divided by a *lineal Suture* call'd *Harmonia*.

(*k*) The *Mastoid* and *Styloforme Process* in our *Pygmie* were very little, yet more than in the *Monkey*; but herein our *Pygmie* rather imitates the *Ape-kind*.

(*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' *Casserius* therefore thinks *Galen* does not mention them, and never observed them, because they are not to be found in *Apes*: But *Riolan* tells us the contrary.

(*m*) The *Os Zygomaticum* in our *Pygmie* was not half so big or large as in the *Cranium* of the *Monkey*; herein therefore our *Pygmie* more 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, Ἁπάντων γὰρ τῶν ζώων ἄνθρωπος ἔχει βραχυτάτην τὴν γένυν, ὡς πρὸς τὴν ἀναλογίαν δηλονότι τοῦ παντὸς σώματος· εἶτ' ἐξῆς ἀνθρώπῳ πίθηκος, εἶτα λύγκες, εἶτα σάτυροι, κἄπειτ' ἐξῆς κυνοκέφαλοι. i. e. *That of all Animals a Man hath the shortest Chin, or under Jaw, in proportion to his Body; then next to a Man, an* Ape, *then a* Lynx, *then* Satyrs, *and after these the* Cynocephali. And I may add, of all *Apes*, our *Pygmie* hath the shortest. The Articulation of the under Jaw in our *Pygmie* was *Condyloides*, as 'tis in *Man*; 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 *Superficies* 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.

CAP. 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 apparet, imò nulla sentitur asperitas, in anteriore parte corporis primæ vertebræ humanæ obtusa quædam eminentia apparet, quæ in simia magis extuberat, & in mucronem producitur. Quod si vertebras & spinas breves habet simia,* (c) *apophyses transversas obtinuit longiores, atque ad anteriora magis, quàm in homine reflexas. Imprimis verò sexta colli vertebra, quæ hunc processum præ cæteris insignem adepta est, eumque bifidum, magisque recurvum & aduncum, quàm in aliis vertebris. Hic autem spondylus sextus maximus est, propter illas transversas apophyses grandiores, in simia caudata minor est. Septimi spondyli transversæ apophyses simplices & tenues, in caudata simia bifidæ, & satis longæ existunt, quæ licet in homine simplices appareant, sexto tamen crassitie non cedunt.*

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

(h) *Lumbi,*

(h) *Lumbi, inquit* Galenus, *in simiis sunt longiores quàm in hominibus, si pro ratione reliquarum partium hoc æstimare velis, nam in homine quinque vertebræ lumbos efformant, in simiis non secus, quàm in aliis quadrupedibus sex adsunt.* (i) *Harum vertebrarum processus ab humanis differunt. Siquidem transversi in homine teretes sunt & oblongi, nonnihil in exteriora conversi, 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 vertebra primò incepit transversum consequi processum, qui brevis est. Reliqui subsequentes longiores existunt.* (k) *Posteriores processus spinosi non sunt recti, sed supernè spectant, atque excipiuntur à supernis incumbentibus vertebris, quæ hiatu 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 apophyseωn lumbarium, atque etiam duarum infirmarum thoracis, quædam tubercula magnitudine figuraque mespilorum nucleos referentia sæpius reperiri, quæ cum in canibus & simiis non habeantur, suspicari posset aliquis vicem illarum quas paulò antè descripsi proceritatum in homine tenere.*

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

(n) *Simiæ longior est* Coccyx, *quàm homini, pluribus ideo constructus Ossibus, quæ juxta commissuram Ossis Sacri perforata sunt, medullamque continent, atque nervos antrorsum & retrorsum emittunt, quæ omnia desunt in coccyge 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. Simiæ latius cæteris pectus datum, sed humano angustius.*

(p) *Porro simia, tam caudata, quàm non caudata, costas viginti sex præ se fert, cum in homine tantùm viginti quatuor reperiantur. Harum utrimque sunt octo veræ costæ, in homine septem, quæ per articulum sterno committuntur. Quinque vero nothæ costæ non desinunt in perfectam cartilaginem versus sternum invicem constrictæ, ut in homine, sed osseæ magis quàm cartilaginosæ, à se mutuò disjunguutur.* Costæ *in simia, tam caudata, quàm non caudata, spatiis vertebrarum intermediis inseruntur: at in hominibus magis corporibus vertebrarum attexuntur.*

(q) Sternum *octo constat Ossibus rotundis, quorum primum aliquantisper prominet, supra cartilaginum duarum primarum conjunctionem, quæ duæ cartilagines videntur amplexari superiore parte primum os sterni. Cartilagines*

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

(r) *Simia quoad scapulas & claviculas homini maximè similis est*, *authore* Galeno. *Clavicula incipiens à primo sterni osse ad medium costæ rectà procedit, inde ad acromion usque multùm curvata intumescit: huic articulationi interjectum est ossiculum, quod in homine ad decimum octavum annum & ultrà, appendix existit: at in simia, nec istud ossiculum, nec illius vestigium ullum apparet, imò pars illa robustissima est.*

(*a*) In our *Pygmie* there were seven *Vertebræ* of the Neck, as there are in a *Man*, and an *Ape* too; but they were short, making in length about two Inches; and seemed more to imitate those in *Apes*, being flatter before, and not so round as in *Man*. And their *Spines*, tho' they were longer, and more obtuse, and not so acute as in *Monkeys*; yet they were not *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 infernæ*, as 'tis in a *Humane Sceleton*: in a *Monkey* there are four *Apophyses* there.

(*g*) Our *Pygmie* if *Riolan*'s account be true, is different both from the *Ape* and *Man* too; for here 'twas the thirteenth *Vertebra*, *quæ infra, suprave suscipitur*.

(*h*) The

(*h*) The *Vertebræ* of the *Loins* in our *Pygmie* were about two Inches long; and their number the same, as in a *Man*, *viz.* five; and not six, as are in *Apes* and *Monkeys* : But the *Os Ilium* of each side does ascend so high, as to include the two lower *Vertebræ*; which is not so in *Man*.

(*i*) The *Transverse Processes* of the *Lumbal Vertebræ* in the *Pygmie*, were round and thick, as in *Man*; and not thin and flat, or broad, as in the *Monkey*.

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

(*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 largiùs sumpto, Coccygem quoque comprehendens : (quem Coccygem pro uno Osse, ut in præsenti textu facit, tanquam quartum adjungens assumpsit, à Sacro interim distinguens) sæpius 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 *Falloppius* 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 *Sceleton* of a *Monkey* I observed but three Bones or *Vertebræ* which did make up the *Os Sacrum*.

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

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

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

Monkey,

Monkey, there are more Bones, and those perforated, as *Riolan* describes them. Hence *Julius Pollux* stiles it, ὁ τρητὸς κόκκυξ, *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 Arabicâ 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 Sceleton*; and it was as full *chested* 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 Sceleton*; and the Articulation of the *Ribs* was more on the Body of the *Vertebræ*, than in the *Interstices*. *Drelincourt* is mistaken in mentioning but twelve *Ribs* in the *Ape*, of a side, or his was different.

(q) *Jo. Philippus Ingrassias* (86) makes eight Bones in the *Sternum* of Infants; and tells us, that in time these Bones do coalesce, and grow 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 *Ingrassias* saith, is for the *Cartilago Ensiformis*. In the *Sternum* of our *Pygmie* I numbred seven Bones, the two last being small and partly *Cartilaginous*; and here the *Cartilages* were inserted at the Commissures and Joynings of the Bones of the *Sternum*. The *Cartilago Ensiformis* was long and roundish. The whole of the *Sternum* of our *Pygmie* much more resembled the *Humane Sceleton*, than the *Monkey*'s, being much broader and larger, and as far as I observed just alike.

(r) The *Scapula* of our *Pygmie*, tho' in most respects it resembled a *Man*'s, yet I thought it did not so much, as a *Monkey*'s; for it seemed

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

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

CAP. IV.

De Artubus Superioribus.

(a) SIMIÆ *& 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 osficulum non in prima brachialis acie est locatum, sed tertio ejusdem aciei ossi incumbit, atque inter ea quæ indicem & medium digitum sustinent seipsum inserit: vocatur à* Galeno διφύες, *hoc osse videntur carere simiæ caudatæ, sed ejus loco adipiscuntur os peculiare, quod carpi ossi cubito substrato annectitur, & satis longè protuberat. Deinde instar cornicis versus manus volam incurvatur, atque cum processu ossis carpi radio articulati, magnam cavitatem musculorum tendinibus efformat.*

(e) Metacarpij, Digitorumque Ossa *simiæ, tam caudatæ quàm non caudatæ, parum admodum ab humanis ossibus discrepant. Simia quidem magnum manus digitum* Pollicem, *mutilum obtinet, & curtum, & indici propinquum, non oppositum, instar alterius manus, ut in homine: Reliqui digiti multò sunt minores digitis pedum.*

(a) I

(*a*) I have already mentioned that the *Scapula* or *Omoplata* 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 ἀντίχειρα, and *Hippocrates* μέγαν, 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*, εἶτ', ὦ πρὸς θεῶν ὁδὲν ἔχοντες ἐν τοσαύταις καταφύσεσι μέμφασθαι, οὔτ' ὂν τὸ ὄγκον τῶν τενόντων, ὅτε τὸ τόπον, οὔτε τὸ τρόπον τῆς ἐμφύσεως, ἀλλ' ἐν ἁπάσαις αὐταῖς θαυμαστὴν ἀναλογίαν ὁρῶντες, μιᾶς μόνης ἀπολλυμένης κατὰ τὸ αὐτὸν τρόπον ἐν ἀμφοτέροις τοῖς μεγάλοις δακτύλοις, καὶ ταύτης ἐκ ἀλό-

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

γως,

γως, ἀλλ' ὅτι μηδὲν αὐτῆς ἐχρήζομεν, εἰκῇ φάτε, ἢ χωρὶς τέχνης, ἅπαντα τὰ τοιαῦτα γεγονέναι. i. e. *Vos, per Deos immortales, cùm nihil habeatis, quod in tot Insertionibus reprehendatis, neque Tendonum molem, neque locum, neque Insertionis modum, sed in his omnibus mirabilem quandam Proportionem videatis, unâ solâ in utroque magno digito similitèr perditâ (& hoc non sine ratione, quod eâ non egebamus) temerè dicitis & absque Arte omnia hujusmodi facta fuisse.*

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

CAP. V.

De Artubus Inferioribus.

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

(b) *Ea est* Femoris structura *in simia, ut eam stare rectam non permittat, nec instar hominis corpus suum erigere, aut incedere, ne quidem sedere, quia femoris caput obliquius in articulo coxæ, committitur.* (c) *In homine cervix rotundi capitis femoris oblonga est, & sensim obliquè deorsum ducitur. In simia verò brevis, & propemodum transversa visitur. Sed femoris cervice, apophyses duæ, trochanteres dictæ, in simia similes sunt humanis, verum in illa, ut in caudata minores.*

(d) Patella *utriusque simiæ manifestum discrimen ab humana demonstrat: est enim oblonga, non rotunda. Quamvis autem extrinsecus gibba sit, atque intus cava, nihilominus longè aliter se habet quàm in homine. Nam secun-*

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

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

(f) Simiæ Pes *ab humano maximè discrepat, est enim oblongus latusque homini, angustus brevisque simiæ, pro ratione corporis, pedisque digiti longiores sunt, sed metatarsi Ossa breviora, calcaneum verò angustius, & anteriori in parte qua cum Osse cyboide committitur, latius evadens, magisque inibi longum, quàm retrò, impedit ne simia diu erecta, & stare, & ambulare queat. Astragalus* Galeno *tenuis non efficitur, sed manens sublimis, Ossi scaphoidi conjungitur, quod simiæ 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, quâ discreparent ab homine.* (g) *Digitorum notissima est discrepantia in homine, ut notavit* Galenus, *omnes una serie disponuntur, brevissimoque spatio discreti, multo minores sunt, quàm qui in manu habentur. Nam quantò pes summa manu major est, tanto illius digiti manus digitis sunt minores.*

(h) *Accedit quod pollex longitudine indici æqualis 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 digiti insigni spatio discreti sunt, multoque longiores, quàm in manu existunt: Pollex cæteris digitis brevior tenuiorque est, atque diversam ab aliis positionem sortitur, dehiscit etiam, ut pollex in manu valde ab indice. Digiti pedis simiæ, manus humanæ digitorum seriem imitantur, est enim pollex in pede simiæ 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 *Sceletons* of the *Monkeys* I uſed, theſe Bones were loſt, ſo that I did not obſerve them.

(e) The two Bones in the *Leg*, the *Tibia* and the *Fibula* were juſt the ſame in the *Pygmie* as in *Man*; and their Articulations were alike: The *Tibia* was four Inches long; the *Fibula* was a little ſhorter. The girth of the *Tibia* in the middle was about an Inch; of the *Fibula*, about half an Inch.

(f) What makes the *foot* of the *Pygmie* ſeem different from a *Man*'s, is chiefly the length of the *Toes*, and the Structure of the *great 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* 'tis altogether as long; and herein it reſembles the *Ape-kind*. But whereas *Ariſtotle* (as I have remarked) mentions, that in *Apes* the *middle Toe* is the longeſt, as is the *middle Finger* in the *Hand*; In the *Sceleton* of the *Pygmie* I did obſerve, that the *firſt* and *middle Toe* were both much of a length, each meaſuring an Inch and three quarters: The *third* and *little Toe* were about an Inch and an half long; the *little Toe* being rather ſomewhat ſhorter than the *third Toe*. If in the *great Toe* you reckon three *Articuli*, as *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.

CAP. VI.

De Sesamoideis.

IN *Homine* Ossa Sesamoidea *pauca sunt, magnaque ex parte cartilaginosa, & si ea quæ pollici applicantur exceperis, in constanti sede firmata. In simia verò multa, atque magna occurrunt, & ossea 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.

Beth

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 ἀκμὴ 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 justifie 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) *haud longè ab his nasci, quorum qui longissimi sunt, non longiores esse quàm pedes duos & quadrantem.* And so *Pliny* (89), *Suprà hos extremâ in parte Montium Trispithami, Pygmæique narrantur, ternas Spimathas longitudine, hoc est ternos dodrantes non excedentes*; that is twenty seven Inches. For as *Ludovicus Vives* (90) observes, a *Foot* contains sixteen *Digiti* or twelve *Pollices*. The *Dodrans* 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 πενταπιθάμους ἀνθρώπους, as well as the τριπιθάμους; 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. Noct. 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.

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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 flection of the fore and hinder Limbs, is both the same way: But in a *Man* and an *Ape* (as I have before remarked from *Aristotle*) 'tis contrary; or as *Pliny* expresses it, *Homini genua & Cubita contraria, item Ursis & Simiarum generi, ob id minimè pernicibus*. But how *Pliny* comes to bring in the *Bear* here, I do not understand: for if with the *Parisians* (93) we should here understand by *Genua*, the *Heel-bone*, and by *Cubita* a Bone of the *Carpus* (which are often longer in *Brutes* than in *Man*) then this will be a Property not peculiar to *Bears*, but might be observed in other *Quadrupeds* too. I should rather own it as a Mistake in *Pliny*. Nor can I assent to the *Parisians*, *That all Animals have these Parts turned after the same manner, whatever* Aristotle *may report thereof*. I must 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 *Scapulæ* 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

Shoulder with the *Scapula* in *Quadrupeds* lies nearer the *Ribs*; in *Man* 'tis extended farther from them. Now our *Pygmie* so exactly imitating *Humane-kind* in all these Circumstances, makes me think that *Nature* did not design it a *Quadruped*, but a *Biped*. For it had a full round *Chest* or *Thorax*, and it's *Scapulæ* placed backwards, not so forwards on the *Ribs*, and the Articulation of the *Shoulder* with the *Scapula*, stood off from the *Ribs* as it do's in *Man*. And from this very Consideration *Galen* (94) tells us, That a *Man*, if he would, could not walk upon all four, Δεόντως ἓν ἄνθρωπῳ (saith he) οὐδ' εἰ βουληθείη βαδίζειν ὅτι τῷ τετάρων κώλων δυνάσθαι ἄν, ἀπεσμένων αὐτῷ πόρρω τοῦ θώρακος τῶν κατὰ τὰς ὠμοπλάτας ἄρθρων. i. e. *Meritò itaque Homo ne, si volet, quidem ambulare quatuor artubus queat, quòd 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, Τὰ δὴ κατ' ὠμοπλάτας καὶ κλεῖς ἀνθρώπῳ, καὶ μάλιστα προσέοικεν, καὶ τοί γ' ὁ δεόμενος ἐοίκεται ταύτῃ τοῖς ἀνθρώποις εἰς ὠκύτητα βαδίσεως· ἀπαμφοτερίζει τοιγαροῦν ἑκατέροις τοῖς γένεσιν, καὶ οὔτε δίπους ὀξὺν ἀκριβοῦς, οὔτε τετράπους, ἀλλὰ καὶ ὡς δίπους χωλόν, ὁ γὰρ ἀκριβῶς ὀρθὸν στῆναι δύναται, καὶ ὡς τετράπους, ἀνάπηρόν τε ἅμα, καὶ βραδύ, διὰ τὸ πλεῖστον ἀπῆχθαι τοῦ θώρακος αὐτὸ τὸ κατ' ὦμον ἄρθρον, καθάπερ εἰ καὶ τῷ ἄλλου τινὸς ζώου ἀποπαδὲν τοῦ θώρακος ἐκλὸς ἀποχωρήσειεν· i. e. *Quod verò ad Scapulas & Claves attinet, homini maximè est similis, quamquàm eâ 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 quatenùs est Bipes, clauda est, non enim rectè planè stare potest; & quatenùs est Quadrupes, mutila simul est, ac tarda, quòd Humeri articulus à Thorace plurimùm sit abductus, quemadmodùm 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), Ἔστι δ' ὠμοιόταθ ἀνθρώπῳ πίθηκος, ὡς ἂν στρογγύλον τε μάλιστ' ἔχων τὸ πρόσωπον, καὶ τοὺς κυνόδοντας μικροὺς, τὸ στέρνον πλατὺ, καὶ τὰς κλεῖς μακροτέρας, καὶ ἥκιστα δασὺς, καὶ ὀρθὸς ἵσταται καλῶς, ὡς καὶ βαδίζειν ἀμέμπτως, καὶ θεῖν ὠκέως δυνάσθαι. i. e. *Est autem simillima homini Simia, ut quæ rotundam præcipuè habet faciem, Dentes Caninos parvos, latum Pectus, Claviculas longiores, minimùm Pilosa, quæ recta etiam stat bellè, ut & incedere 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 *Gression* 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, πίθηκος γὰρ ὁ πίθηκος, κἂν χρυσοῦν ἔχῃ σύμβολον, (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, Λέγεται δὴ καὶ βασιλεύς τις Αἰγύπτιος, πιθήκους ποτὲ πυρρίχιζειν διδάξαι, &c. i. e. *Fertur Ægyptius Rex quidam Simias ut tripudiarent instituisse, Animaliaque (nam admodùm ad res humanas imitandas sunt apta) celerrimè didicisse, ut Personata ac Purpurata saltarent: eratque admodùm visu res digna, donec Spectator quispiam*

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

urbanus

urbanus nuces è sinu depromptas in medium abjiceret: id simiæ videntes, tripudij oblitæ, id quod erat, simiæ pro saltatoribus evaserunt, Personas conterebant, vestitum discerpebant, invicemque pro fructibus depugnabant, ità ut Pyrriches ordo dissolveretur, à Theatroque ridebatur. And in another place (98) he tells the like Story of *Cleopatra's Apes.* So that they can, not only go erect, but can dance in a figure too, if taught to do 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. *Cowper*, 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.

THE MYOTOMY OR DESCRIPTION OF THE MUSCLES.

Of the Muscles *of the* Abdomen.

THE *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 *Pygmie*. 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 Urinæ* 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. *Organi Viſûs*, Fig. XII. & XIII. Nor was there any *Muſculus Septimus Brutorum* in this *Animal*. The *Alæ Naſi* of the *Pygmie* being ſmall, thoſe *Muſcles* only appear'd, which from their Office are call'd *Conſtrictores Alarum Naſi*, *ac Depreſſores Labij ſuperioris*.

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

The *Muſcles Common* to both *Lips*, are the *Zygomaticus*, (Fig. 3. 3.) *Elevator*, *Depreſſor*, and *Conſtrictor Labiorum*, which were not ſo conſpicuous, as in *Men*. The *Proper Muſcles* of the *upper* and *under Lip*, were very diſtinct in this *Animal*, (*viz.*) the *Elevator* and *Depreſſor Labij Superioris*, (Fig. 3. 4.) the laſt of which is mentioned above, and called *Conſtrictor Alæ Naſi*; the *Depreſſor* and *Elevator Labij Superioris*, (Fig. 3. 5.)

Tho

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 *Styliform Process*; that *Process* being wanting in this *Animal*, or at least did not appear, by reason it was young; this *Muscle* therefore seem'd to arise from the *Os Petrosum*.

The *Genioglossus*, by reason of the length of the *Lower Jaw*, was longer than that in *Man*. The *Ceratoglossus* and *Styloglossus* differ'd not; except that the latter arises from the *Os Petrosum*, like the *Stylohyoideus*. The other *Muscles* appear'd in this *Animal* belonging to it's *Tongue*. The *Sternothyroideus*, *Hyothyroideus*, *Cricothyroideus*, *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 Gulæ*. The following *Muscles* of the *Gargareon* 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, *Tendinem 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 Primus*, *Secundus* and *Tertius*; *Subclavius* (Fig. 3. 34.) *Serratus minor anticus*, (Fig. 3. 35.) *Serratus major anticus*, (Fig. 3. 37.) All these were like the *Humane*. The *Parisians* tell us, That the *Great Serratus* did in in their *Monkeys* arise from the fourth, fifth, and sixth *Vertebra* of the *Neck*; but it was not so in the *Pygmie*: The like is taken notice of by *Drelincourt* in *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 *Clavicula*; when it Acts, it draws up the *Clavicle*, aſſiſting the *Elevator Scapulæ*, 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 & extremum claviculæ extenditur.*

The *Muſcles* imploy'd in the Motion of the *Scapula*, are the *Cucularis*. (Fig.4. 1.1.1.) *Rhomboides* (Fig.4.6.) *Levator Scapulæ* (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* imploy'd in the *Motion* of the *Head* of the *Pygmie*, differed very little from thoſe in *Man*; as the *Splenius*, (Fig. 4. 2.) *Complexus*, (Fig. 4. 4.) *Rectus major*, *Rectus minor*, *Obliquus Superior*, and *Obliquus Inferior*, neither was this *Inferior Oblique Muſcle* larger than in *Man*; as *Veſalius*, *Lib.* II. *Cap.* XXVIII. aſſures us, it is in *Apes* and *Dogs*. The *Maſtoideus* (Fig. 3. 8. 8.) was chiefly inſerted to the *Occipital-bone*, as the *Pariſians* obſerve it in *Monkeys*. The *Rectus internus major*, not commonly deſcribed by Authors in *Humane Bodies*, tho' it is very plain and conſtant in all thoſe, I have hitherto lookt for it, was alſo in the *Pygmie*. The *Rectus internus minor*, or *Muſculus Annuens*, ſometimes obſerved by me in *Humane Bodies*, was alſo in this *Animal*; and ſo was the *Rectus Lateralis* deſcribed by *Falloppius* in *Men*. Nor was any of thoſe *Muſcles* I have diſcovered in *Humane Bodies*, wanting in this *Animal*, but the *Interſpinales 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 *Longiſſi-*

mus

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 Scapulæ*. 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 *Olecranum* 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

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

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

The *Muſcles* of the *four Fingers* were, the *Perforatus*, (Fig. 3. 24.) *Perforans*, (Fig. 3. 25.) *Lumbricales*; (ib. 31.) theſe agreed exactly with the *Humane*; but the *Extenſor Digitorum Communis* (Fig. 4. 21.) was larger and diſtinct from the *Extenſor minimi Digiti*, as in *Men* and *Apes*, which *Drelincourt* obſerves. The *Extenſor Indicis*, *Abductor Indicis*, (Fig. 3. 30.) *Extenſor minimi digiti*, (Fig. 4. 20.) *Abductor minimi digitis* (Fig. 4. 25.) and *Interoſſij Manûs*, 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 *Glutæus minor*; nor did the *Glutæus maximus* (Fig. 4. 33. 33.) reſemble the *Humane*: It was meerly *Tendinous* at it's Origin, from the whole *Spine* of the *Os Ilium*; it was much longer, and not ſo thick as in *Man*; nor were it's fleſhy Fibres ſo divided: This *Sylvius* deſcribes for the *Membranoſus* in *Apes*. The *Pariſians* give a very imperfect account of the *Muſculi Glutæi* in *Monkeys*, where they tell us, *The Muſcles of the Buttock had a Figure differing from*

those in Men, being shorter, by reason the Ossa Ilium *in Apes are much straiter than in Man.* The *Glutæus 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 longer and larger, than in *Man.* Besides this, the *Parisians* tell us of two other little *Muscles* in *Monkeys*, which have the same Origin as the *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 Tubere etiam nata, postico cruri propè toti affixa, ad usque Cavitatem inter duos condylos mediam : tertia minima & brevissima ossis pubis in medium & posticum Os Cruris.* The *Pyriformis* (Fig. 4. 35.) was like the *Humane*; nor did it appear less in proportion, as the *Parisians* represent it, in *Monkeys*, who say, *This Muscle, instead of taking it's rise from the lower and external part of the* Os Sacrum, *it proceeded from the* Ischium *near the* Cavitas Cotyloides. The *Marsupialis* had it's *Marsupium* much broader than in *Men.* The *Quadratus Femoris* was less than in *Man.* The *Obturator extrorsum* was much larger.

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

The Muscles of the *Tarsus* or *Foot*, agreed in Number and Situation with the *Humane*; but varied in their Figure. The *Gasterocnemius externus* (Fig. 4. 43.) had not so large a Belly, nor were it's Fibres so variously disposed; but it continued fleshy much lower, than in *Man.* *Sylvius* tells us in *Apes*, *Capita Gemellorum* (meaning this *Muscle*) *Ossa Sesamoidea habent, firmantia in Condylis Crus cum Tibia.* The *Plantaris* differ'd not from that in *Man.* The *Gasterocnemius 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 Seſamoides* in the Tendon of this *Muſcle* in *Apes*. The *Peroneus primus* (Fig. 3. 51.) differ'd very little from that in *Man*; it's Tendon having the ſame progreſs in the Bottom of the *Foot*, to the Bone of the *Metatarſus* of the *Great Toe*; which is nevertheleſs denied by *Galen* to be exiſtent in *Man*; for which *Veſalius*, *lib.* 2. *cap.* 59. ſeverely Cenſures him. I have more than once, ſeen a *Boney body*, placed in this *Tendon* at it's *Flexure* on the *Os Cuboides* in *Humane Bodies*: The like is taken notice of by *Sylvius* in an *Ape*. The *Peroneus ſecundus* differ'd not from that in *Man*. The *Tibialis Poſticus* (Fig. 4. 45.) was not ſo large as in *Man*.

The *Muſcles* of the *Great Toe* differ'd from the *Humane*. The *Extenſor Pollicis longus* (Fig. 3. 52.) had a more Oblique progreſs, and was fleſhy lower. The *Extenſor Pollicis brevis* (Fig. 3. 53.) was much larger, and it's progreſs on the *Foot* almoſt tranſverſe. The *Flexor Pollicis longus* was pretty large. The *Flexor Pollicis brevis* (Fig. 4. 47.) was very large, and inſeparably joined with the *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 Digiti*, differ'd very little from thoſe in *Men*. The *Muſculus Extenſor Digitorum brevis*, and *Tranſverſalis Pedis* did not appear in this *Animal*.

I ſhall not at preſent give the *Reader* the trouble of the *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 *Rostrum* or *Chin* shorter.

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

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

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

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

7. It had *Calves* in it's *Legs*.

8. The *Shoulders* and *Breast* were more spread.

9. The *Heel* was longer.

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

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

12. The *Intestines* or *Guts* much longer.

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

14. In having a *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

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

28. It had an *Os Cribriforme*, and the *Crista Galli*; which *Monkeys* have not.

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

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

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

32. The *Os Zygomaticum* in the *Pygmie* was small; in the *Monkey* and *Apes* 'tis bigger.

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

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

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

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

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

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

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

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

41. In the *Pygmie* there were but seven *Costæ veræ*; and the Extreams of the *Nothæ* were *Cartilaginous*; and the *Ribs* were articulated to the body of the *Vertebræ.* 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 *Vertebræ.*

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 *Alæ 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 *Vertebræ* of the *Neck* short as in the *Ape-kind*, and flat before, not round; and their *Spines*, not *bifide*, as in *Man*.
23. In the first *Vertebra* of the *Neck* there was no *Spine*.
24. In an *Ape* the Tenth *Vertebra* of the *Back*; in a *Man* the Twelfth; in the *Pygmie* the Thirteenth *Vertebra*, *infra suprave suscipitur*.

25. The

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 Clavicularum* 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 Radij 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 *Mammæ* 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 *Frænum*; no pendulous *Scrotum* here; the *Thighs* a little divaricated; the

Legs

Legs long and with *Calves*; the *Foot* like a *Hand*, having long *Toes*, and the *Great Toe* placed at a distance from the others, like a *Thumb*; the *Feet*, *Hands*, *Face*, *Ears*, and *Penis* without *Hair*; and all the 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 *Claviculæ*.
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 *Humane* Bodies.
m. m. The Internal Protuberances of the *Os Humeri*.
n. The *Radius* of the left Arm made bare.
o. The *Umbilicus*, or *Navil*.
p. The *Linea Alba*.
q. q. The Tendons of the Oblique Muscles, call'd *Linea Semilunaris*.
r. r. The

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*.
u. The *Great Trochanter*.
w. The *Penis*.
x. x. The two *Patellæ*.
y. y. The internal and lower *Appendix* of the *Os Femoris*.
z. z. The *Tibia*.
N° 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 Claviculæ*, which Muscle is not in Man, but in the *Pygmie* and *Apes*.
13. Part of the *Complexus Capitis*.
14. Part of the *Cucularis*.
15. 15. *Deltoides*.
15. 16. The *Biceps*.
17. The thin Tendinous Expansion of the *Biceps*, which involves the *Muscles* of the *Cubit*, as in Man.
18. Part of the *Brachæus 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 *Pectinæus.*
48. The *Gracilis.*
49. 49. The *Tibialis Anticus.*
50. Part of the *Gasterocnemius.*
51. Parts of the *Peronei.*
52. The *Extensor Pollicis longus.*
53. The *Extensor Pollicis brevis*, which differ'd in this *Animal*, from that in Man.
54. The Tendons of the *Extensor Communis digitorum*, as they pass between the *Interossij.*
55. The *Abductor minimi digiti.*
56. The *Pronator Radij Quadratus.*
57. Part of the *Supinator Radij brevis*; at it's Insertion to the *Radius.*

Figure the Fourth

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

a. 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

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 *Ossa Ilium.*

n. The *Os Coccygis.*

o. The *Great Trochanter.*

p. The Trunk of the Great *Crural Nerve.*

q. q. The *Ossa Ischij.*

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

s. s. The *Os Calcis.*

t. t. The *Malleolus Internus.*

u. The *Malleolus externus.*

w. w. The *Great Toe.*

x. x. The four *little Toes.*

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

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

2. Part of the *Splenius.*

3. Part of the *Mastoideus.*

4. Part of the *Complexus.*

5. Part of the *Levator Scapulæ.*

6. *Rhomboides.*

7. Part of the *Serratus superior posticus.*

8. *Supraspinatus.*

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 it's Original and hanging down.

14. The *Biceps Externus seu Gemellus.*

15. The *Anchonæus.*

16. Part of the *Brachæus 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 *Glutæus maximus* on the left side *in situ*, on the right freed from its Origin, and left at it's Insertion.
34. The *Glutæus 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. THE *Os Frontis*.
2. The *Os Bregmatis*.
3. Part of the *Os Occipitis*.
4. *Os Temporale*, *seu Squammosum*.
5. *Os Jugale*, *seu Zygomaticum*.
6. The first Bone of the *Upper Jaw*.
7. The *Os Lachrymale*.

8. The

8. The *Os Narium.*
9. The fourth Bone of the *Upper Jaw.*
10. The upper part of the *Os Sphænoides.*
11. The *lower Jaw.*
a. The *Processus Condyloides* 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 Scapulæ.*
14. 14. The Internal parts of the *Scapula.*
l. l. The *Processus Chorocoides Scapulæ.*
15. 15. The *Os Humeri.*
†. †. A *Sinus* for receiving the External Tendon of the head of the *Biceps.*
m. m. A *Sinus* for receiving the Prominence (*n.n.*) of the *Ulna* upon bending the *Arm.*
16. 16. The *Ulna.*
o. Part of the *Olecranon* of the *Ulna* of the left *Arm.*
17. 17. The *Radius.*
p. A Prominence of the *Radius*, to which the internal great Tendon of the *Musculus Biceps* is inserted.
18. 18. The Bones of the *Carpus*, which in a great measure were *Cartilaginous.*
19. 19. The Bones of the *Metacarpus.*
20. 20. The Bones of the *Thumb.*
21. 21. The Bones of the *Fingers.*
22. 22. The *Sternum* or *Os Pectoris.*
23. The *Cartilago Ensiformis.*
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. The Thirteen *Ribs* of each side.
24. The *Vertebræ* of the *Back.*
25. The *Vertebræ* of the *Loins.*
q. The *Transverse Processes* of the *Vertebræ* of the *Loins.*
r. The *Foramina* for the passage of the Nerves.
26. The *Os Sacrum.*
27. The *Os Coccygis.*
28. 28. The *Os Ilium.*
29. The *Os Pubis.*
30. The *Os Ischij.*
s. s. The *Cartilaginous* Conjunction of the *Os Ilium* with the *Os Pubis* and *Ischij* at the *Acetabulum.*

t. t. The

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 *Ossa Cuneiformia minora*.
40. 40. The *Ossa Metatarsi*.
41. 41. The *Ossa Digitorum*.
42. 42. The Bones of the *Great Toe*.
y. The *Malleolus externus*.
z. The *Malleolus internus*.
**** Signifie, that those Parts were *Cartilaginous*.

The 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

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 *Ileon* 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. THE back part of the *Bladder* of *Urine*, the greatest part of the *Bladder* being cut off.

B. The *Penis.*

C. C. The two *Ureters.*

D. D. The *Vasa Deferentia.*

E. E. The *Vesiculæ Seminales.*

F. The *Glandulæ Prostatæ*, or *Corpus Glandosum.*

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

The Eighth Figure

Exhibits part of the *Musculus Latissimus Dorsi* dissected.

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

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

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

The ninth Figure

Represents the *Urinary Parts* and *Organs* of *Generation*.

A. THE left *Kidney* entire.

a. 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 *Papillæ*, 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 *Glandulæ Renales*.

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

d. The *Cæliac Arterie*.

δ. 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

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 Deferentia.*

O. O. The *Vesiculæ 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. THE fore-part of the *Os Hyoides.*

a. a. Its two ends, that are connected to the two *Superior* long *Processes* of the *Cartilago Scutiformis.*

B. The *Epiglottis.*

C. The *Cartilago Scutiformis.*

b. The Prominent part of the *Annulary Cartilage.*

D. D. The *Musculi Hyothyroidei.*

E. E. The *Musculi Sternothyroidei.*

c. c. The *Musculi Cricothyroidei.*

F. The *Arteria Aspera*, or *Wind-pipe.*

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

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. THAT part contained in the *Ventricle.*

B. Three Impressions, formed by the *Semilunary Valves.*

C. That part, that lay in the *Aorta.*

D. That part that passed into the descending Trunk of the *Aorta.*

E. Those *Ramuli* of it that lay in the ascendent Branches of the *Aorta.*

The twelfth Figure

The *Polypus* found in the right *Ventricle* of the *Heart.*

A. THAT part contained in the *Ventricle.*

B. The Impressions made by the *Valvulæ sigmoides.*

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

The thirteenth Figure

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

A. A. THE 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*,

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

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

e. e. The *Carotid Arteries.*

f. f. The *Vertebral Arteries.*

g. The *Cervical Arterie.*

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

j. A small *Arterie* descending down the *Spinal Marrow.*

k. The *Infundibulum.*

l. l. The *Glandulæ duæ 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 *Striæ* as they appear in this Section in the *Corpora Striata* in the lower part of the *Brain.*

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

H. H. The *Plexus Choroides.*

J. J. The *Thalami Nervorum Opticorum.*

j. The *Plexus Choroides* continued.

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

k. The *Foramen anterius* that leads to the Cavity under the *Protuberantiæ orbiculares.*

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 *Protuberantiæ orbiculares.*

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

The fifteenth Figure

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

The 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.*

FINIS.

Fig: 1.

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

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

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

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FINIS.


Fig: 1.

Ferania in Septria; some wide they fight with Canes, but Menecles

FINIS.


Fig: 2:

FINIS.


Fig: 2:
M. Vander Gucht Scul.

Ceramia in Septria; some wide they fight with Canes, but Monecles

Fig: 3.

Fig: 3.

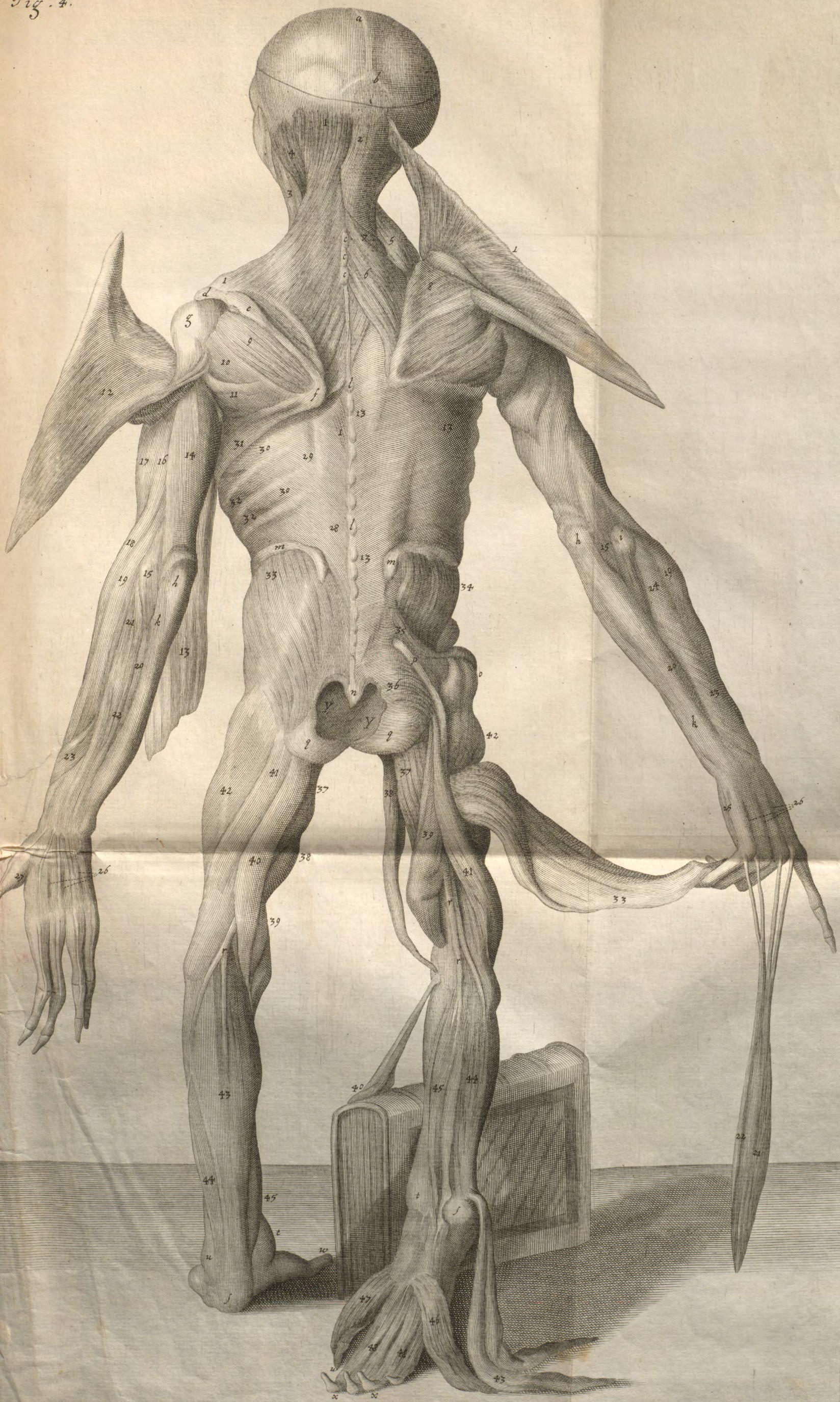
M. Vander Gucht Sud

Drama in Sophia; some wide day light with Oranges, but Menecles

Fig: 4.

Drama in Sophia; some wide day light with Oranges, but Menecles

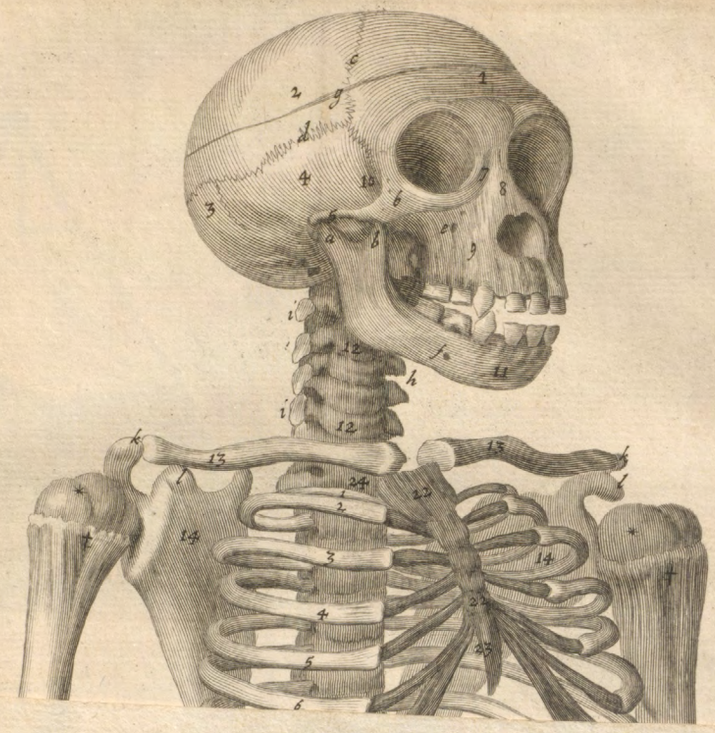
Fig: 4.



M. Vander Gucht Scul:

Drama in Ophelia; some wide they fight with Hamlet, but Merecles

Fig: 5.



Drama in Ophelia; some wide they fight with Hamlet, but Merecles

Fig: 5.

M. van der Gucht Scul.

Fig: 6.

Fig: 6.

Fig: 7.

Fig: 8.

M. Vander Gucht Scul: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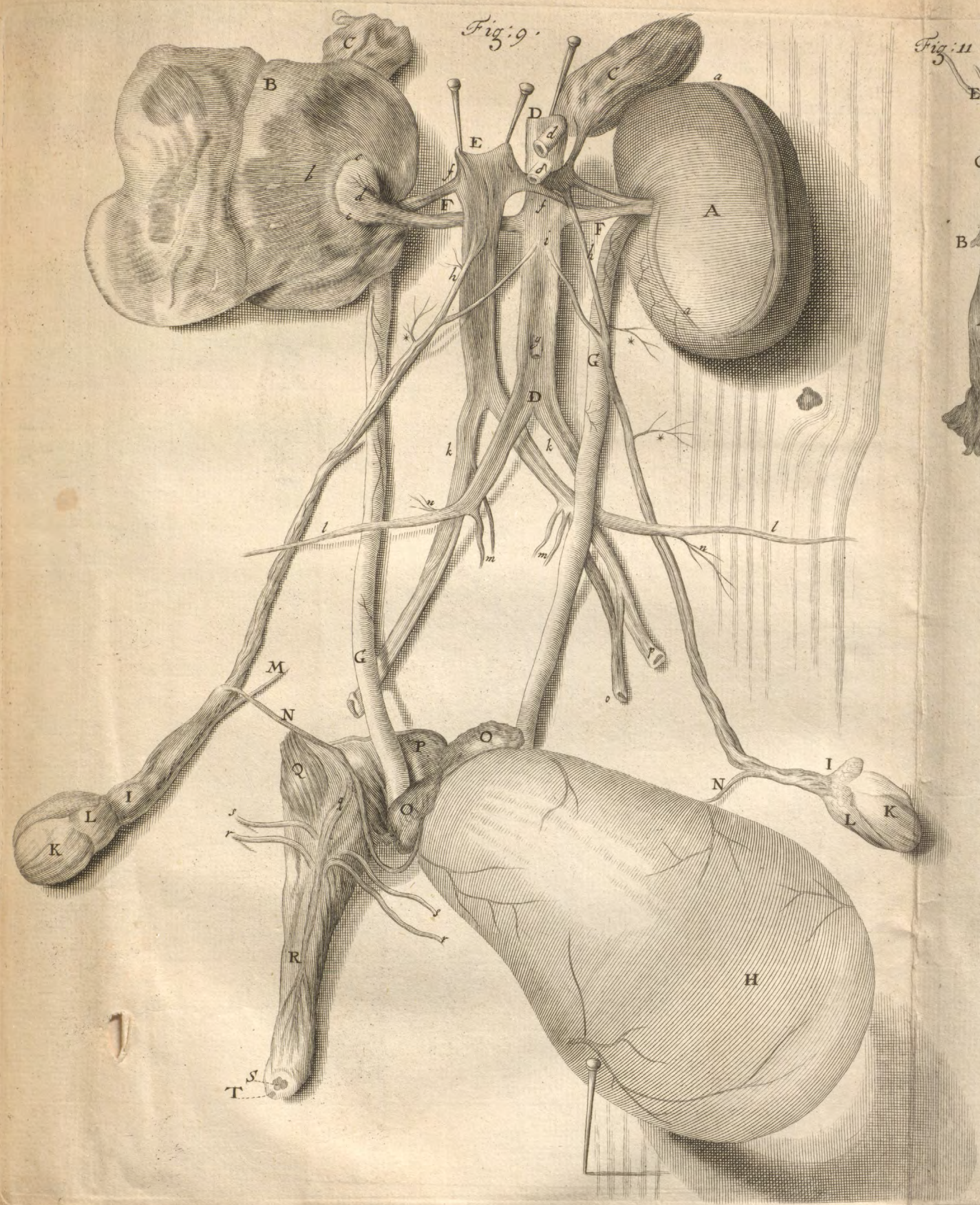
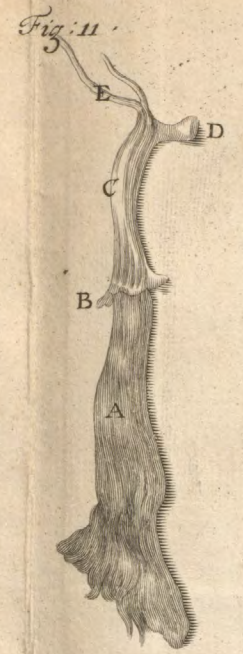
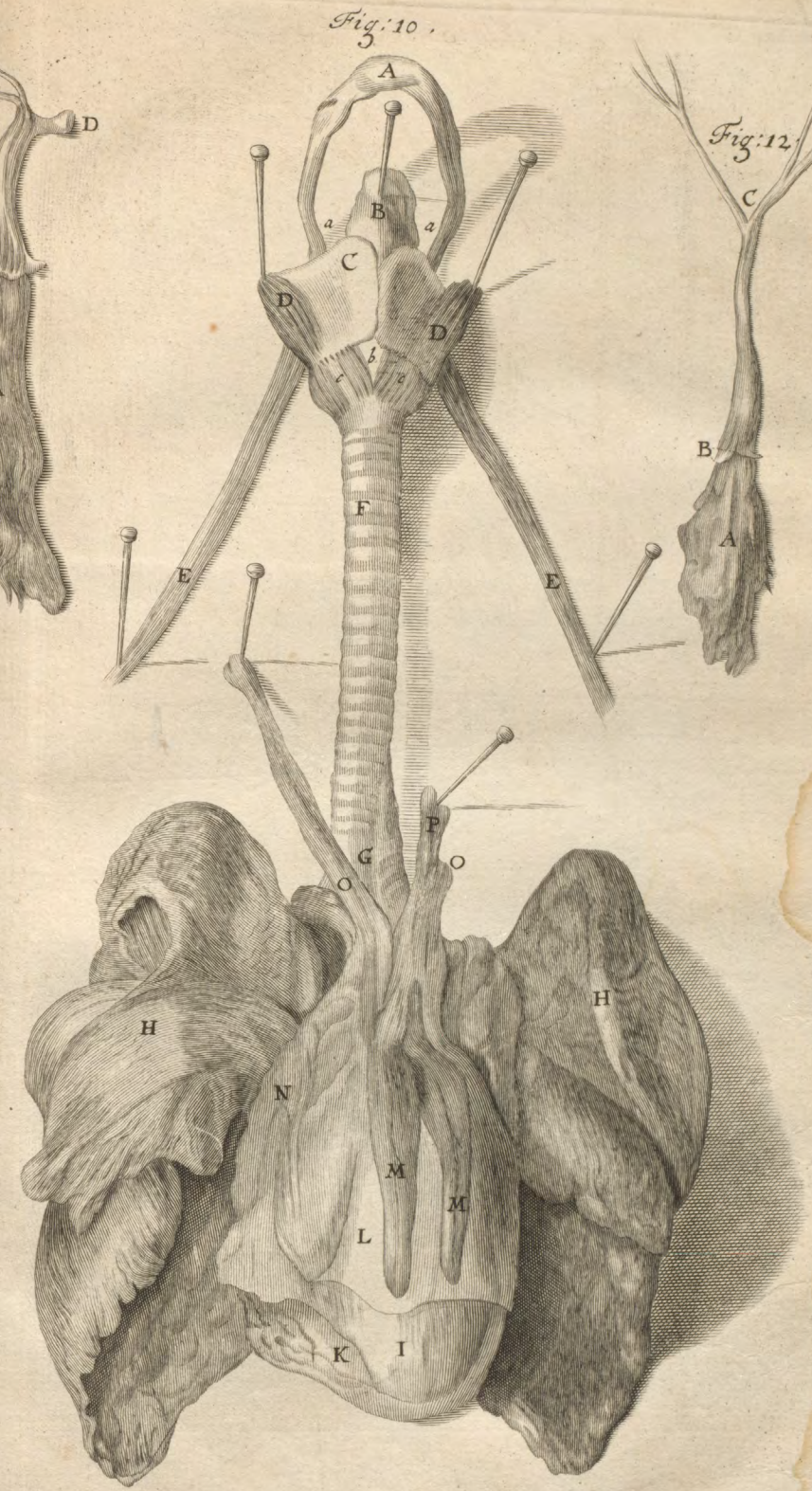






M. Vander Gucht Scul:

Fig. 13

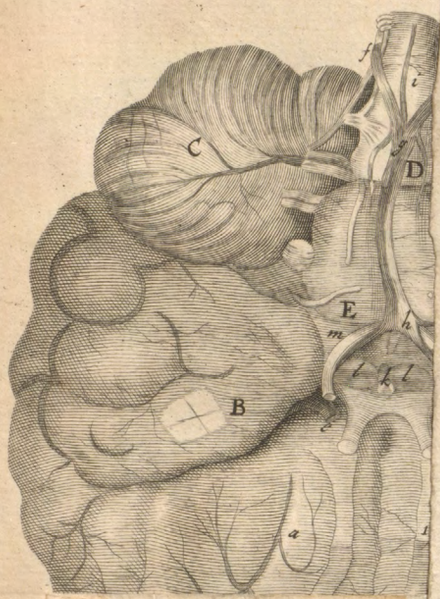
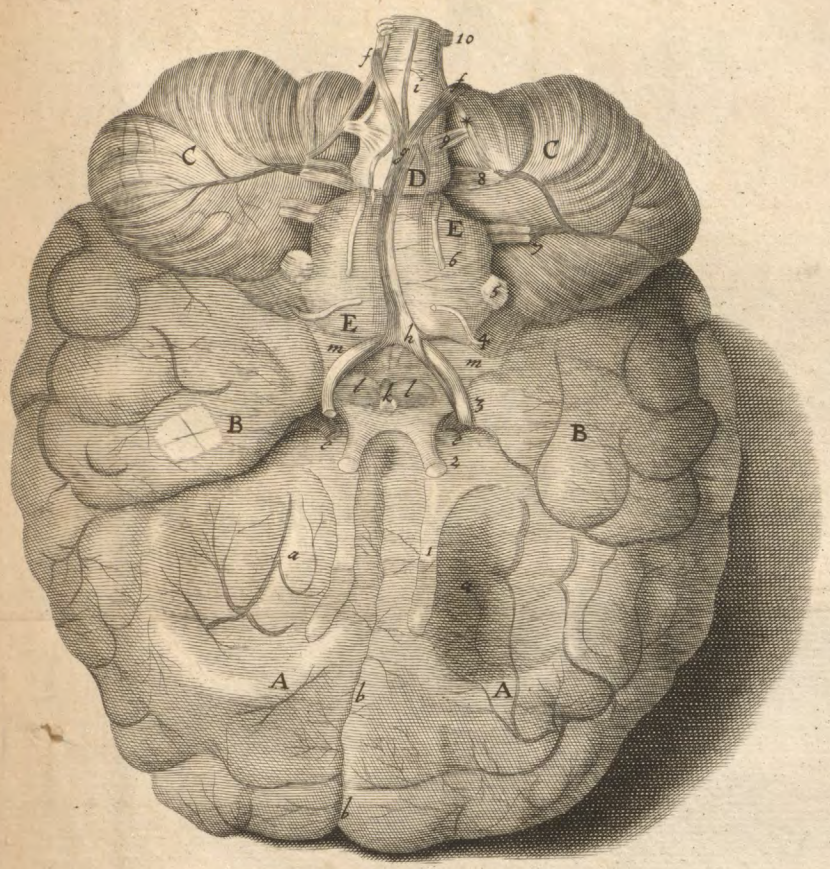


Fig: 13.



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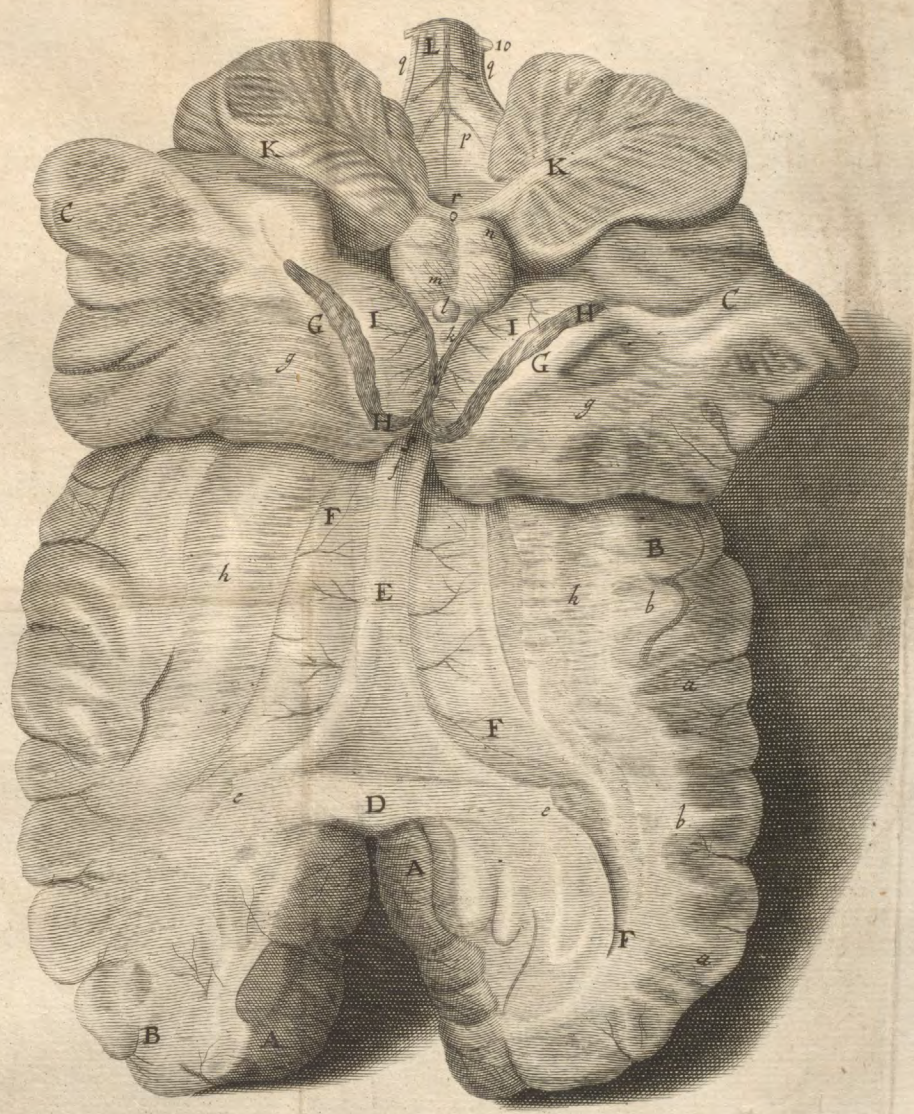

Fig: 16

Fig: 17

Fig: 15

nder Gucht Soul:

A PHILOLOGICAL ESSAY

Concerning the

PYGMIES, THE CYNOCEPHALI, THE SATYRS and SPHINGES OF THE ANCIENTS,

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

By *Edward Tyson* M. D.

A Philological Essay Concerning the PYGMIES OF THE ANCIENTS.

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 Atchievements, believing that there were never any such Creatures in Nature.

This Opinion had so fully obtained with me, that I never thought it worth the Enquiry, how they came to invent such Extravagant Stories: Nor should I now, but upon the Occasion of Dissecting this *Animal:* For observing that 'tis call'd even to this day in the *Indian* or *Malabar* Language, *Orang-Outang*, *i.e.* a *Man* of the *Woods*, or *Wild-men*; and being brought from *Africa*, that part of the World, where the *Pygmies* are 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 uselefs, 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.

Ἅι τ' ἐπεὶ ὖν χειμῶνα φύγον, καὶ ἀθέσφατον ὄμβρον
Κλαγγῇ ταί γε πέτονται ἐπ' ὠκεανοῖο ῥοάων
Ἀνδράσι πυγμαίοισι φόνον καὶ κῆρα φέρουσαι. i. e.

Quæ simul ac fugere Imbres, 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
Ibant, sublato Campum clamore replentes:
Non secus ac cuneata Gruum sublime volantum
Agmina, dum fugiunt Imbres, ac frigora Brumæ,
Per Cœlum matutino clangore feruntur,
Oceanumque petunt, mortem exitiumque cruentum
Irrita Pigmæis moturis arma ferentes.

By ἀνδράσι 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*, ὃ γὰρ καθ' ἄγνοιαν τῆς τοπικῶν λέγεται, ἀλλ' ἡδονῆς καὶ τέρψεως χάριν, That he said it, not thro' Ignorance, but to please and delight: Or, as in another place he expresses himself (*d*), ὃ γὰρ καθ' ἄγνοιαν τῆς ἱστορίας ὑπολαμβάνον γένεσθαι τοῦτο, ἀλλὰ τραγῳδίας χάριν. *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 *Pygmæan Men*, or the *Cranes* and *Apes*, which from their Stature he calls *Pygmies*, and from their shape *Men*; provided that when the *Cranes* go to engage, they make a mighty terrible noise, and clang enough to fright these little *Wights* their mortal Enemies. To have called them only *Apes*, had been

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

flat and low, and lessened the grandieur of the Battle. But this *Periphrasis* of them, ἄνδρες 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*, ἐνεκάινισαν ἐκ τοῦ Ὁμηρικοῦ τῶν Πυγμαίων γεραναμαχίαν τριακοσιάμεις εἰπόντες, 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 *Betrachomyomachia*, '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 interiùs Pygmæi, 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 justifie *all* that they say, I could rest satisfied in great part of their Relation: For *Pliny* (h) tells us, *Veris tempore universo*

(e) *Strabo Geograph.* lib. 2. p. m. 48. (f) *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) *Plinij Hist. Nat.* lib. 7. cap. 2. p. m. 13

agmine

agmine ad mare descendere, & Ova, Pullosque earum Alitum consumere: That in the Spring-time the whole drove of the *Pygmies* go down to the Sea side, to devour the *Cranes* Eggs and their young Ones. So likewise *Onesicritus* (i), Πρὸς δὲ τὰς τριακοντάμυας πόλεμον ἐστὶ ταῖς Γερανοῖς (ὃν καὶ Ὅμηρον δηλοῦν) καὶ τοῖς Πέρδιξιν, ἃς χηνομεγέθεις εἶναι· τούτους δ' ἀκλέγειν αὐτοὺς τὰ ὠά, καὶ φθείρειν· ἐκεῖ γὰρ ὠοτοκεῖν τὰς Γεράνους· διόπερ μηδαμοῦ μηδ' ὠὰ εὑρίσκεσθαι Γεράνων, μήτ' ἐν νεότητι· 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 *Pygmæan* blood. And this may well enough, in a *Poet*'s phancy, be magnified, and represented as a dreadful War; and no doubt of it, were one a *Spectator* of it, 'twould be diverting enough.

——Si videas hoc
Gentibus in nostris, risu quatiere: sed illic,
Quanquam eadem assiduè 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 *Pygmæomachia* 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. (k) *Juvenal. Satyr.* 13. *vers.* 170. (l) *Aristotle. Hist. Animal.* lib. 8. cap. 15. Edit. Scalig.

'Tis not therefore the *Poet* that is to be blamed, tho' they would father it all on him; but the fabulous *Historians* in after Ages, who have so odly dreſt up this Story by their fantastical Inventions, that there is no knowing the truth, till one hath pull'd off those Masks and Visages, wherewith they have disguised it. For tho' I can believe *Homer*, that there is a fight between the *Cranes* and *Pygmies*, yet I think I am no ways obliged to imagine, that when the *Pygmies* go to these Campaigns to fight the *Cranes*, that they ride upon *Partridges*, as *Athenæus* from *Basilis* an *Indian Historian* tells us; for, saith he (m), Βάσιλις ἐν τῷ δευτέρῳ τῶν Ἰνδικῶν, οἱ μικροί, φησὶν, ἄνδρες οἱ ταῖς Γεράνοις διαπολεμοῦντες Πέρδιξιν ὀχήμασι χρῶνται. For presently afterwards he tells us from *Menecles*, that the *Pygmies* not only fight the *Cranes*, but the *Partridges* too, Μενεκλῆς ἐν πρώτῃ τῆς συναγωγῆς οἱ πυγμαῖοι, φησι, τοῖς πέρδιξι, καὶ ταῖς Γεράνοις πολέμουσι. This I could more readily agree to, because *Onesicritus*, as I have quoted him already confirms it; and gives us the same reason for this, as for fighting the *Cranes*, because they rob their Nests. But whether these *Partridges* are as big as *Geese*, I leave as a *Quære*.

Megasthenes methinks in *Pliny* mounts the *Pygmies* for this Expedition much better, for he sets them not on a *Pegasus* or *Partridges*, but on *Rams* and *Goats*: *Fama est* (saith *Pliny* (n)) *insedentes Arietum Caprarumque dorsis, armatis sagittis, veris tempore universo agmine ad mare descendere.* And *Onesicritus* in *Strabo* tells us, That a *Crane* has been often observed to fly from those parts with a brass Sword fixt in him, πλειστάκις δ' ἐκπίπτειν γέρανον χαλκῷ ἔχουσαν ἀκίδα ἀπὸ τῶν ἐκεῖθεν πλησμάτων (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 ἀκίδα 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), Ῥᾴδιον δ' ἄν τις Ἡσιόδῳ, καὶ Ὁμήρῳ πιστεύσειεν ἡρωολογοῦσι, καὶ τοῖς τραγικοῖς ποιηταῖς, ἢ Κλησίᾳ τε καὶ Ἡροδότῳ, καὶ Ἑλλανίκῳ, καὶ ἄλλοις τοιούτοις· i. e. *That one may sooner believe* Hesiod, *and* Homer, *and the* Tragick Poets *speaking of their*

(m) *Athenæi Diepnosoph.* lib. p. 9. m. 390. (n) *Plinij 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); Ἅπαντες μὲν τοίνυν οἱ περὶ τὴν Ἰνδικὴν γεγράφαντες ὡς ὅτι τὸ πολὺ ψευδολόγοι γεγόνασι, καθ' ὑπερβολὴν δὲ Δαίμαχος· τὰ δ' ὕστερα λέγει Μεγασθένης, Ὀνησίκριτός τε καὶ Νέαρχος, καὶ ἄλλοι τοιοῦτοι· i. e. *All who have wrote of* India, *for the most part, are fabulous, but in the highest degree* Daimachus; *then* Megasthenes, Onesicritus, *and* Nearchus, *and such like.* And as if it had been their greatest Ambition to excel herein, *Strabo* (s) brings in *Theopompus*, as bragging, Ὅτι καὶ μύθους ἐν ταῖς Ἱστορίαις ἐρεῖ κρείττον, ἢ ὡς Ἡρόδοτος, καὶ Κτησίας, καὶ Ἑλλάνικος, καὶ οἱ τὰ Ἰνδικὰ συγγράψαντες· *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, Ὅλως δὲ τὰ μὲν ἄγρια ἀγριώτερα ἐν τῇ Ἀσίᾳ, ἀνδρειότερα δὲ πάντα τὰ ἐν τῇ Εὐρώπῃ, πολυμορφότατα δὲ τὰ ἐν τῇ Λιβύῃ· καὶ λέγεται δέ τις παροιμία, ὅτι ἀεὶ φέρει τὴ Λιβύη καινόν· 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, minimè 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. 741.

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:

Ὅτι ἐν μέσῃ τῇ Ἰνδικῇ ἄνθρωποι εἰσι μέλανες, καὶ καλοῦνται πυγμαῖοι, τοῖς ἄλλοις ὁμόγλωσσοι Ἰνδοῖς· μικροὶ δὲ εἰσι λίαν· οἱ μακρόταλοι αὐτῶν πηχέων δύο, οἱ δὲ πλεῖστοι, ἑνὸς ἡμίσει πήχεως, κόμην δὲ ἔχουσι μακροτάτην, μέχρι καὶ ὀπίσω τὰ γόνατα, καὶ ἔτι καὶ πλείονα, καὶ πώγωνα μέγιστον πάντων ἀνθρώπων· ἐπειδὰν δὲ τὸν πώγωνα μέγα φύσωσιν, ἐκέτι ἀμφιέννυνται ἐσθῆτα ἱμάτιον: ἀλλὰ τὰς τρίχας, τὰς μὲν ἐκ τῆς κεφαλῆς, ὄπισθεν καθίενται πολὺ κάτω τῶν γονάτων· τὰς δὲ ἐκ τοῦ πώγωνος, ἔμπροσθεν μέχρι ποδῶν ἑλκομένας. Ἔπειτα περιπυκασάμενοι τὰς τρίχας περὶ ἅπαν τὸ σῶμα, ζώννυνται, χρώμενοι αὐταῖς ἀντὶ ἱμαλίου. αἰδοῖον δὲ μέγα ἔχουσιν, ὥστε φαύειν τῶν σφυρῶν αὐτῶν, καὶ παχύ. αὐτοί τε σιμοί τε καὶ αἰσχροί. τὰ δὲ πρόβατα αὐτῶν, ὡς ἄρνες. καὶ αἱ βόες καὶ οἱ ὄνοι, σχεδὸν ὅσον κριοί. καὶ οἱ ἵπποι αὐτῶν καὶ οἱ ἡμίονοι, καὶ τὰ ἄλλα πάντα ζῶα, οὐδὲν μείζω κριῶν. ἔπονται δὲ τῷ βασιλεῖ τῶν Ἰνδῶν, τούτων τῶν πυγμαίων ἄνδρες τριχίλιοι. σφόδρα γὰρ εἰσι τοξόται· δικαιόταται δέ εἰσι καὶ νόμοισι χρῶνται ὥσπερ καὶ οἱ Ἰνδοί. λαγώς τε καὶ ἀλώπεκας θηρεύουσιν, οὐ τοῖς κυσὶν, ἀλλὰ κόραξι καὶ ἰκτῖσι καὶ κορώναις καὶ ἀετοῖς.

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

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

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

are

'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 rea-'ches to the Ancle, 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 πάρηβον, that will attract Lambs and Birds, as the Loadstone does filings of Steel; and a great many other Wonders he tells us: all which are copied from him by *Ælian*, *Pliny*, *Solinus*, *Mela*, *Philostratus* and others. And *Photius* concludes *Ctesias*'s Account of *India* with this passage; Ταῦτα γράφων καὶ μυθολογῶν Κτησίας. λέγει τ' ἀληθέςαλα γράφειν· ἐπαίνων ὥς τὰ μὲν αὐτὸς ἰδὼν γράφει, τὰ δ' παρ' αὐτῷ μαθὼν τῷ εἰδότων. πολλὰ δ' τέτων καὶ ἄλλα θαυμασιώτερα παραλιπεῖν, διὰ τὸ μὴ δόξαι τοῖς μὴ ταῦτα θεασαμένοις ἄπιστα συγγράφειν· 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.

him-

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*, Ἃ μήτε αὐτὸς εἶδε, μήτε ἄλλος εἰπόντος ἤκουσεν, *What he neither saw himself, nor ever heard from any Body else.* And *Aristotle* tells us plainly, he is not fit to be believed: Ἐν ᾗ τῇ Ἰνδικῇ ὥς φησι Κτησίας, ἐκ ὧν ἀξιόπιστος (*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 inauditæ, incredulæ, Scriptores veteres non parvæ authoritatis*, Aristeas Proconnesius, & Isagonus, & Nicænsis, & Ctesias, & Onesicritus, & Polystephanus, & Hegesias. Not that I think all that *Ctesias* has wrote is fabulous; For tho' I cannot believe his *speaking Pygmies*, yet what he writes of the *Bird* he calls Βίττακος, 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 *Æthiopia*, gives of his Travels. I will transcribe the Passage, as I find it in *Photius* (*e*), and 'tis as follows:

Ὅτι ἀπὸ τῆς Φαρσὰν πλέοντι τῷ Νοννόσῳ, ὅπῃ τὴν ἐσχάτην τῶν νήσων καλουμένην ὅτι τοῖον δέ τι συμβέβηκε, θαῦμα καὶ ἀκοῦσαι. ἐνέτυχε γάρ τισι μορφὴν μὲν καὶ ἰδέαν ἔχουσιν ἀνθρωπίνῃ, βραχυτάτοις δὲ τὸ μέγεθος, καὶ μέλασι τὴν χρόαν. ἕπονται δὲ τεῖχος δεδασυσμένοις διὰ παντὸς τοῦ σώματος. εἵπονται δὲ τοῖς ἀδελφοῖς καὶ γυναῖκες παραπλήσιαι καὶ παιδάρια ἔτι βραχύτερα, τῶν παρ' αὐτοῖς ἀνδρῶν. γυμνοὶ δὲ ἦσαν ἅπαντες· πλὴν δέρματι τινὶ μικρῷ τὴν αἰδῶ περιεκάλυπτον, οἱ προσεδεδηκότες ὁμοίως ἄνδρες τε καὶ γυναῖκες. ἄγριον δὲ οὐδὲν ἐπεδείκνυτο οὐδὲ ἀνήμερον· ἀλλὰ καὶ φωνὴν εἶχον μὲν ἀνθρωπίνῃ ἄγνωστον δὲ πάντασι τὴν διάλεκτον

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

(a) *Lucian* lib. 1. *de 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.* codi. 3. p. m. 7.

διάλεκτον τοῖς τὲ περοίκοις ἅπασι, καὶ πολλῷ πλέον τοῖς περὶ τ᾽ Νοννοσσον, διέζων ἢ ὀκ θαλαττίων ὀστρέων, καὶ ἰχθύων, τ᾽ ἀπὸ τ᾽ θαλάσης εἰς τ᾽ νῆσον ἀπορριπτομένων· θάρσος ἢ εἶχον ὀδὲν. ἀλλὰ καὶ ὁρῶντες τὸς καθ᾽ ἡμᾶς ἀνθρώπος ὑπέπτησαν, ὥσπερ ἡμεῖς τὰ μείσω τῷ θηρίων.

è 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.

Φωνὴ εἶχον μὲν ἀνθρωπίνὴ 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 nutus motusque Membrorum est*; and that they had no more a Speech, than *Ctesias* his *Cynocephali* which could only bark, as the same *Pliny* (*g*) remarks; where he saith, *In multis autem Montibus Genus Hominum Capitibus Caninis, ferarum pellibus velari, pro voce latratum edere, unguibus armatum venatu & Aucupio vesci, horum supra Centum viginti Millia fuisse prodente se Ctesias scribit.* But in *Photius* I find, that *Ctesias's Cynocephali* did speak the *Indian Language* as well as the *Pygmies*. Those therefore in *Nonnosus* since they did not speak the *Indian*, I doubt, spoke no *Language* at all; or at least, no more than other *Brutes* do.

Ctesias I find is the only Author that ever understood what Language 'twas that the *Pygmies* spake: For *Herodotus* (*h*) owns that they use a sort of Tongue like to no other, but screech like *Bats*. He saith, Οἱ Γαραμάντες ἔτοι τὸς τρωγλοδύτας Αἰθίοπας θηρεύουσι τοῖσι τελείωποισι. Οἱ γὰ

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

Τρωγλοδύται αἰθίοπες πόδας, τάχιστοι ἀνθρώπων πάντων εἰσὶ, τῶν ἡμεῖς περὶ λόγους ἀποφερομένους ἀκούομεν. Σιτέονται δὲ οἱ Τρωγλοδύται ὄφις, καὶ Σαύρους, καὶ τὰ τοιαῦτα τῶν Ἑρπετῶν. Γλῶσσαν δὲ ὐδεμιῇ ἄλλῃ παρομοίῳ νενομίκασι, ἀλλὰ τρίζουσι καθάπερ αἱ νυκτερίδες· 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 δ' εἰσὶ τὸν βίον. And so *Philostratus* (*k*), Τοὺς δὲ πυγμαίους οἰκεῖν μὲν ὑπογείους. 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 divertisement.* And *Gassendus* in the Life of *Peiresky*, tells us they commonly hunt them too in *Angola* in *Africa*, as I have already mentioned. So that very likely *Herodotus*'s *Troglodyte Æthiopians* may be no other than our *Orang-Outang* or *wild Man*. And the rather, because I fancy their Language is much the same: for an *Ape* will chatter, and make a noise like a *Bat*, as his *Troglodytes* did: And they undergo to this day the same Fate of being hunted, as formerly the *Troglodytes* used to be by the *Garamantes*.

Whether those ἄνδρας μικροὺς μείζων ἐλάσσονας 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, ἐν τῇ πάντας εἶναι τοῖσι ἄγουσι τὸ μέγεθος ἴσους, 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 frighted at the sight of them, they ran home, and the *Nasamones* followed them.

I do not find therefore any good Authority, unless you will reckon *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. Tyanæi*, 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 awkardly, that it is as difficult almoſt to underſtand his Language as his *Apes*; if the Reader has a mind to attempt it, he will find it in the Margin (*p*).

Had *Albertus* only 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* (ſaith he) *dari negemus, Grues etiam cum iis Bellum gerere, ut fabulantur, negabimus, & tam pertinaciter id negabimus, ut ne jurantibus credemus.*

I find a great many very Learned Men are of this Opinion: And in the firſt place, *Strabo* (*r*) is very poſitive; Ἑωρακὼς μὲν γὰρ οὐδεὶς ἐξηγεῖται τῆς πίστεως ἀξίων 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* (ſaith he) *Antiquorum figmenta & meræ Nugæ, ſi exſtarent, 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* (ſaith he) *non deſunt, qui eandem de Pygmæis lepidam fabellam renovent; ut qui etiam è Sacris Literis, ſi Deo placet, fidem illis conentur aſtruere. Legi etiam Bergei cujuſdam Galli Scripta, qui ſe vidiſſe diceret. At non ego credulus illi, illi inquam Omnium Bipedum mendaciſſimo.* I ſhall add one Authority more, and that is of

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

(p) *Si qui Homines ſunt Silveſtres, ſicut Pygmeus, non ſecundum unam rationem nobiſcum dicti ſunt Homines, ſed aliquod habent Hominis in quadam deliberatione & Loquela*, &c. A little after adds, *Voces quædam (ſc. Animalia) formant ad diverſos conceptus quos habent, ſicut Homo & 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 Animæ cadentia & mota ad Naturæ Inſtinctum, ſicut Pygmeus, qui non, ſequitur rationem Loquelæ ſed Naturæ Inſtinctum; Homo autem non ſuccumbit 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 Ariſt. Hiſt. Animal.* lib. 8. §. 126. p. m. 914. (t) *Iſaac Cauſabon 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 πύγων dicti à statura, 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 minùs hoc statuam, tum Authoritate primùm Doctissimi* Strabonis 1. Geograph. *coactus sum, tum potissimùm nunc moveor, quod nostro tempore, quo nulla Mundi pars est, quam Nautarum Industria non perlustrarit, nihil tamen unquam simile aut visum est, aut auditum. Accedit quod* Franciscus Alvarez *Lusitanus, qui ea ipsa loca peragravit, circa quæ* Aristoteles *Pygmæos esse scribit, nullibi tamen tam parvam Gentem à se conspectam tradidit, sed Populum esse Mediocris staturæ, &* Æthiopes *tradit.*

I think my self therefore here obliged to make out, that there were such Creatures as *Pygmies*, before I determine what they were, since the very being of them is called in question, and utterly denied by so great Men, and by others too that might be here produced. Now in the doing this, *Aristotle*'s Assertion of them is so very positive, that I think there needs not a greater or better Proof; and it is so remarkable a one, that I find the very Enemies to this Opinion at a loss, how to shift it 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*):

Μετὰ μὲν τὴν φθινοπωρινὴν Ἰσημερίαν, ἐκ τῆς Πόντου καὶ τῶν ψυχρῶν φεύγουσι τὴν ἐπιοῦσαν χειμῶνα· μετὰ δὲ τὴν ἐαρινὴν, ἐκ τῶν θερινῶν, εἰς τοὺς τόπους τοὺς ψυχροὺς, φοβούμενα τὰ καύματα· τὰ μὲν, καὶ ἐκ τῶν ἐγγὺς τόπων ποιούμενα τὰς μεταβολὰς, τὰ δὲ, καὶ ἐκ τῶν ἐσχάτων, ὡς εἰπεῖν, οἷς αἱ γέρανοι ποιοῦσι. Μεταβάλλουσι γὰρ ἐκ τῶν Σκυθικῶν εἰς τὰ ἕλη τὰ ἄνω τῆς Αἰγύπτου, ὅθεν ὁ Νεῖλος ῥεῖ. Ἔστι δὲ ὁ τόπος οὗτος περὶ οὗ οἱ πυγμαῖ-

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

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

οἱ καλοικεῖσιν· ἐ γὰρ ἔστι τοῦτο μῦθος, ἀλλ' ἔστι καὶ τῷ ἀληθειαν. Γένος μικρὸν μὲν, ὥσπερ λέγεται, καὶ αὐτοὶ καὶ οἱ ἵπποι· Τρωγλοδύται δ' εἰσὶ τὸν βίον.

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

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

We may here observe how positive the *Philosopher* is, that there are *Pygmies*; he tells us where they dwell, and that 'tis no Fable, but a Truth. But *Theodorus Gaza* has been unjust in translating him, by foisting in, *Quo in loco pugnare cum Pygmæis dicuntur*, whereas there is nothing in the Text that warrants it: As likewise, where he expresses the little Stature of the *Pygmies* and the Horses, there *Gaza* has rendered it, *Sed certè Genus tum Hominum, tum etiam Equorum pusillum.* *Aristotle* only saith, Γένος μικρὸν μὲν, ὥσπερ λέγεται, καὶ αὐτοὶ, καὶ οἱ ἵπποι. 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 *Ægypt*, 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 ætas, cum omnia nunc fermè orbis mirabilia innotuerint, declarat. Sed quod tantum Philosophum decepit, fuit Homeri Auctoritas non apud illum levis.*
(y) *Bocharti Hierozoic. S. de Animalib. S. Script. part. Posterior.* lib. 1. cap. 11. p. m. 76.

Translation

Translation of it, he leaves out indeed the *Cranes* fighting with the *Pygmies*, yet makes them *Men*, which *Aristotle* do's not; and by anti-placing, *ut aiunt*, he renders *Aristotle*'s Assertion more dubious; *Neque enim* (saith he in the Translation) *id est fabula, sed reverâ, ut aiunt, Genus ibi parvum est tam Hominum quàm Equorum.* *Julius Cæsar 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, ἐ γὰ ἔστι τοῦτο μῦθος, ἀλλ' ἔστι καὶ τῶ ἀλήθειαν, 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. Pygmeis)* Herodotus, *at Philosophus semper moderatus & prudens etiam addidit*, ὥσπερ λέγεται, is not to be allowed. Nor can I assent to Sir *Thomas Brown*'s (a) remark upon this place; *Where indeed* (saith 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 (saith 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 ὥσπερ 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 ἄνδρες, or ἄνθρωποι μικροί, or μέλανες; 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*, saith *Aristotle*, as 'tis that they are a Dwarfish Race of Men; that they speak the *Indian* Language; that they are excellent Archers; that they are very Just; and abundance of other Things that are fabulously reported of them; and because he thought them *Fables*, he does not take the least notice of them, but only saith, *This is no Fable, but a Truth, that about the Lakes of* Nile such *Animals*, as are called *Pygmies*, do live. And, as if he had foreseen, that the abundance of Fables that *Ctesias* (whom he saith 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

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, quàm 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 ὄφιες οἱ ὑπερμεγάθεες, καὶ οἱ λέοντες καὶ τοῦτοι εἰσὶ, καὶ οἱ ἐλέφαντές τε καὶ ἄρκτοι, καὶ ἀσπίδες τε καὶ ὄνοι οἱ τὰ κέρατα ἔχοντες· καὶ οἱ κυνοκέφαλοι (in the Margin 'tis ἀκέφαλοι) οἱ ἐν τοῖσι στήθεσι τοὺς ὀφθαλμοὺς ἔχοντες (ὡς δὴ λέγεται γε ὑπὸ Λιβύων) καὶ ἄγριοι ἄνδρες, καὶ γυναῖκες ἄγριαι· καὶ ἄλλα πλῆθος πολλὰ θηρία ἀκατάφευκτα: 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 ἄγριοι ἄνδρες, καὶ γυναῖκες ἄγριαι are only θηρία 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 *Æthiopia* and *Ægypt*, tells us (*d*), Βόσκουσι δὴ καὶ θηρία οἷα οὐχ ἑτέρωθι· καὶ ἀνθρώπους μέλανας, ὁ μὴ ἄλλαι ἤπειροι. Πυγμαίων τε ἐν αὐταῖς ἔθνη, καὶ ὑλακλύντων ἄλλο 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. 885. (c) *Herodot. Melpomene seu* lib. 4. p. m. 285. (d) *Philostratus in vita Apollon. Tyanei*, lib. 6. cap. 1. p. m. 258.

and

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. Ἄνδρες ἄγριοι, or *Orang-Outang*, is alike to me; and I am better pleased with *Homer*'s ἄνδρες πυγμαῖοι, than if he had called πίθηκοι. 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 Ἀμύκτηρες or Ἄρρινες, 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 Ἐνοτοκοῖται, whose Ears reach down to their Heels, on which they lye and sleep. The Ἄστομοι, 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 Μονόμμαλοι or Μονόφθαλμοι, 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 Στερνόφθαλμοι, that have Eyes in their Breasts. The Πάναι σφηνοκέφαλοι with Heads like Wedges. The Μακροκέφαλοι, with great Heads. The Ὑφοβόρεοι, who live a Thousand years. The ὠκύποδες, so swift, that they will out-run a Horse. The ὀπισθοδάκτυλοι, that go with their Heels forward, and their Toes backwards. The Μακροσκελεῖς, The Στεγανόποδες, The Μονοσκελεῖς, 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 Rhodigini Lection. Antiq.* lib. 17. cap. 13.

Now

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 *Ægypt* that was no bigger than a Partridge; yet what was to be admired, he was very Prudent, had a sweet clear Voice, and a generous Mind; and lived Twenty Years. So likewise a King of *Portugal* sent to a Duke of *Savoy*, when he married his Daughter to him, an *Æthiopian 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 *Æthiopia*, which being made *Eunuchs*, were to guard the Ladies of the *Seraglio*. And a great many such like Relations there are. But these being only *Dwarfs*, they must not be esteemed the *Pygmies* we are enquiring about, which are represented as a *Nation*, and the whole Race of them to be of the like stature. *Dari tamen integras Pumilionum Gentes, tam falsum est, quàm quod falsissimum*, saith *Harduin* (*m*).

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

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

than to *Brutes* or *Plants*. The Dimensions of them all, according to the *Climate*, may differ. If we consult the Original, *viz. Homer* that first mentioned the *Pygmies*, there are only these two *Characteristics* he gives of them. That they are 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 *Tract*. He has made it a little more formal indeed, by dividing it into *Chapters*; of which I will give you the *Titles*; and as I see occasion, some Remarks thereon: They will not be many, because I have prevented my self already. The *first Chapter* is, *De Homuncionibus & Pumilionibus seu Nanis à Pygmæis distinctis*. The *second Chapter*, *De Pygmæi nominibus & Etymologia*. The *third Chapter*, *Duplex esse Pygmæorum Genus; & primum Genus aliquando dari*. He means *Dwarfs*, that are no *Pygmies* at all. The *fourth Chapter* is, *Alterum Genus, nempe Gentem Pygmæorum esse, aut saltem aliquando fuisse Autoritatibus Humanis, fide tamen dignorum asseritur*. 'Tis as I find it printed; and no doubt an Error in the printing. The Authorities he gives, are, *Homer*, *Ctesias*, *Aristotle*, *Philostratus*, *Pliny*, *Juvenal*, *Oppian*, *Baptista Mantuan*, St. *Austin* and his *Scholiast*. *Ludovic. Vives*, *Jo. Laurentius Anania*, *Joh. Cassanius*, *Joh. Talentonius*, *Gellius*, *Pomp. Mela*, and *Olaus Magnus*. I have taken notice of most of them already, as I shall of St. *Austin* and *Ludovicus Vives* by and by. *Jo. Laurentius Anania* (p) *ex Mercatorum relatione tradit* (saith *Bartholine*) eos (*sc. Pygmæos*) *in Septentrionali Thraciæ Parte reperiri, (quæ Scythiæ est proxima) atque ibi cum Gruibus pugnare*. And *Joh. Cassanius* (q) (as he is here quoted) saith,

(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 suæ Geograph.* (q) *Joh. Cassanius libello de Gygantibus*, p. 73.

De

De Pygmæis fabulosa quidem esse omnia, quæ de iis narrari solent, aliquando existimavi. Verùm 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, *Constare arbitror* (saith *Talentonius*) (r) *debere concedi, Pygmæos non solùm olim fuisse, sed nunc etiam esse, & homines esse, nec parvitatem illis impedimento esse quo minùs 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 Saylors, in their Voyages, would have lighted on them. Tho' *Aristotle* is here quoted, yet he does not make them *Men*; So neither does *Anania:* And I must own, tho' *Talentonius* be of this Opinion, yet he takes notice of the faulty Translation of this Text of *Aristotle* by *Gaza:* and tho' the parvity or lowness of Stature, be no Impediment, because we have frequently seen such *Dwarf-Men*, yet we did never see a *Nation* of them: For then there would be no need of that *Talmudical* Precept which *Job. Ludolphus* (s) mentions, *Nanus ne ducat Nanam, ne fortè oriatur ex iis Digitalis* (in *Bechor.* fol. 45.)

I had almost forgotten *Olaus Magnus*, whom *Bartholine* mentions in the close of this Chapter, but lays no great stress upon his Authority, because he tells us, he is fabulous in a great many other Relations, and he writes but by hear-say, that the *Greenlanders* fight the *Cranes*; *Tandem* (saith *Bartholine*) *neque ideo Pygmæi sunt, si fortè sagittis & hastis, sicut alij homines, Grues conficiunt & occidunt.* This I think is great Partiality: For *Ctesias*, an Author whom upon all turns *Bartholine* makes use of as an Evidence, is very positive, that the *Pygmies* were excellent *Archers:* 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 Variar. & recondit. Rerum Thesaurus*, lib 3. cap. 21. p. m. 515. (s) *Job Ludolphi Comment. in Historiam Æthiopic.* p. m. 71.

and others extreamly little, he infers, *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 tantùm 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 fabulous. *Bartholine* concludes this *Chapter* thus: *Ulteriùs ut Probabilitatem fulciamus, addendum Sceleton Pygmæi, quod* Dresdæ *vidimus inter alia plurima, servatum in Arce sereniss.* Electoris Saxoniæ, *altitudine infra Cubitum, Ossium soliditate, proportioneque tum Capitis, tum aliorum; ut Embrionem, aut Artificiale quid Nemo rerum peritus suspicari possit. Addita insuper est Inscriptio* Veri Pygmæi. I hereupon looked into Dr. *Brown*'s Travels into those Parts, who has given us a large Catalogue of the Curiosities, the *Elector* of *Saxony* had at *Dresden*, but did not find amongst them this *Sceleton*; which, by the largeness of the Head, I suspect to be the *Sceleton* of an *Orang-Outang*, or our *wild Man*. But had he given us either a Figure of it, or a more particular Description, it had been a far greater Satisfaction.

The Title of *Bartholine*'s *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 indubiè 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 *Ægypt*; *Homer*'s *Scholiast* in the middle of *Ægypt*; *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 Japonem esse*; and adds, *has Autorum dissensiones facile fuerit conciliare; nec mirum diversas relationes à* Plinio *auditas.* For (saith he) as the *Tartars* often change their Seats, 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 Egg-shels. 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

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, Terræ 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 *Suessanus* (*w*) his Argument, that they want *Reason*, this he will not grant; but if they use it less, or more imperfectly than others (which yet, he saith, is not certain) by the same parity of Reason, *Children*, the *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 *Suessanus*'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 *Pygmies* were *Apes* and not *Men*, he quotes likewise *Benedictus Varchius* (*x*), and *Joh. Tinnulus* (*y*), and *Paulus Jovius* (*z*), and several others of the Moderns, he tells us, are of the same mind. *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) *Suessanus 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.*

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The Title of *Bartholine's eighth* and last *Chapter* is, *Argumenta eorum qui Pygmæorum Historiam fabulosam censent, recitantur & refutantur.* Where he tells us, the only Person amongst the Ancients that thought the Story of the *Pygmies* to be fabulous was *Strabo*; but amongst the Moderns there are several, as *Cardan*, *Budæus*, *Aldrovandus*, *Fullerus* and others. The first Objection (he saith) is that of *Spigelius* and others; that since the whole World is now discovered, how happens it, that these *Pygmies* are not to be met with? He has seven Answers to this Objection; how satisfactory they are, the Reader may judge, if he pleases, by perusing them amongst the Quotations (a). *Cardan's* second Objection (he 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 *Calingæ* a Nation of *India*, *where the Women conceive when five years old, and do not live above eight.* *Gesner* speaking of the *Pygmies*, saith, *Vitæ 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 Monocerota & alia negare liceret.* 3. *Qui maria pernavigant, vix oras paucas maritimas lustrant, adeò non terras omnes à mari dissitas.* 4. *Neque in Oris illos habitare maritimis ex Capite quinto manifestum est.* 5. *Quis testatum se omnem adhibuisse diligentiam in inquirendo eos ut inveniret.* 6 *Ita in terra habitant, ut in Antris vitam tolerare dicantur.* 7. *Si vel maximè omni ab omnibus diligentia quæsiti fuissent, nec inventi; fieri potest, ut instar Gigantum jam desierint nec sint amplius.*

(b) *Plinij Hist. Nat.* lib. 7. cap. 2. p. m. 14.

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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 *Æthiopic 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 Acception, 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. Æthiopic.* p. 73.

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he seems to assert quite the contrary: For proposing this Question, *An ex propagine* Adam *vel filiorum* Noe, *quædam genera Hominum Monstrosa prodierunt?* He mentions a great many monstrous Nations of *Men*, as they are described by the *Indian Historians*, and amongst the rest, the *Pygmies*, the *Sciopodes*, &c. And adds, *Quid dicam de* Cynocephalis, *quorum Canina Capita atque ipse Latratus magis Bestias quàm Homines confitentur? 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) *& Cercopithecos, & 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 Νῶβαι 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. 1. lib. 2. cap. 23. p. m. 142.

Text

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 *Avalitæ*, near the *Moſſylon Emporium*; I ſhall not enquire. This I am certain of, he miſrepreſents *Ariſtotle* where he tells us (*f*), *Quamvis in ea fabula hoc ſaltem verum eſſe aſſerat Philoſophus, 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, quàm Equorum*; which had *Bochartus* conſidered, he would not have been ſo fond it may be of his *Nubæ*. And if the Νῶβοι Πυγμαῖοι in *Heſychius* are ſuch *Pygmies* as *Bochartus* makes his *Nubæ*, *Quos tamen abſit ut putemus ſtaturâ fuiſſe Cubitali*, it will not do our buſineſs at all; and neither *Homer*'s Authority, nor *Ariſtotle*'s does him any Service.

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

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

 for

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

Isaac Vossius seems to unsettle all, and endeavours utterly to ruine the whole Story: for he tells us, If you travel all over *Africa*, you shall not meet with either a *Crane* or *Pygmie*: *Se mirari* (saith (h) *Isaac Vossius*) Aristotelem, *quod tam seriò affirmet non esse fabellam, quæ de Pygmæis & Bello, quod cum Gruibus gerant, narrantur. Si quis totam pervadat* 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), Σπείρειν ὅταν μὲν Γέρανος κρωΐζων ἰς τὴν λιβύην μεταχωρῇ. *'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 γέρανοι δὲ Αἰγύπτου ὥρᾳ θέρους ἀφιστάμεναι, ὃν ἀνεχόμεναι τὸ θάλπος, τείνασαι πτέρυγας ὥσπερ ἱστία, φέρονται διὰ τοῦ ἀέρος ἐνθὺ τῆς Σκυθῶν γῆς. i. e. *Grues per æstatem ex* Ægypto *abscedentes, quia Calorem pati non possunt, alis velorum instar expansis, per aerem ad* Scythicam *plagam rectà 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 fingi & aliquod plerunque continent veri, id ipsum quoque hic factum esse existimo. Certum quippe est ultra* Nili *fontes multos reperiri* Nanos, *qui tamen non cum Gruibus, sed cum Elephantis perpetuum 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

Job Ludolphus (*l*) in his *Commentary* on his *Æthiopick 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 sit, ex qua ista Naturæ Ludibria tantâ copiâ proveniant, Vossium docere oportebat, quia Pumiliones Pumiles alios non gignunt, sed plerunque steriles sunt, experientia teste; ut planè 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 encountred an *Elephant*, were as vain an Attempt, as the *Pygmies* were guilty of in *Philostratus* (*m*), 'who to re-
'venge the Death of *Antæus*, having found *Hercules* napping in *Libya*,
'mustered up all their Forces against him. One *Phalanx* (he tells us) as-
'saulted his left hand; but against his right hand, that being the stron-
'ger, two *Phalanges* were appointed. The Archers and Slingers besieg-
'ed 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 *Euristhenes*. 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 Æthiopicam*, p. m. 71. (m) *Philostratus. Icon.* lib. 2. p. m. 817. (n) *Plutarch. in vita Q. Sertorij.*

of the *Relator*: 'Tis this that has incited them to give their several Conjectures about it. *Job Ludolphus* finding what has been offered at in Relation to the *Pygmies*, not to satisfie, he thinks he can better account for this Story, by leaving out the *Cranes*, and placing in their stead, another sort of Bird he calls the *Condor*. I will give you his own words: *Sed ad Pygmæos* (saith (*o*) *Ludolphus*) *revertamur*; *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 *nominârit, sicuti* Plautus *Picos pro Gryphibus, &* Romani *Boves lucas pro Elephantis dixere.*

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

Ad subitas Thracum volucres, nubemque sonoram
Pygmæos parvis currit Bellator in armis:
Mox impar hosti, raptusque per aera curvis
Unguibus à sævâ 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 Æthiopic.* 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 Æthiopum veniunt, Nilique fluenta
Turmatim Palamedis Aves, celſæque per altum
Aera labentes fugiunt Athlanta nivoſum,
Pygmæos imbelle Genus, parvumque fatigant,
Non perturbato procedunt ordine denſæ
Inſtructis volucres obſcurant aëra Turmis.

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

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

Having now conſidered and examined the various Opinions of theſe learned Men concerning this *Pygmæomachia*; and repreſented the Reaſons they give for maintaining their Conjectures; I ſhall beg leave to ſubjoyn my own: and if what at preſent I offer, may ſeem more probable, or account for this Story with more likelyhood, than what hath hitherto been advanced, I ſhall not think my time altogether miſpent: But if this will not do, I ſhall never trouble my head more about them, nor think my ſelf any ways concerned to write on this Argument again. And I had not done it now, but upon the occaſion of Diſſecting this *Orang-Outang*, or *wild Man*, which being a Native of *Africa*, and brought from *Angola*, tho' firſt taken higher up in the Country, as I was informed by the Relation given me; and obſerving ſo great a Reſemblance, both in the outward ſhape, and, what ſurprized me more, in the Structure likewiſe of the inward Parts, to a *Man*; this Thought was eaſily ſuggeſted to me, That very probably this *Animal*, or ſome other ſuch of the ſame *Species*, might give the firſt riſe and occaſion to the Stories of the *Pygmies*. What has been the πρῶτον ψεῦδος, and rendered this Story ſo difficult to be believed, I find hath been the Opinion that has generally

(s) *Oppian. lib.* 1. *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 ἄνδρες 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 loaded it with, I have endeavoured to render it a true, at least a probable Story. I have instanced in *Ctesias* and the *Indian Historians*, as the Authors and Inventors of the many Fables we have had concerning them: Particularly, I have Examined those Relations, where Speech or Language is attributed to them; and shewn, that there is no reason to believe, that they ever spake any Language at all. But these *Indian Historians* having related so many extravagant Romances of the *Pygmies*, as to render their whole History suspected, nay to be utterly denied, that there were ever any such Creatures as *Pygmies* in *Nature*, both by *Strabo* of old, and most of our Learned Men of late, I have endeavoured to assert the Truth of their *being*, from a *Text* in *Aristotle*; which being so positive in affirming their Existence, creates a difficulty, that can no ways be got over by such as are of the contrary Opinion. This *Text* I have vindicated from the false Interpretations and Glosses of several Great Men, who had their Minds so prepossessed and prejudiced with the Notion of *Men Pygmies*, that they often would quote it, and misapply it, tho' it contain'd nothing that any ways favoured their Opinion; but the contrary rather, that they were *Brutes*, and not *Men*.

And that the *Pygmies* were really *Brutes*, I think I have plainly proved out of *Herodotus* and *Philostratus*, who reckon them amongst the *wild Beasts* that breed in those Countries: For tho' by *Herodotus* they are call'd ἄνδρες ἄγριοι, and *Philostratus* calls them ἀνθρώπους μέλανας, yet both make them θηρία 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, ἐν ᾗ ταύταις οἰκεῖν ἄνδρας ἀγρίους, 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 *Caspar 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 slights 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, quàm 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' *Albertus*, 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 ἄγριοι, 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 ἄγριοι, which he makes to be θηρία, or *wild Beasts:* And the ἄνδρες μικροὶ or μέλανες (as they are often called) were just the same. Because this sort of *Apes* had so great a resemblance to Men, more than other *Apes* or *Monkeys*; and they going naturally erect, and being designed by Nature to go so, (as I have shewn in the *Anatomy*) the Ancients had a very plausible ground for giving them this denomination of ἄνδρες or ἄνθρωποι, but commonly they added an Epithet; as ἄγριοι, μικροὶ, πυγμαῖοι, μέλανες, 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 engraft upon, and invent Stories about, they have not been wanting in furnishing us with a great many very Romantick ones on this occasion. And the Moderns being imposed upon by them, and misguided by the Name of ἄνδρες or ἄνθρωποι, 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 *Trispithami*, that is, but two Foot and a quarter high, because by some Relations that have been given, it appears they have been observed to be of a higher stature, and as tall as ordinary Men. Now tho' this may be allowed as to these *wild Men* that are bred in other places; and probably enough likewise, there are such in some Parts of the Continent of *Africa*; yet 'tis sufficient to our business if there are any there, that will come within our Dimensions; for our Scene lies in *Africa*; where *Strabo* observes, that generally the Beasts are of a less size than ordinary; and this

this he thinks might give the rise to the Story of the *Pygmies*. For, saith he (*u*), Τὰ δὲ βοσκήματα αὐτοῖς ἐστὶ μικρὰ, πρόβατα καὶ αἶγες, καὶ κύνες μικροὶ, τραχεῖς δὲ καὶ μάχιμοι (οἰκεῖοι μικροὶ ὄντες) τάχα δὲ καὶ τοὺς πυγμαίους ἀπὸ τῆς τούτων μικροφυΐας ἐπενόησαν, καὶ ἀνέπλασαν. 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* μικροφυΐα *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, γένος μικρὸν 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 *Tulpius*, nor *Gassendus*, nor any that I have hitherto met with, have adjusted the full stature of this *Animal* that is found in those Parts from whence ours was brought: But 'tis most certain, that there are sorts of *Apes* that are much less than the *Pygmies* are described to be. And, as other *Brutes*, so the *Ape-kind*, in different Climates, may be of different Dimensions; and because the other *Brutes* here are generally small, why may not *they* be so likewise. Or if the difference should be but little, I see no great reason in this case, why we should be over-nice, or scrupulous.

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

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

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

Those *Pygmies* that *Paulus Jovius* (*w*) describes, tho' they dwell at a great distance from *Africa*, and he calls them *Men*, yet are so like *Apes*, that I cannot think them any thing 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 postquàm ad summum adoleverint, nostratis Pueri denum annorum Mensuram vix excedunt. Meticulosum genus hominum, & garritu Sermonem exprimens, adeo ut tam Simiæ propinqui, quàm staturâ 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 sailing 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 quòd in barba & in loco secreto Pilos relinquunt, & occisos speciebus Aromaticis condiunt, & postea desiccant, venduntque Negociatoribus, 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 Muschovitar.* lib. p. m. 489. (†) *M. Pauli Veneti de Regionibus Orieneal.* lib. 3. cap. 15. p. m. 390. (x) *Jo. Jonston. Hist. Nat. de Quadruped.* p. m. 139.

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*, καὶ τὰ δένδρα αὐ πιπερίδες, ὧν γεωργοὶ πίθηκοι. And he calls them the People of *Apes*; ἃ λέγεται πιθήκων οἰκεῖν δῆμον ἐν μυχοῖς τοῦ ὄρους. *Dapper* (*z*) tells us, *That the* Indians *take the* Baris *when young, and make them so tame, that they will do almost the work of a Slave; for they commonly go erect as Men do. They will beat Rice in a Mortar, carry Water in a Pitcher*, &c. And *Gassendus* (*a*) in the Life of *Pieresky*, tells us, *That they will play upon a Pipe or Cittern, or the like Musick, they will sweep the House, turn the Spit, beat in a Mortar, and do other Offices in a Family.* And *Acosta*, as I find him quoted by *Garcilasso de la Vega* (*b*) tells us of a *Monkey* he saw at the Governour's House at *Cartagena*, 'whom they sent often to the Tavern for Wine, with Money in one 'hand, and a Bottle in the other; and that when he came to the Ta-'vern, he would not deliver his Money, until he had received his 'Wine. If the Boys met with him by the way, or made a houting 'or noise after him, he would set down his Bottle, and throw Stones 'at them; and having cleared the way, he would take up his Bottle, 'and hasten home. And tho' he loved Wine excessively, yet he would 'not dare to touch it, unless his Master gave him License. A great many Instances of this Nature might be given that are very surprising. And in another place tells us, That the Natives think that they can speak, but will not, for fear of being made to work. And *Bontius* (*c*) mentions that the *Javans* had the same Opinion concerning the *Orang-Outang*, *Loqui verò eos, easque Javani aiunt, sed non velle, ne ad labores cogerentur.*

(y) *Philostratus in vita Apollonij Tyanæi*, 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 φησὶν ἀνθρώπους βιοῦσθαι, κυνὸς ἔχοντας κεφαλήν. Ἐσθῆτας δὲ φορεῖν ἐκ τῶν ἀγρίων θηρίων: φωνῇ δὲ διαλέγονται ἐδεμίᾳ, ἀλλ' ὠρύονται ὥσπερ κύνες· καὶ οὕτω συνιᾶσιν αὐτῶν τὴν φωνήν. Ὀδόντας δὲ μείζους ἔχουσι κυνός, καὶ τοὺς ὄνυχας ὁμοίως, κυνῶν, μακροτέρους δὲ καὶ στρογγυλοτέρους. Οἰκοῦσι δὲ ἐν τοῖς ὄρεσι, μέχρι τοῦ Ἰνδοῦ ποταμοῦ. Μέλανες δὲ εἰσι καὶ δίκαιοι πάνυ, ὥσπερ καὶ οἱ ἄλλοι Ἰνδοί, οἷς [καὶ] ὁμιλοῦσι. Καὶ συνιᾶσι μὲν τὰ παρ' ἐκείνων λεγόμενα, αὐτοὶ δὲ οὐ δύνανται διαλέγεσθαι: ἀλλὰ τῇ ὀργῇ καὶ ταῖς χερσὶ, καὶ τοῖς δακτύλοις σημαίνουσιν, ὥσπερ οἱ κωφοὶ καὶ ἄλαλοι· καλοῦνται δὲ ὑπὸ τῶν Ἰνδῶν καλύστριοι, ὅπερ ἐστὶν ἑλληνιστὶ κυνοκέφαλοι. Τὸ δὲ ἔθνος ἐστὶν, ἕως δώδεκα μυριάδων.

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

And a little afterwards he adds,

Ὅτι οἱ κυνοκέφαλοι οἰκοῦντες ἐν τοῖς ὄρεσιν, οὐκ ἐργάζονται: ἀπὸ θήρας δὲ ζῶσιν. Ὅτ' ἂν [δὲ] ἀποκτείνωσιν αὐτὰ, ὀπτῶσι πρὸς τὸν ἥλιον. Τρέφουσι δὲ καὶ πρόβατα πολλὰ, καὶ αἶγας, καὶ οἶς. Πίνουσι δὲ γάλα καὶ ὀξύγαλα τῶν προβάτων. Ἐσθίουσι δὲ καὶ τὸ καρπὸν τοῦ σπαχόρου, ἀφ' οὗ τὸ ἤλεκτρον: γλυκὺς γὰρ ὄζει· καὶ ξυρραίνοντες αὐτοὺς, σπυρίδας συρράπτουσιν, ὥσπερ ἐν τοῖς ἕλλησι τὴν σαφίδα. Οἱ δὲ κυνοκέφαλοι σχεδίαν ποιησάμενοι, καὶ ὁπτήσαντες, ἀπάγουσι φόρτον τοῦτο. Καὶ τῆς πορφύρας τὸ ἄνθος καθαρὸν ποιήσαντες, καὶ τοῦ ἠλέκτρου ξ' καὶ σ' τάλαντα τοῦ ἐνιαυτοῦ· καὶ οὕτω

Narrat insuper hos Cynocephalos in montibus habitantes nullum exercere opificium; sed de venatione vivere, feráſque quas occiderint ad solem torrere. Magnam nihilominus pecoris copiam alere, caprarúmque & ovium: quarum quidem ovium lac atque oxygala pro potu illis sit. Vesci tamen etiam Sipachoræ fructu; è qua, uti dictum est, arbore *succinum emanat. dulcem enim illum esse. Hunc item illos fructum arefactum in corbes constipare, ad eum modum quo uvas passas Græci. Eosdem illos Cynocephalos ratem quoq; extemporariam construere, qua impositum hujus fructus onus, ut & purpuræ (sed purgato prius ejus flore) itémque electri, ad ducenta & sexaginta talen-*

τὸ

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

τὸ φοινίκιον βάπτε) τῷ φαρμάκῳ, ἕτερα τοσαῦτα. Καὶ ἠλέκτρου χίλια τάλαντα ἀπάγουσι κατ' ἐνιαυτὸν τῷ Ἰνδῶν Βασιλεῖ. Καὶ ἕτερα ἃ κατάγοντες πωλοῦσι τοῖς Ἰνδοῖς, πρὸς ἄρτους καὶ ἄλφιτα καὶ ξύλινα ἱμάτια. Πωλοῦσι δὲ καὶ ξίφη, οἷς χρῶνται πρὸς τὴν θηρίων ἄγραν, καὶ τόξα καὶ ἀκόντια. Πάνυ γὰρ καὶ δεινοί εἰσιν ἀκοντίζειν καὶ τοξεύειν. Ἀπολέμητοι δ' εἰσί, διὰ τὸ οἰκεῖν αὐτοὺς ὄρεα ἄβατα καὶ ὑψηλά. Δίδωσι δὲ αὐτοῖς διὰ πέμπτου ἔτους δῶρα ὁ Βασιλεύς, λ' μὲν μυριάδας τόξων, καὶ ἀκοντίων τοσαύτας, πελτῶν δὲ δώδεκα· καὶ ξίφη δὲ πεντακισμύρια. Τούτοις τοῖς κυνοκεφάλοις οὐκ εἰσὶν οἰκίαι, ἀλλ' ἐν σπηλαίοις διαιτῶνται. Θηρεύουσι δὲ τὰ θηρία, τοξεύοντες καὶ ἀκοντίζοντες, καὶ διώκοντες καταλαμβάνουσι· ταχὺ γὰρ τρέχουσι· λέων δὲ καὶ γυναῖκες αὐτῶν ἅπαξ τοῦ μηνὸς, ὅταν τὰ κατάμηνια αὐτῆς ἔλθῃ· ἄλλοτε δ' οὔ. Οἱ δὲ ἄνδρες οὐ λούονται μέν, τὰς δὲ χεῖρας ἀπονίζονται. Ἐλαίῳ δὲ χρῶνται τρὶς τοῦ μηνὸς, τῷ ἀπὸ τοῦ γάλακτος γινομένῳ, καὶ ἐκλείβουσι δέρμασι. Τοῦ δὲ ἐνθάδε ἔχουσιν οὐ δασεῖαν, ἀλλὰ ψιλῶν τῶν μαθημάτων, ὡς λεπτοτάτων, καὶ αὐτοὶ καὶ αἱ γυναῖκες αὐτῶν. Οἱ δὲ πλουσιώτατοι αὐτῶν, λίνα φοροῦσιν· οὗτοι δὲ εἰσὶν ὀλίγοι. Κλῖναι δὲ αὐτοῖς οὐκ εἰσὶν, ἀλλὰ στιβάδας ποιοῦνται. Οὗτος δ' αὐτῶν πλουσιώτατος νομίζεται, ᾧ ἂν πλείστα πρόβατα ᾖ: ἡ δὲ ἄλλη οὐσία, παραπλησία. Οὐρὰν δὲ ἔχουσι πάντες καὶ ἄνδρες καὶ γυναῖκες, ὑπὲρ τῶν ἰσχίων· οἷανπερ κύων· μείζονα δὲ καὶ δασυτέραν. Καὶ μίσγονται ταῖς γυναιξὶ τετραποδιστί, ὥσπερ οἱ κύνες. ἄλλως δὲ μιγῆναι αὐτοῖς, ὀξὺν αἰσχρόν. Δίκαιοι δὲ εἰσι, καὶ μακροβιότατοι πάντων ἀνθρώπων: ζῶσι γὰρ ἔτη ρ' καὶ ο'. ἔνιοι δὲ αὐτῶν καὶ τ'.

ta quotannis avehunt; additis talentis totidem illius Pigmenti, quo infectores puniceum colorem inducunt. Electri præterea mille talenta quotannis ad Indorum regem advehere. Immò & alia plura devehere ad Indos venalia, pro quibus vicissim panes, farinam, & xylinas vestes accipiant. Habere quoque enses venales, quibus ipsi ad venatum utuntur, cum arcubus & jaculis. Peritissimos enim esse jaculandi atque sagittandi: & præterea etiam, quòd montes habitent altos atque inaccessos, bello insuperabiles. Regem ipsis pro munere quinto quoque anno præbere trecenta arcuum, totidémque jaculorum millia; jam peltarum centum viginti, & gladiorum quinquaginta millia. Nullas item apud hos esse domos, sed in antris degere. In venatione jaculis potissimum feras, vel sagittis petere; easdemque persequendo, quòd cursus velocitate præstent, etiam assequi. Horum uxores semel duntaxat per mensem, cùm menstrua patiuntur, lavare; aliâs nunquam. Neque viros unquam omnino lavare, sed manus tantummodò abluere. Oleo tamen ex lacte confecto ter saltem mensibus singulis ungi, & pellibus deinde abstergi. Veste ad hæc uti, non villosa, sed è glabris maceratisq; pellibus quàm tenuissimis, ipsos æquè atque uxores. Exceptis fortè ditissimis inter eos, & iis quidem paucis, qui lineos gestent amictus. Nec item lectorum novisse usum eos, qui extemporaneos sibi toros exstruant. Hunc apud eos ditissimum haberi, qui plurimum habeat pecoris, ac reliquas opes his propemodum esse similes. Caudam insuper habere omnes, tam viros quàm mulieres, supra clunes, caninæ, similem, nisi quòd major sit, & pilis densior. Quadrupedes item hos, canum more, cum mulieribus congredi aliúmque congrediendi modum omnem pro turpi habere. Justissimos 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 rost it in the 'Sun. They breed a great many Sheep, Goats and Asses; and drink the 'Milk and Butter-milk of the Sheep. They eat likewise the Fruit of the '*Sipachora* Tree, from whence comes *Ambar*, the Fruit whereof is sweet, 'which having dried, they put up in Baskets, as the *Greeks* do *Raisins*. 'These *Cynocephali* having made a Boat, they load it with this Fruit, and 'with *Purpura*, the Flower being first picked, and with *Ambar*, to the 'quantity of Two hundred and 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 Asseveration of the Truth of all that he had wrote, that Apology that *Strabo* (*b*) makes for the *Poets*, might excuse him, Φαίνεται γὰρ (saith *Strabo*) εὐθὺς ὅτι μύθους παραπλέκουσιν ἑκόντες· οὐκ ἀγνοίᾳ τῶν ὄντων, ἀλλὰ πλάσει τῶν ἀδυνάτων, τερατείας καὶ τέρψεως χάριν· i. e. *Statim enim apparet 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' *Æschylus*, as the same *Strabo* there tells us, first invented the Story of the *Cynocephali*, or *Canicipites*, as likewise the *Pectoroculati* and the *Unoculi*, as *Hesiod* and *Homer* did that of the *Pygmies*; yet I can't but think he hath as far out-done the Original in what he relates of the *Cynocephali*, as he did in the Account he gives of the *Pygmies*.

These *Cynocephali* by (*c*) *Ælian* are called ἄνθρωποι κυνοπρόσωποι, and he gives this Relation of them, as I find him translated by *Conrad. Gesner*, who is more faithful in rendering him than *Pet. Gillius*, *Ultra Oasin Ægypti, solitudo maxima ad septem dierum iter extenditur. Eam excipit Regio quam* Cynoprosopi *Homines incolunt, in via* Æthiopiam *versus. Vivunt illi Caprarum & Bubalidum venatu. Aspectus iis niger, Caput & Dentes Canis. Quod Animal, quum referant, non absurda eorum* (quamquam Hominum) *hoc in loco existimanda est mentio. Nam & Sermonis usu carent, & acuto quodam stridore sonant. Barbam infra supraque os gerunt, Draconum quadam similitudine. Manus eorum validis & acutissimis unguibus armantur. Corpus omne hirsutum est, hoc etiam instar Canum. Sunt autem pernicissimi, & aquas Regionis norunt; atque eam ob causam, difficiles captu.*

Now tho' *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 Indiæ tractu, ubi Canthari* (†) *jam dicti, Cynocephali etiam reperiuntur: quibus à facie & Corporis specie nomen inditum, cætera fere humana habent: & vestiti pellibus ferarum ingrediuntur. 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 interimunt, & 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 *Philosoph. Transact.* N. 176. p. 1202. from the Worm or *Chrysalis* of which, come the *Cochineel*, for dying Scarlet, of which there is a good account here in *Ælian* out of *Ctesias*.

ex

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

But 'twas for want of Education, it may be, and by their living wild in the Woods, they lost their Learning and their Speech; for the *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 Disciplinæ idonea hæc esse percepi. Regnantibus* Ptolomeis *Cynocephalos Ægyptij literas, & saltare, & pulsare Citharam docebant. Tum verò unusquisqiam 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 τῷ αὐτῷ ἔχουσι μορφῷ τοῖς πιθήκοις, πλῴω μείζονες τ' εἰσὶ, καὶ ἰσχυρότεροι, καὶ τὰ πρόσωπα ἔχοντες κυνοειδέστερα. Ἔπι δὲ ἀγελωτέρα τε τὰ ἤθη, καὶ τοὺς ὀδόντας ἔχουσι κυνοειδεστέρους καὶ ἰσχυροτέρους. i. e. *The* Cynocephali *are of the same shape with* Monkeys, *but they are bigger and stronger, and they have a Face more like a Dog's, and are of a fiercer Nature, and have Teeth more like a Dog's, and stronger.* And so (g) *Pliny, Efferacior Cynocephalis Natura sicut Satyris:* And (h) *Solinus, Cynocephali & ipsi sunt è numero simiarum, in Æthiopiæ parte frequentissimi: violenti ad saltum, feri morsu, nunquam ita mansueti, ut non sint magis rabidi.* And (i) *Diodorus Siculus* describes them after the same manner: Οἱ δ' ὀνομαζόμενοι κυνοκέφαλοι τοῖς μὲν σώμασιν ἀνθρώποις δυσειδέσι παρεμφερεῖς εἰσὶ, ταῖς δὲ φωναῖς μυγμοὺς ἀνθρωπίνους ποιοῦνται· ἀγελώτατα δὲ ταῦτα τὰ ζῶα, καὶ παντελῶς ἀπιθάνοις καθεστῶτα, τῷ ἀπὸ τῆς ὀφρύων προσφυῆ αὐχενοστέρνον ἔχει· ταῖς δὲ θηλείαις ἰδιώτατον συμβαίνει, τὸ τῷ μήτρᾳν ἐκτὸς τοῦ σώματος φέρειν ἅπαντα τὸν χρόνον. i. e. *Qui Cynocephali (à Canino Capite) dicuntur, Corporis aspectum Hominum deformium instar habent, quorum vocem mussitatione tantùm exprimunt. Apprimè ferox est hoc Animal, nec ullo cicurationem pacto admittit, & vultum à superciliis austerioribus præfert. Singulare quiddam fœmellis accidit; quod vulvam perpetuò extra Corpus projectam habent.* And *Agatharcides* in (k) *Photius* gives just the same description of them: Ὁ δὲ κυνοκέφαλος (saith he) τὸ μὲν σῶμα ἀνθρώπου δυσειδὲς ὑπο-

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

γεράφει, τὸ πρόσωπον δὲ κυνὸς· φωνὴν δὲ ἀφίησι μυγμῷ παραπλησίαν· ἄγριον δὲ ὑπερβολῇ καὶ τελείως ἀπηθάνευτον, καὶ τὴν ὄψιν ἐμφαῖνον ἀπό τε τῶν ὀφρύων καὶ τῶν ὀμμάτων αὐστηράν. Περὶ μὲν τ' ἄρρενα ταῦτα. Τῷ δὲ θήλει πρόσκειται καὶ τὸ τὴν μήτραν ἔξω τοῦ σώματος φορεῖν, καὶ οὕτω διαγίνεσθαι πάντα τ' βίον. i. e. *In Cynocephalo Hominis Corpus, specie turpis, adumbratur. Canina ei facies, vocem stridori Muris non dissimilem exprimit. Sed immodicè ferum est Animal, nec ullo modo cicuratur: vultumque à superciliis & oculis austerum prodit. Ita Mas comparatus est. Fœmineo generi hoc est proprium, ut uterum extra Corpus gestet, eoque habitu totam exigat vitam.*

Salmasius (l) 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.

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

A Philological Essay Concerning the SATYRS OF THE ANCIENTS.

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 reverà in Rerum Naturâ existere.* So (*b*) *Isaac Vossius* speaking of the *Ægipanes* tells us, *Sanè neque in forma hujus monstri conveniunt, si tamen monstris accensenda sunt ea, quæ sunt mera Græculorum Commenta.* And the Learned (*c*) *Bochartus* saith, *Absit interim ut ex his locis Quisquam colligat, ullos aut jam exstare, vel unquam extitisse in Rerum Natura Satyros.* However, I do not doubt but to make it plainly appear, that there were

(a) *Casaubon de Poesi Satyricâ*, lib. 1. cap. 2. (b) *Is. Vossij Comment. ad Pompon. Melam.* lib. 1. c. 8. p. m. 46.
(c) *Bocharti Hierozoic. seu de Animal. Sacræ 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*, *Ægipan*, *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 *Dæmons*; 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 *Humanâ Effigie*. *Diodorus Siculus* (*d*) informs us, that when *Osiris* went into *Æthiopia*, ἀχθῆναι λέγεται πρὸς αὐτὸν τὸ τῶν Σατύρων γένος, ὅς φασιν ὅτι τῆς ὀσφύος ἔχειν κόμας, &c. i. e. *Dum in Æthiopia versatur (Osiris) Gens Satyrorum ei adducitur, quas pilos in lumbis (Osphye) habere ferunt. Risûs enim amator erat Osiris & Musicæ Choreisq; gaudebat*, &c. *Satyri igitur quia ad tripudia, & decantationem Carminum, omnemque hilaritatem & lusum apti erant, in partem Militiæ venerunt.* He makes them likewise the Companions of *Bacchus*, and for the same reason (*e*), Τοὺς δὴ Σατύρους ταῖς περὶ γέλωτα συνεργοῦσαις ὑπολυόντες χρωμένους, παρεσκευάζειν τῷ Διονύσῳ τὸν εὐδαίμονα καὶ κεχαρισμένον βίον· i. e. *Ita Satyri ludicris & ad risum compositis gestibus & actionibus, vitam Dionyso beatam, Gratiisque delibutam, reddunt.* And they are always represented as Jocose and Sportful, but Scurrilous and Lascivious; and wonderful Things they relate of their Revellings by Night, their Dancing, Musick, and their wanton Frolicks. For thus *Pliny* (*f*) describing the Parts about the Mountain *Atlas* in *Africa*, informs us, *Incolarum neminem interdiu cerni: silere omnia, non alio quam solitudinum horrore: subire tacitam*

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

Re-

Religionem animos propriùs accedentium, præterque horrorem elati (sc. Montis) super nubila, atque in viciniam Lunaris circuli. Eundem noctibus micare crebris ignibus, Ægipanum, Satyrorumque *lascivia impleri, Tibiarum ac Fistulæ Cantu, & Cymbalorum Sonitu strepere.* And then adds, *Hæc celebrati Authores prodidere.* And so (g) *Pomponius Mela, Ultra hunc sinum Mons altus (ut Græci vocant)* Θεῶν ὄχημα, *perpetuis ignibus flagrat: ultra montem viret Collis longo tractu, longis littoribus obductus, unde visuntur patentes magis Campi, quâm ut prospici possint, Panum, Satyrorumque. Hinc opinio ea fidem cepit, quòd 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 Tibiæ Sonantes majus humanis.* Where we may observe that what *Pliny* calls *Ægipanes*, *Mela* calls here *Panes*. And the *Satyrs* being commonly called *Fauni*, I can't but think, that the idle Stories we have about the *Fairies*, must come from hence: For they likewise have their Revellings, Dancing, and Musick by Night. And as even to this day, to fright Children, they tell them Stories of *Fairies* and *Hobgoblins*, so the Ancients did use to call any great sudden Fear, as we do now, a *Panick Fear*, from this *Pan*. For as (h) *Pausanias* tells us, Ἐν ᾗ τῇ νυκτὶ φόβῳ σφίσιν ἐκπίπτει Πανικός. Τὰ γὰρ ἀπὸ αἰτίας ἐδεμιᾶς δείματα ἐκ τούτου φασὶ γίνεσθαι· i. e. *Eâ nocte Panicus illos incessit terror. Terrores enim nulla ex causa Ortos ab eo (sc.* Pane) *immitti aiunt.* And so (i) *Euripides:*

Κρονίου Πανὸς τρομερᾷ μάστιγι φοβῆ.

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

And so (k) *Dionysius Halicarnasseus* speaking of the *Faunus*, says, Τούτῳ γὰρ ἀναπιθέασι τῷ δαίμονι Ῥωμαῖοι τὰ Πανικά, καὶ ὅσα φάσματα ἄττα ἄλλοιας ἔχοντα μορφὰς, εἰς ὄψιν ἀνθρώπων ἔρχονται, δείματα φέροντα· i. e. *Huic enim Romani Panicos terrores adscribunt, & quæcunque 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. (h) *Pausanias in Phocicis.* (i) *Euripides in Rhæso.* (k) *Dionysij Halicarnass.* lib. 5. cap. 3. (l) *Ovid in Phædra.*

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, Ἔστι δὴ τὸ πανικὰς λέγεσθαι παραχὰς τὰς ἀφνιδίους, καὶ ἀλόγους, ὅτω γάρ πως καὶ αἱ ἀγέλαι, καὶ τὰ ἀιπόλια πτοεῖται, ψόφου τινὸς ἐξ ὕλης, ἢ ἀφ' ὑπανάλρων καὶ φαραγγωδῶν τόπων ἀκουσαντα· i. e. *Nihil prohibet quin etiam Panicos tumultus dicamus, qui subito & sine ratione certa exoriuntur: sic enim interdum armenta & greges terrentur, dum sonus quidam subitus è Sylva, aut ex Antris aut ex Terræ voraginibus affertur.*

Now *Lucretius* thinks that all this Musick of Pipes, Flutes, Cymbals and Drums, that is said to be made by the Jollity and Revellings of the *Satyrs*, *Fauni*, *Panes*, &c. in this dreadful Mountain by Night, is meer Romance and Fiction; and that 'tis nothing but the *Ecchoing* of the whistling boisterous Winds amongst those hideous Rocks: For speaking of *Eccho's*, he tells us (*n*),

Sex etiam, aut septem loca vidi reddere voces
Unam cum jaceres: ita colles collibus ipsis
Verba repulsantes iterabant dicta referre.
Hæc loca Capripedes Satyros, Nymphasque tenere
Finitimi fingunt, & Faunos esse loquuntur;
Quorum noctivago strepitu, Ludoque jocanti
Adfirmant volgo taciturna silentia rumpi,
Chordarumque Sonos fieri, dulceisque querelas,
Tibia quas fundit digitis pulsata canentum:
Et genus Agricolûm late sentiscere, cum Pan
Pinea semiferi Capitis velamina quassans,
Unco sæpe labro calamos percurrit hianteis,
Fistula Silvestrem ne cesset fundere Musam.
Cætera de genere hoc monstra, ac Portenta loquuntur,
Ne loca deserta ab Divis quoque forte 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) *Phurnutus 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 Ruricolæ, Sylvarum Numina, Fauni
Et Satyri fratres, & tunc quoque clarus Olympus
Et Nymphæ flerunt.

The *Fauni* therefore and *Satyrs* I find are near akin. And (*p*) *Ovid* in another place ſaith,

Quid non & Satyri Saltatibus apta juventus
Fecere, & Pinu præcincti Cornua Panes.
Silvanuſque ſuis ſemper juvenilior annis.

And elſewhere he tells us (*q*),

Panes & in Venerem Satyrorum prona juventus.

The *Satyrs* therefore and *Fauni* ſeem to be young ones, and the elder, the *Panes* and *Silvani*, according to that of (*r*) *Virgil*,

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

And (*s*) *Plutarch* tells us that what the *Greeks* called *Ægipan*, the *Romans* called *Silvanus*. And (*t*) *Pauſanias* expreſly tells us, that when the *Satyrs*

(o) *Ovid. Metamorph.* lib. 6. verſ. 392. (p) *Ovid. Metamorph.* lib. 14. verſ. 637. (q) *Ovid.* l. 1. *Faſtorum.* (r) *Virgil. Georg.* l. 2. verſ. 494. (s) *Plutarch. in Parallelis.* (t) *Pauſan. in Attic.* p. m. 21.

grow

grow old, they are called *Sileni*: Τὰς δὲ ἡλικίᾳ τῷ Σατύρων προήκοντας ὀνομάζουσι Σειληνούς. 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 Nymphæ,
Faunique, Satyrique, & monticulæ Silvani.

Now what difference there is amongst all these, unless as to their *Age* and *Sex*, I will not undertake at present to determine. The *Poets* and the *Painters* of old, if we nicely enquire into them, have been pleased, as their fancy govern'd them, to make, or not make a distinction between them. Those that have a mind to satisfie their Curiosity farther in this Matter, may consult *Salmasius*, *Bochart*, *Gerard*, and *Isaac Vossius*, and several others, who have largely wrote about them. I am apt to think that *Pan*, *Ægipan*, *Silvanus* and *Silenus*, were all the same; as were the *Satyri* and the *Fauni*; only these were younger than the former; and the *Nymphs* were the *Females* of the Kind. But 'tis sufficient to my business, if I make it appear, notwithstanding all this, that the *Satyrs* were not *Men*, nor *Demi-Gods*, nor *Dæmons*, but only Brutes of the *Monkey-kind*; which is plain enough even from the Ancients, who have invented so many Fables about them.

For (*w*) *Herodotus* tells us, and he is apt enough oftetimes to be over-credulous, ἐμοὶ μὲν ὃ παρὰ λέγουσι, οἰκέειν τὰ ὄρεα αἰγίποδας ἄνδρας· for they are neither Men, nor have they such Feet. *Satyri de hominibus nihil aliud præferunt quàm 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) perniciosissimum Animal: Cùm Quadrupedes tum rectè incedentes, humanâ 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 *Ælian* is a little more express: *Finitimos* Indiæ *montes* (saith (*a*) he) *transmittenti, ad intimum latus densissimas convalles videri aiunt, &* Corudam *locum nominari: ubi Bestiæ Satyrorum similitudinem formamque gerentes, & toto Corpore hirsutæ, versantur: atque Equina Cauda præditæ dicuntur. Eæ quum non à venatoribus agitantur, in opacis & spissis Sylvis solent ex frondibus (& fructibus) vivere. Quùm autem Venantium strepitum sentiunt, & Ca-*

(u) *Ovid. Metamorph.* lib. 1. vers. 193. (w) *Herodot. in Melpomene*, p. m. 229. (x) *Solinus Polyhist.* cap. 34. (y) *Pomp. Mela de situ Orbis*, lib. 1. cap. 8. p. 11. (z) *Plinij Hist. Nat.* lib. 7. cap. 2. (a) *Ælian. Hist. Animal.* lib. 16. cap. 21.

num

num latratus exaudiunt, in Montium vertices incredibili celeritate excurrunt: nam per montes iter conficere assuetæ sunt. Contra eos qui se insequuntur pugnant, de summis montibus saxa devolventes, quorum impetu sæpe multi deprehensi pereunt. Itaque difficillimè capiuntur: Et ex iis nonnullæ, sed ægerrimè tandem, aut ægrotantes nimirum, aut gravidæ comprehenduntur. Illæ quidem propter morbum; hæ verò ob gravitatem. Captæ autem ad Prasios deferuntur. Ælian here tells us that they have Tails like Horses, therefore they must be of the *Monkey* or *Baboon* kind. And *Pausanias*, who made it his Business to enquire more particularly about them, informs us they have such Tails, but can't speak, but are very Lascivious and Lustful, as they are observed to be to this day. I will give you *Pausanias*'s words; Περὶ δὲ Σατύρων (saith (*b*) he) οἵτινες εἰσὶν, ἑτέρῳ πλέον ἐθέλων διήσασθαι, πολλοῖς αὐτῷ τούτων εἵνεκα ἐς λόγους ἦλθον. Ἔφη δὲ Εὔφημος Κὰρ ἀνὴρ πλέων ἐς Ἰταλίαν ἁμαρτεῖν ὑπὸ ἀνέμων τοῦ πλοῦ, καὶ ἐς τινὰ ἔξω θάλασσαν, ἐς ἣν ἐκέτι πλέουσιν ἐξεννεχθῆναι· Νήσους δὲ εἶναι μὲν ἐρήμους πολλὰς, ἐν δὲ ταύταις οἰκεῖν ἄνδρας ἀγρίους· ἄλλαις δὲ οὐκ ἐθέλειν νήσοις προσίσχειν τοὺς ναύτας, οἷα πρότερόν τε προσχόντας, καὶ τῷ ἐνοίκων ἀπείρως ἔχοντας. Βιασθῆναι δ' ὅν καὶ τότε. Ταύτας καλεῖσθαι μὲν ὑπὸ τῶν ναυτῶν Σατυρίδας, εἰ δὲ τοὺς ἐνοικοῦντας καὶ πυῤῥοὺς, καὶ ἵππων ὁ πολὺ μείους ἔχειν ὀπὶ τοῖς ἰσχίοις οὐρά. Τούτους ὡς ἥδοντο καταδραμόντας ὀπὶ τινὶ ναυῒ, φωνὴν μὲν ἀδεμίαν ἱέναι, ταῖς δὲ γυναιξὶν ὀπιχειρεῖν ταῖς ἐν τῇ νηί. Τέλος δὲ δείσαντας τοὺς ναύτας, βάρβαρον γυναῖκα ἐκβαλεῖν ἐς τινὰ νῆσον. Ἐς ταύτην ἐν ὑβρίζειν τοὺς Σατύρους, ὃ μόνον ἢ καθέκηκεν, ἀλλὰ καὶ τὸ πᾶν ὁμοίως σῶμα. Which (*c*) *Conrad. Gesner.* I find hath thus translated; *Cæterum de Satyris, quinam sint, cùm plura quàm alij scire laborem, cum multis ea de re sum collocutus: Dixit autem Euphemus Car, se quùm in Italiam navigaret cursu esse excussum vi ventorum, & ad mare extimum, quod navigari non item soleat portatum. Insulas autem ibi multas esse ac desertas, & viris agrestibus incoli. Ad alias verò aiebat nautas deflectere recusasse, quòd antea quoque cò appulsi, Incolarum Inhumanitatem essent experti. Tempestatis denique violentia eò pervenisse. Insulas eas à Nautis vocari Satyrias. Incolas inesse rubicundos, & caudas imo dorso habere, Equinis non multò minores. Hos, ubi senserant, ad navigium accurrisse, nullamque vocem edidisse, sed mulieribus Navi unà advectis manus injecisse. Nautas verò timore correptos, Barbaram Mulierem in Insulam tandem projecisse. Eam Satyros, non solum qua parte consuetudo permittat, verùm 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, Ἔστι δὲ καὶ τοῦτο (sc. *Satyrus*) πίθηκος, ἐρυθρὸν τὸ πρόσωπον, καὶ γοργὸς τινὰ κίνησιν, καὶ οὐρὰν ἔχων. 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. Ecclesiastic.* 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 *Tulpius* was too hasty in laying down this Conclusion, *In summâ* (saith (*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 *Tulpius* a mind to have made his *Orang-Outang* a *Satyr*, he should not have compared him to a Courtier, nor instanced in such Niceties as he observes, of his drinking, and going to bed: For, *Efferatior Cynocephalis Natura, sicut Satyris*, saith (*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* (saith (*k*) *Pliny*) *in Thesauros Maxillarum Cibum Sphingiorum & Satyrorum genus: mox inde sensim ad mandendum, manibus expromit: & quod formicis in annum solenne est, his in dies vel horas.* The *Orang-Outang* therefore cannot be the *Satyrs* of the Ancients, as *Tulpius*, and *Bontius*, and *Dapper* imagined.

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) *Plinj ibid.* lib. 5. cap. 8. p. m. 549. (k) *Plinij Nat. Hist.* lib. 10. cap. 72. p. m. 466.

fabulous

fabulous or a Delusion. *Non assentior* (saith (l) *Bochartus*) *narrationi Magni Scriptoris, in qua Satyrus introducitur Antonium in Eremo rogans, ut pro se communem Deum deprecetur, tanquam Salutis in Christo particeps futurus. Non alios servat Christus, quàm quos assumpsit. At non assumpsit Angelos, multò minùs Dæmones aut Satyros qui nusquam sunt, sed semen Abrahæ.* And tho' St. *Jerome*, to confirm this Relation, adds, That in *Constantine*'s time one of these Monsters was seen alive at *Alexandria* in *Ægypt*, and after it's Death, it's Carcass was embalmed and sent to *Antioch* for the Emperor to see it; Yet I shall plainly prove that this *Satyr* was nothing else but that sort of *Monkey* I am now discoursing about.

This Story I find often mentioned; but (m) *Philostorgius* gives us the most particular Account of it, and therefore I shall insert his own words; Καὶ ἄλλαις πολλῶν ζωῶν εἰδέαις τῆς πιθηκείας μορφῆς ἐπιμιγνυμένης· καὶ δῆλον ταῦτα ἐξίν, πολλῶν εἰς ἡμᾶς κομιζομένων, οἷς δὴ καὶ ὁ Πὰν ἐπικληθεὶς ὑπάρχει, ὅς τῷ κεφαλῷ αἰγοπρόσωπός ἐστι, καὶ αἰγόκερως, καὶ ἐκ λαγόνων τὰ κάτω αἰγοσκελής, τῷ δὴ κοιλίᾳ καὶ τὸ στέρνον καὶ τὰς χεῖρας καθαρὸς πίθηκος, ὃν καὶ ὁ τῆς Ἰνδῶν βασιλεὺς Κωνσταντίῳ ἀπεστάλκει. Τοῦτο δὴ τὸ ζῶον ἔζη μὲν φερόμενον ἄχρι τινὸς ἐν τινι πλέγματι διὰ τὸ θηριῶδες εἰργμένον, ἐπεὶ δὴ ἀπέθανε, παρεσκευάσαντες αὐτὸ οἱ κομίζοντες, θεάματος παρασχεῖν ἀσυνήθους εἰκόνα, μέχρι τῆς Κωνσταντίνου διεσώσαντο πόλεως. Καὶ μοὶ δοκοῦσι τοῦτο Ἕλληνες πάλαι ἰδεῖν, καὶ ἐκπλαγέντες τῷ ξένῳ τῆς θέας, Θεὸν σφίσιν νομίσαι, εἰθισμένον αὐτοῖς τὰ παράδοξα θεοποιεῖν. Ὥσπερ καὶ τὸν 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 it's Loins downwards Goat's Legs; but in it's 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 πίθηκος here is generical, and includes both. But there being several *Species* of them, they received a denomination according to the resemblance they had to other *Animals*; as in *Philostorgius* are mentioned before, the *Leontopithecus*, the *Arctopithecus*, the *Cynocephalus* and *Aegopithecus*, which last seems to be our *Satyr*, from the resemblance it hath in it's Head and Legs to a *Goat*. That their Legs and Face are like a Goat's, is easie enough to be believed: but the *Horns* that they clap upon his Head, seem to me as an addition of the *Poets*, or the *Painters*, or both. But what gave a foundation to this Invention, possibly may be the large-

(l) *Bochart. Hierozoic. part. poster.* lib. 6. cap. 7. p. 829. (m) *Philostorg. Hist. Ecclesiastic.* lib. 3. cap. 11.

ness of their Ears standing off from their Head, and which are very remarkable. And this *Phurnutus* (*n*) gives as the reason of it. *Horace* (*o*) takes notice of their Ears, but ill describes them in making them sharp pointed, whereas they are round.

——& aures
Capripedum 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 *Ægyptians*; and 'twas Death for any Body to kill one of them: For thus saith (*p*) *Diodorus Siculus*, Τάς τε γὰρ αὐτὰς οἰκίας οἱ πίθηκοι καλῶσιν τοῖς ἀνθρώποις, θεοὶ παρ' αὐτοῖς νομιζόμενοι, καθάπερ παρ' Αἰγυπτίοις οἱ κύνες· ἔκ τε τῶν παρεσκευασμένων ἐν τοῖς ταμείοις τὰ ζῶα τὰς τροφὰς ἐλάμβανον ἀκωλύτως ὁπότε βούλοιτο. Καὶ τὰς προσηγορίας δ' ἐτίθεσαν γονεῖς τοῖς παισὶ κατὰ τὸ πλεῖστον ἀπὸ τῶν πιθήκων, ὥσπερ παρ' ἡμῖν ἀπὸ τῶν θεῶν. Τοῖς δ' ἀποκτείναι τοῦτο τὸ ζῶον, ὡς ἠσεβηκόσι τὰ μέγιστα, θάνατος ἦν ἐπιτίμιον. Διὸ δὴ καὶ παρά τισιν ἐισχύσειν ἐν παροιμίας μέρει λεγόμενον ὅτι τῶν ἀναιρουμένων, ὅτι πιθήκου αἷμα πεπόσεσαι. i.e. *Easdem enim domus Simiæ quas Homines frequentant; & pro Diis habentur apud illos, ut apud Ægyptios Canes; paratos etiam in Cellis penariis cibos, quando libet, nemine prohibente, hæ bestiæ sumunt, nominaque ut plurimùm à Simiis, ut apud nos à Diis, Parentes Liberis suis imponunt. Qui Animal hoc interfecerint, in eos, ut nefariæ Impietatis reos, supplicio capitis animadvertitur. Ideo apud nonnullos Proverbij vicem obtinuit, quod in magnifice se efferentes dicitur; Simiæ Cruorem bibisti.* And in another place (*q*) *Diodorus* tells us, that *Pan* was in the greatest Veneration amongst the *Ægyptians*, and 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 dissuaded from it by 'their Bishop *Gaspar*, who told them, that it was a Crime, thus to encourage the Idolatry of the *Indians*; whereupon he burnt the *Tooth*, and 'flung the Ashes into the River. *Joh. Euseb. Nierembergius* (*t*) hath the same

(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) *Juven. Satyr.*15. *v.* 4. (s) *J.Linschoten apud Theod.de Bry Indiæ Orient.part.*2.*cap.*46.p.m.111. (t) *J.Eus.Nieremberg.Hist.Nat.*l.9. *cap.*46.p.180.

ſame Story, but varies in the Account of ſome Particulars. And *Joh. Petrus Maſſeius* (*u*) gives us a Relation of one of their Temples, which for Magnificence, might vie with any at *Rome:* His words are theſe; *Sanè fanum eſt Simiæ dicatum: Cujus duntaxat Pecori in victimarum uſum cuſtodiendo, Porticus miram in longitudinem excurrit, Columnarum Septingentarum 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 *Satyrs* Heads, I ſhall not at preſent enquire: I call it an Addition, becauſe there is no Account from any credible Author, that there were ever obſerved any of the *Ape-kind* to have Horns. Poſſibly ſome ancient Statues or Paintings might give ſome light into this matter: for the ancient *Statuaries* and *Painters* were curious in repreſenting them; and *Pliny* recommends, as excellent in this kind, the *Satyr* of *Mylo*, of *Lucippus*, *Antiphalus*, *Protogenes*, *Ariſton*, and *Nicomachus*, as Pieces admired in thoſe days.

Albertus Magnus (*w*) who was happier in gueſſing, than in proving or deſcribing what he meant; tells us indeed, that the *Satyr* (whom he calls *Piloſus*) was of the *Ape-kind*; but he makes ſuch an odd Compoſition of him, that one would take it to be rather a *Chimæra*, than a real Being: You may ſee his words in the Citations.

(u) *Joh. Pet. Maſſeij Hiſt. Indic.* lib. 1. p. m. 36. (w) *Albert. Magnus de Animalib.* lib. 22. p. m. 223. *Piloſus eſt Animal Compoſitum ex homine ſuperius, & Capra inferius; ſed Cornua habet in fronte; & eſt de genere Simiarum; ſed multùm monſtruoſum; & aliquotiens incedit erectum, & efficitur domitum. Hoc aſſerunt in Diſertis habitare Æthiopiæ; & 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, ἔπεμψε δ' Ἥρα Σφίγγα, ἣ μέλεος μὲν Ἐχίδνης ἦν, Παλεὸς δὲ, Τυφῶνος, εἶχε δὲ πρόσωπον μὲν γυναικὸς, στῆθος δὲ καὶ βάσιν καὶ ὀρρὸν λέοντος, καὶ πτέρυγας ὄρνιθος· *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 pennis, pedibus fera, fronte Puella.*

But as their Fansies govern'd them, so they made their description. *Clearchus* (as I find him quoted in (c) *Natalis Comes*) has out-done them all; *At* Clearchus (saith he) *Caput & Manus Puellæ, Corpus Canis, vocem Hominis, Caudam Draconis, Leonis ungues, Alas Avis, illam habuisse scripsit. Palæphatus* (d) is somewhat different in his Account, where he tells us, Περὶ τῆς Καδμείας Σφιγγὸς λέγουσιν ὡς θηρίον ἐγένετο, σῶμα μὲν ἔχον ὡς κυνὸς, κεφαλὴν δὲ, καὶ πρόσωπον κόρης, πτέρυγας ὄρνιθος, φωνὴν δὲ ἀνθρώπου· 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, πρόσωπον παρθένου, στῆθος δὲ καὶ πόδας λέοντος. So the *Scholiast* upon (f) *Aristophanes*, οἱ δὲ Σφιγγὸς πόδες λεοντώδεις ἦσαν· And *Euripides* himself, as he is quoted by (g) *Ælian*, makes her to have the Tail and Feet of a Lion, in that Verse,

> Οὐρὰν δ' ἐπείλεσ' ἐπὶ λεοντόπους βάσιν·
> *Caudam remulcens ad Leoninos pedes.*

Where we may observe that *Ælian* tells us here that the *Ægyptian Statuaries*, and the *Theban Fables*, made the *Sphinx* to be only *Biformis*: *Biformem nobis conantur representare, ipsam ex Corpore Virginis & Leonis cum gravitate compositam architectantes*, as *Gesner* there translates him: But the *Greeks* represented the *Sphynx* with wings; for as (h) *Ælian* in another place tells us,

(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) *Palæphatus de incredibilibus Historiis Cap. de Sphinge.* p.m.14. (e) *Eurip. in Phœnissis.* (f) *Aristophan. in Ranis.* (g) *Ælian. de Animal.* l.12.c.7. (h) *Ælian. de Animal.* l.12.cap.38.

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

But our chief Business is to enquire, how *Nature* hath formed them; and not how the *Poets*, *Painters*, or *Statuaries* have, according to the Luxuriancy of their Fancie, 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*, *Lyncas vulgo frequentes, & Sphinges, fusco Pilo, mammis in Pectore geminis Æthiopia generat.* And so (*k*) *Solinus*, *Inter Simias habentur & Sphinges, villosæ comis* (*Salmasius* reads it *villosæ 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 σφίγγες καὶ οἱ Κυνοκέφαλοι καὶ Κῆποι παραπέμπουσιν εἰς τὴν Ἀλεξανδρείαν ἐκ τῆς Τρωγλοδυτικῆς, καὶ τῆς Αἰθιοπίας· εἰσὶ δὲ αἱ μὲν Σφίγγες ταῖς γραφομέναις παρόμοιαι. Πλὴν ὅτι πᾶσαι δασεῖαι, καὶ ταῖς ψυχαῖς ἥμεροι καὶ πρᾶοι. Καὶ πανουργίας κοινωνοῦσι πλείστης, διδασκαλίας τε μεθοδικῆς ὑπὸ ποσὸν ἄπτον, ὥστε τὴν εὐρυθμίαν ἐν πᾶσι θαυμάζειν. i. e. *The* Sphinges, Cynocephali *and* Cepi *are sent to* Alexandria *from the Country of the* Troglodytes *and* Æthiopia. *The* Sphinges *are like to what they are painted, only they are all hairy, and mild and gentle in their Nature: they have a great deal of Cunning, and a Method of Learning what they attain to, that one would wonder at their aptness to any thing.* *Diodorus Siculus* (*o*) gives us much the same Relation, and 'tis likely *Agatharchides* borrowed his from him: for he tells us, Αἱ δὲ Σφίγγες γίγνονται μὲν περί τε τὴν Τρωγλοδυτικὴν, καὶ τὴν Αἰθιοπίαν, ταῖς δὲ μορφαῖς ὑπάρχουσιν οὐκ ἀνόμοιοι ταῖς γραφομέναις, μόνον δὲ ταῖς δασύτησι διαλλάττουσι. Τὰς δὲ ψυχὰς ἡμέρους ἔχουσαι καὶ πανούργους, ὅτι πλεῖον καὶ διδασκαλίαν μεθοδικὴν ὑπιδέχονται. i. e. *Sphinges circa Troglodyticam & Æthiopiam existunt, formâ his non absimiles, quæ Arte Pictorum exhibentur, nisi quòd hirsutia tantummodò differunt. Placidi illis sunt Animi, & versuti, artisque quæ compendio tradi solet, admodum capaces.* But *Philostorgius* (*p*) is so particular in his Description, and he is the more to be credited, because he declares he had seen them himself, that I think I need

(i) *Plinij Hist. Nat.* lib.8.cap.21.p.m.168. (k) *Solinus Polyhist.* cap.27. p.m.39. (l) *Ælian. de Animal.* lib.16.cap.15. (m) *Strabo Geograph.* lib.16.p.533. (n) *Agatharchides apud Photij Biblioth.* p. m. 1362. cap. 38. (o) *Diodorus Siculus Biblioth.* lib.3. p.m.167. (p) *Philostorgius Hist.Ecclesiast.* 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 Σφὶγξ γένος ἐστὶ πιθήκων (αὐτὸς γὰρ θεασάμενος γράφω) ἧς τὸ μὲν ἄλλο σῶμα λάσιόν ἐστιν, ὡς τοῖς ἄλλοις πιθήκοις· τὸ δὲ στέρνον ἄχρι γε αὐτοῦ τοῦ τραχήλου ἐψίλωται, μαζοὺς δὲ γυναικὸς ἔχει. Ἐρυθρά τινος βραχέος καὶ χρωειδοῦς ἐπανασήματα ἅπαν ἐν κύκλῳ τὸ γεγυμνωμένον τοῦ σώματος περιέχει, καὶ εἰς πολλήν τινα εὐπρέπειαν ἀνθρωποφανεῖ ὄντι τῷ ἐν μέσῳ χρώματι συναρπαζομένου. Τὸ δὲ πρόσωπον εἰνεστρογγύλῳ μᾶλλον, καὶ εἰς γυναικίαν ἕλκει μορφήν. Ἡ τε φωνὴ ὑπεικὼς ἀνθρωπείᾳ, πλὴν ὅσον ἐκ εἰς ἄρθρα διαιρουμένη, ἀλλά τινι ταχέως. καὶ οἷς μετά τινος ὀργῆς τε καὶ ἀχθηδόνος ἄσημα ἐπιφθεγγομένης προσεοικυῖα βαρυτέρα τε μᾶλλον ἐστὶν ὀξυνομένα· ἄγριόν τέ ἐστι δεινῶς τὸ θηρίον, καὶ πανουργότατον, καὶ οὐδὲ ῥαδίως πιθανευόμενον. 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 præcipitate; 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. Circumducebat eam circulator quidam Gallus, ex ignotis antea Insulis recens advectam.* And a little after adds, *Ipsa verò Sphinx toto erat pectore glabello, facie & auribus humanis proprioribus, dorso hispido supra modum, fusco & oblongo Pilo, coque 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 Operæ subcisivæ sive Meditat. Hist. Cent.* 1. *Cap.* 71. p. m. 325.

FINIS.

Ferania in Sophia; some while they fight with Canes, but [illegible] Menecles

An Advertisement

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

PHOCÆNA, or the *Anatomy* of a *Porpess*, dissected at *Gresham-Colledge*; with a *Præliminary* Discourse concerning *Anatomy*; and a *Natural History* of *Animals*, *Lond.* Printed for *Benj. Tooke* at the Ship in St. *Paul's* Church-yard, 1680. in 4to.

Vipera Caudisona Americana; or the *Anatomy* of a *Rattle Snake*; dissected at the Repository of the *Royal Society*, *Jan.* 168$\frac{2}{3}$. vide *Philosoph. Transactions* N° 144. p. 25.

Lumbricus Latus, or a Discourse read before the *Royal Society* of the *Joynted Worm*. Wherein a great many Mistakes of former Writers concerning it, are remarked: it's Natural History from more Exact Observations is attempted: and the whole urged, as a 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.

Tajaçu, 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 4to.

Embrionis Galei lævis Anatome. Vide Franc. Willoughbæi Hist. Piscium. Edit. à Jo. Raio in Appendic. pag. 13.

Lumpi Anglorum Anatome. ibid. pag. 25.

The *Scent-Bags* in *Poll-Cats*, and several other *Animals*, first discovered. *Vide* Dr. *Plot's* Natural History of *Oxfordshire*, pag. 305.

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

Observ. 26. *Vomica Pulmonis.*

Obſerv. 27. *Hydrops Thoracis, & difficultatis ſpirandi rara Cauſa.*
Obſerv. 28. *Hemoptoe, Tuſſis, Pleuritis & Empyema à duobus claviculis, 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. p. 1035.

An Anatomical Obſervation of four *Ureters* in an Infant; and ſome Remarks on the *Glandulæ 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.

Gerania in Scythia; some write they fight with Cranes, but ~~[illegible]~~ Menecles

Serania in Scythia; some wide they fight with canes, but Mercelas

Ceramia in Scythia; some wide thin frill with cameo, And Moneda

H.P.Cantlie