

The anatomy of a pygmy compared with that of a monkey, an ape, and a man. : With an essay concerning the Pygmies, &c.; of the antients. Wherein it will appear that they are all either apes or monkies, and not men, as formerly pretended. To which is added, The anatomy and description of a rattlesnake : Also of the musk-hog. With a discourse upon the jointed and round-worm. And two letters concerning a monstrous birth, and preternatural conception : With reflections thereon. The second edition. / Being the works of Edward Tyson, M.D. F.R.S. Adorn'd with copper-plates, engraved by M. Vander Gucht.

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T.p. between pts ii and iii

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



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 myself 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 spite, when one gives, or refuses them what they passionately long for.

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

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

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

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

The *Skin* of the whole Body of our *Pygmie* was whitish; but that on the *Head* was tawny, and of a darker colour. 'Twas thin, but strong, and adhered pretty firmly, and more than usually to the *Flesh*; it's greatest adhesion was at the *Linea alba*, and in the *Palms* of the *Hands*, and the *Soles* of the *Feet*, and in the *Fingers* and *Toes*; as it is in *Men*. In the *Skin* of the *Arm-pits*, I observed those *Glandule 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 *Glandule Axillares*. For these I have observed to be *Lymphatic Glands*; and have traced the *Lymphaducts* thence to the head of the *Ductus Thoracicus*, where they empty themselves.

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

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

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

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

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

The *Omentum* or *Caul* in our *Pygmie* was very thin and large, falling over and covering most parts of the Guts. 'Twas fastened a little to the *Peritonæum* in the Left Side. It had but little *Fat*, and was tinged in many places with a deep Yellow Colour, by the Bladder of the *Gall*, as was likewise part of the *Duodenum*. It had numerous Blood-Vessels, and it's adhesion 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 adhesion; 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, adharens Extremo Hypochondrio dextro, quâ parte Colon substratum jecoris limbis. Idem adhaeret 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 distinguished into three Parts; The *Gula*, the *Ventricle*, and *Intestines*: The two latter do lie in the Cavity of the *Abdomen*, the former, in the *Thorax* and *Neck*; but being but one continued *Canalis*, I shall treat of the whole here.

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

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

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

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

This *Gula* or *Gullet* is a *Hollow Muscle*, and fitly enough compared to a *Funnel*; where the *Mouth*, which may be thought a Part belonging to it, being more capacious, first receives the *Food*, and prepares it, by chewing, and then forces it down into this *Stem* or *Pipe*, to convey it to the *Ventricle*. I did not observe, upon the Dissection, any difference of this Part in our *Pygmie*, from that of a *Man*. For as in a *Man*, (and so conformable too in other Circumstances) it passed under the lower *Muscle* of the *Diaphragm*, which by that slant running of it's 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. Fœsij 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.

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 Inosculation 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. *Porro vidi* (saith he) *& Lapidem Pa-zahar natos in ventriculis Simiorum, qui teretes sunt & longitudinem digiti aliquandò excedunt, qui præstantissimi omnium censentur.* *Pa-zakar*, he tells us a little before, signifies in the *Persian*, *contra venenum*, whence may come the word *Bezoar*. *Joh. Georg. Volchamers* (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. Baldens*, in his *Description* of *Malabar* and *Cormandel*, does esteem it much cheaper. *Casper Baubinus* hath wrote a distinct *Treatise* of the *Bezoar-stone*, to whom I refer my Reader; and shall only farther 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 *Trial*, 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 Lactææ*, as they are call'd, which conveys it into the *Blood*, for the recruiting the constant waste that is made there, and repairing it's losses; as also for the *Nourishment* and *Augmentation* of the *Parts*: And for the doing this, 'tis requisite that the *Intestines* should be long; and they being so, that they should be coyled and winding; that this *Separation* might be the better performed, and so we find the *Guts* in our *Pygmie*. For from the *Pylorus*

(53) *Jac. Bontij, Hist. Nat. & Med. lib. 4. in Animadv. in Garcia ab Orto, cap. 45. p. m. 48.*

(54) *Miscell. Curiosa German. Decuria secundæ annis secundus An. 1683. Observ. 189. p. 420.* (55) *Joh. Bapt. Tavern. lib. 2. Itin. Indic. cap. 24.* (56) *Bontius ibid. in cap. 46. p. m. 48.*

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

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

Into the *Duodenum* of our *Pygmie*, a little below the *Pylorus*, were inserted the *Ductus Communis* of the *Gall*, and the *Ductus Pancreaticus* ; they both emptying themselves into the Gut at the same *Orifice* as is usual in *Man*. And the same is observed likewise by *Drelincourt* in the *Male Ape* he dissected, where he tells us, à *Pyloro qui videtur suggrunda esse circularis & carnosâ 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 *Convulsions* 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 *Job. 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 *feces* ; 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 *Aper* 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 Infertion of the *Ileon*, *Manus transversæ, seu trium digitorum spatium*. And *Drelincourt* tells us, *duarum unciarum est*. But since it hath those *Ligaments* of the *Colon*, 'tis plain, that 'tis only a part of it, and not a distinct Intestine; or as *Blasius* more truly calls it, *Principium Coli*. He hath given a figure of it, but not very exact; and in another figure he represents the *Valve* of the *Ileon* at the *Colon*, or rather *Valves*; for he makes more than one. His *Description*, as 'tis faultily printed; so I am afraid, it is not very accurately drawn up, and therefore do omit it.

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

This great length of the *Intestines* in our *Pygmie* was orderly colligated and fastened to the *Mesenterie*, which kept them in a due situation; and so, as to make in them, several windings or convolutions; that hereby they might the better make a distribution of the *Chyle*; and the whole was, as 'tis in a *Man*. But I observed here, the *Membranes* of the *Mesenterie*, to be more loosely 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 Lactæa*. 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 *Lymphaducts* 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*. *Glandulae ad radicem Mesenterij, & passim in ambitu, numerosae & planae, magnitudinem Lentulae, sed Ouales. Anastomoses frequentissimae 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-caecum*.

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 *Vertebrae*. 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 felle, duo alij ventriculum amplectebantur, cum lobulo quinto se inferente in spatium ventriculi intra orificium utrumque.* So likewise in the *Female Ape* he tells us, *Jecur opplet regionem Epigastricam quintuplici lobo, uno sexto minimo opplens cavitatem lunarem ventriculi.* But *Blasius* in the *Ape* he dissected saith, *Epar cum humano minimè, optimè cum Canino convenit, manifestissimè in lobos VII divisum, tantæ magnitudinis ut etiam utrumque Hypochondrium*

drinum occupet. Vesalius (57) therefore is in the right, where he saith, *Quæ enim Dissectionum Professores de Jecoris formâ, ac penulis seu fibris (quos ὀβείας Græci vocant) commentantur; è Canum potius, & 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 Joachin 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' ὅτι τὸ τῆ ἀνθρώπου ἥπαρ, καὶ ὁμοίον τῷ βοείῳ.* 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 satisfy 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 adhesion to the Liver was not so much as it is in a Man; for at the fundus or end, it juts beyond the Liver about half an Inch. For about three quarters of an Inch, it is more closely joyned to the Liver; afterwards it is fastened to it only by a Membrane, as is also the Ductus Cysticus. So that the 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) Vasanicusjussdam Calumniarum in Hipp. Galenique rem Anat. depulsio. per Jac. Sylvium. vid. Depuls. 26. p. m. 150. (64) Renat. Henerus adversus Jacobi Sylvi Depulsionum Anat. Calumnias pro Andrea Vesalio Apologia, p.m. 55.

half an inch broad ; it had a great Ductus, which was immediately inserted underneath the Pylorus. This Ductus received three others, which instead of that, which in Man is single, and which is called Hepaticus ; these three Ductus's had their Branches dispersed like Roots into all the Lobes of the Liver, so that the first had four roots, viz. one in each of the three right Lobes, and one in the first of the left ; the second and third Ductus had both their roots in the second of the left Lobes, these branches did not run under the Tunicle of the Liver, so that they were apparent, and not hid in the Parenchyma, as they generally are. But in our Subject the distribution of the Ductus Hepaticus was altogether the same as it is in Man. In the Male Ape, Drelincourt describing the Bladder of Gall, saith, *Vesicula fellea longa 2 $\frac{1}{2}$ 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 figura est, exiguus admodum respectu corporis, coloris nigricantis, læve equidem molleque valde corpus, ast exterius inæquale, quasi ex globulis variis confectum, adeò ut etiam conglomeratis Glandulis Substantiam Lienis annumerare velle, tali in subiecto fundamentum aliquod agnoscat. Ex Ramo Splenico numerosos easque insignes Ventrículo suppeditat ramos, magnitudinem & figuram externam Fig. 3^a. Tab. XI. exhibet.* But his figure of the Spleen was nothing like to that of ours. For I did not observe those inequalities in the *superficie* 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, coheret 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 Biliaris*) was two Inches distant therefrom. *Blasius* in his *Ape* describes it thus; *Pancreas ventriculo substratum, solidæ admodum substantiæ est, nec adeò molle, quàm in Canibus aliisque Animalibus notatur. Longum itidem insigniter, ast latitudinis ejus, quæ nè minimi digiti latitudini respondeat.* He takes no notice here, how the *Ductus Pancreaticus* was inserted; which *Drelincourt* tells us in the *Female Ape* was eight lines above the *Porus Biliaris*. *Pancreas connatum Lienali Caudæ, & extremo Reni sinistro. Ejus ductus inseritur octo lineis supra Porum Biliarium, contra ac Canibus, substernitur immediatè Ventrículo, & 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.*

The *Glandule 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; its figure was triangular. *Blasius* in his *Ape* tells us, *Glandula Renalis triangularis ferè figuræ est, notabilis valde pro ratione Corporis*, and gives us a figure of it, which was nothing like ours. What *Drelincourt* remarks in the *Male Ape*, is, *Capsule Atrabilariæ triplicem Scrobiculum habent, quarum liquor expressus linguam non ita constringit, uti in Capsulis femineis*. And in the *Female Ape* he tells us, *Ren Succenturiatus sinister ab Emulgente venam habet; idem major Dextro*. This I observed in our *Pygmie*; but he saith nothing farther here of their *Liquor*, nor did I taste it in ours.

We shall now proceed to the *Kidneys*. In our *Pygmie* I did observe very little or no fat in the common or outward Membrane, usually called *Adiposa*: *Drelincourt* observed the same, *nullus hic Adeps in Tunica communi vel 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 of a 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 *Plebotomy* or *Bleeding* is very necessary. And without doubt was the Cause of the Success *Riverius* (66) met with in a Patient, who had a Suppression of Urine for three days; for upon bleeding freely, he was presently relieved, and in a short time rendered a large quantity of Urine. In this *Tubulary* Part of a Humane *Kidney* I always observe these *Blood Vessels*: but here usually the *Cortical* or *Glandulous* Part makes a deeper descent between the heads of this *Tubulary*, and divides it into several Bodies; and as many of them as appear, so many lesser *Kidneys* may be reckoned to make up the Body of each *Kidney*. In *Infants* the *Kidney* externally appears more divided

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

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

The *Parisians* in the *Kidneys* of their *Monkeys* observe, that they were round and 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 uncie. Renalium venarum dextra longè elatior sinistra. Rene aperto Carnis discrimen ut in homine, exterior quidem nigricans lineis quatuor crassa, interior albicans lineis duabus.*

The *Pelvis* of the *Kidney* in our *Pygmie* was as 'tis usually in a *Man*; and the *Ureters* had nothing remarkably different in their Structure, from the common make. They were about the 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 supra Psoas Musculo & Iliaco, atque subius vasis Spermaticis, quibus decussatim substrati sunt etiam quibus vascula admittunt, sese reflectunt in Hypogastricam, decussantes ramos Iliacos & Ejaculatorios.* And in the *Female*, *Ureteris expansiones arcuatim 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 *Canals* 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 Celiaca*; 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; contra 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 Preparantia*; The *Arteries* and *Veins*. The *Spermatic Arteries* in our *Pygmie* do both arise out of the Trunk of the *Aorta*, a little below the *Emulgent Arteries*, as in our figure; and after having ran a little way, they meet with the *Spermatic Vein*; and are both included in a common *Capsula*, and so do descend to the *Testes*. These *Arteries* do carry the blood to the *Testes*, from whence the *Semen* is afterwards separated; the residue of the *Blood* is return'd from the *Testes* by the *Spermatic Veins*; whereof that on the right side enters into the Trunk of the *Vena Cava*, a little below the right *Emulgent Vein*; and that of the left, is emptied into the left *Emulgent Vein*, just all one as it is in a *Humane Body*. Having injected the *Spermatic Vein* with *Mercury*, it discovered abundance of *Vessels*, running waving; which otherwise did not appear: and a great many of them were extreamly fine and small.

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

(67) *Thom. Bartholin. Alia Medica & Philos. Hafniens. an. 1691. & 1672. Obl. 26.*

Aortæ paulò infra Emulgentem sinistram enascens sub Venâ Emulgente intercruciat Cavam ascendentem, quæ superinequitat, & conjungitur Venæ Conso- ciali eò præcisè loci ubi Vena inseritur suum in truncum. Sinistra Vena Sper- matica inseritur in Emulgentem juxta truncum Cavæ, & consocialem Arteri- am admittit eò præcisè loci, in quo enascitur dextra. So in the Female Ape he saith, Spermatica Vena sinistra ab Emulgente sinistra, 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 contract- ed 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 di- lated, 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 other- wise receive in climbing Trees, or other accidents in the Woods. How- ever, 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 extremely given to *Venery*, appears by infi- nite 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 in- clined 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 for- ced 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 *Wo- man* 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 semio natis, mulierem

(68) *Miscell. Curiosa German. Decur. 2. Ann. 5. Obs. 187.* (69) *Ant. Deusingij Fassicul. 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 grandiozem, cui reliqui loco cesserint: hunc mulierem blandè manu captam in antrum ingens abduxisse, eique cum ipsum tum ceteros copiam pomorum, nucum, radicumque variarum apposuisse; & nutu ut vesceretur invitasse; tandem à ferâ coactam ad stuprum; facinus hoc multis diebus continuatum adeò, ut duos ex ferâ liberos pepererit: ita miseram (quantò mors optabilior!) victitasse per annos aliquot; donec Deus misertus navim cò 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 supplicasse, uti se facinore, & calamitosissima servitute irent ereptum, adsentientibusque, & casum miserantibus illis, eam cum ipsis navim adscendisse. Sed ecce tibi simium supervenientem inconditis gestibus, & fremitibus conjugem non conjugem revocantem: ut vidit vela ventis data, concito cursu de liberis unum matri ostentat, minatur, ni redeat, in mare præcipitaturum; nec segniter fecit, quod minatus: tum recurrit ad antrum, & eadem velocitate ad littus rediens 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 clauetro perpetuo commutasse.

But to return to our Business. Our Pygmie in this Particular of the Scrotum, more resembles the Ape-kind, than a Man. For the 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, sèst 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 Testiculæ dorsum. Testiculus autem Ventri Epididymidum adhæret, nisi fibrillis paucis & laxis, capite suo, quo SpermatICA Deferentia admittit, separatur illæsus, cauda autem sua, qua ejaculatoria vasa emittit, tot punctula candicantia exhibet, divulsus ab Epididymide, quot à Testiculo canaliculi protenduntur.*

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

The *Parisians* here do take notice of that *Passage* in *Aristotle* I have already quoted, where he likens the *Parts* of *Generation* in the *Male Ape* to those of a *Dog*, more than a *Man*. But the *Philosopher* herein, is under a *Mistake*; for, as they instance, in the *Penis* of a *Dog*, there is a *Bone*, which is not in the *Monkey's*; so likewise in *Monkeys*, there are *Vesiculæ Seminales*, which are not to be met with in a *Dog*. They describe them in their *Monkeys* thus: The *Glandulous Prostatae* were small; the *Parastatae Cystoides* 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 insigniter intumescunt. Quod si premantur, manifestissime observamus Mate-*

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

riam its 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 *Prostata*, 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 suprâ 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 *Mammet*, 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 prorsus expers est frænuli ac proinde Præputium devolvitur ad radicem usque Penis, & denudatur Glans ipsa, atque Penis integer. Balanus consimilis virili, excepto frænulo, atque præterea hiatus 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, exterius carnosæ naturæ, interius reticulari vasorum plexu refertum, interstitia ipsius materiâ rubicundâ occupante*, by this I suppose he means the Bulb of the Penis. Drelin-court expresses it better, where he saith, *Totus Penis duobus Ligamentis Cavernosis à tuberibus Ischij gaudet*. In our Subject these two bodies were very large and cavernous within. But what Drelincourt adds, *Urethra planè carnosâ*; This was different in our Pygmie; for as I have mention'd, the sides of the Urethra here were Cavernous too, tho' not much.

How the Organs of Generation are in the Female of this Species of Animals, I have had no opportunity of informing my self. But by 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 exterior Orifice was round and strait, as in Bitches, and the generality of other Brutes, and had neither Nymphæ nor Carunculæ. The Neck of the Bladder had it's hole otherwise than in Woman, being very far in the Neck of the Matrix, viz. towards the middle, at the place where it's roughness began, which were seen only towards the extremity of the Ductus near the Internal Orifice. The Trunks of the Matrix were also different from those of Women, and resembling those of Brutes in that they were proportionably longer, and more redoubled by various turnings. The Clitoris had something more conformable to that which is seen in other Brutes that have it, than in that of Women, being proportionably greater, and more visible than it is in Women. It was composed of two Nervous and Spongy 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 enveloped 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 spongy, 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.

The

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 admodum dura, & paulò intrà osculum internum duritie cartilaginosa.*

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 satisfy 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 Candicem 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 latere, qui recte sectionem administrant; innuens Herophilo & Marino ejusmodi Lobum fuisse incognitum, uti sanè fuit, cum illi Hominum Cadavera, non autem cum ipso, simiarum ac Canum duntaxat aggredierentur, in quibus præsentì 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 reapse 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, nervosæ Membranæ colliguntur.* The Comparison, I think, is not so well made.

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

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

Vesalius (73) therefore tells us, *Ceterum Involucris mucro, & dextri ipsius lateris egregia portio Septi transversî nerveo circulo validissimè, amploque admodum spatio connascitur, quod Hominibus est peculiare. Simiis quoque & Canibus & Porcis involucrum à septo multum distat. Tantum abest ut ipsi magnâ sui portione connecteretur, adeo sanè ut & hinc luce clarius constet, Galenum hominis viscera aut oscitantèr, aut neutiquàm spectasse, Simiasque & Canes nobis describentem, immerito veteres arguisse.* He can't forbear at all turns to have a fling at *Galen*: But he is here in the right, and *Galen* mistaken. So *Blancardus* (74) tells us, *Homo præ cæteris Animalibus hoc peculiare habet, quod ejus Pericardium Septi transversî 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 adhesion 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. Vesaliij 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, quod sit Lacertus, quamvis sit similitum rerum in eo, verum 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*) *μῶς ἔστιν κάρπια ἰχθυόεσς, ἔ τ' αὖ τοῦ ὕψους, ἀλλὰ πλεοναχί σαρκός*. *Cor musculus est validus admodum non Ner-vo, verum Carnis spissamento*. And *Steno* and *Dr. Lower* since have shewed us the way of dissecting it, and have made it most evident that 'tis *Muscular*; and it's *motion* is such; but as *Avicenne* observes, 'tis not a *voluntary* motion, but *involuntary*. 'Tis pity we had not a better *Translation* of his *Works*; for unless it be some particular Pieces, the rest is most barbarously done, as appears from that little I have quoted of him. But to return to our *Pygmie*; the magnitude and figure of the *Heart* here, was exactly the same as represented in our *Scheme*, where part of the *Pericardium* is left lying on it. Both in the right and left *Auricle* and *Ventricle*, I observed two *Polypos* *Concretions*, which plainly represented the *Valves* both in the *Arteria Pulmonalis*, and *Aorta*. I must confess by what I have hitherto observed of them, (and I have very frequently met with such *Concretions* in *Humane Bodies*) I cannot think these *Polypus's* to be any thing else, than the *Size* of the *Blood*, or the *Serum* coagulated after *Death*. The Observation I formerly gave (77) of a *Polypus* in the *Trachea* and *Bronchie* of a Patient troubled with an *Hæmoptoe*, in it's kind I think remarkable.

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

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

There was nothing farther, I think, that I observed peculiar in the Thorax of our Pygmie. I shall now therefore follow the Duct of the Trachea up to the Throat. And here as in Man, I observed placed the Glandula Thyroidea, upon the Cartilago Scutiformis of the Larynx; 'twas red and spongy, 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, *Glandula Thyroidea & Cricoidea 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 Quadrumanous 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 extremely 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 justify 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 & carnosæ*.

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

At the Root of the *Tongue* of each side were placed the *Tonsillæ* in our *Pygmie*, as they are in a *Man*. They were protuberant and hard, and not so foraminulous, as usually in *Man*; very probably being vitiated by the *Ulcer* in the Cheek. For *Drelincourt* tells us in the Ape, *Amygdalæ 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. *Glandulae salivales ad angulum Maxillae Inferioris oblongae, laxae, 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 simiae saccum formant, intra quem Esculenta reconduunt*. Pliny is very expresse, 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 insensim 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 round and large: The *Crystalline Humour* Spherical or *Lentiformis*, and almost as large as in a *Man*. The *Optic Nerve* was inserted exactly as in a *Man*. The *Tunica Choroides* rather blacker than in a *Man*. And whereas in *Brutes*, that are *prono Capite*, there is usually a *Musculus Septimus*, which from it's use is call'd *Suspensorius*; in our *Pygmie* there was none of this *Muscle*. All the other *Muscles* of the *Eye*, were exactly the same as in *Man*. This *seventh Muscle* is also wanting in the *Ape*, as appears by the figures *Casseri* (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 extremely 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 Pentasthesion*, h. c. de quinque sensibus. Vide de Organo visus. Tab. 3. fig. 12, 13.

There is a vast difference to be observed in the formation of the Parts, that serve to compose the *Brain* in these various *Animals*. And tho' the *Brain* of a *Man*, in respect of his *Body*, be much larger than what is to be met with in any other *Animal* (for *Vesalius* makes the *Brain* of a *Man* to be as big as those of three *Oxen*) yet I think we can't safely conclude with him, that *Animals*, as they excell in the largeness of the *Brain*, so they do likewise in the Principal Faculties of the *Soul*: For if this be true, then our *Pygmie* must equal a *Man*, or come very near him, since his *Brain* in proportion to his *Body*, was as large as a *Man's*. *Vesalius* (80) his words are these; *Cerebri nimirum constructione Simia, Canis, Equus, Felis, & Quadrupeda quæ hætenus vidi omnia, & Aves etiam universæ, plurimæque Piscium genera, omni propemodum ex parte Homini correspondere: neque ullum secanti occurrat discrimen, quod secus de Hominis, quàm illorum Animalium functionibus statuendum esse præscribat. Nisi fortè quis merito 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, *Vesaliij de Corporis Humanis fabrica*, lib. 7. cap. 1. p. 773, 774.

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

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

The figure of the whole *Brain* in our *Pygmie* was globous ; but by means of a greater jutting in of the Bones of the *Orbit* of the *Eye*, there was occasioned a deeper depression on the *Anterior Lobes* of the *Brain* in this place, than in a *Man*. As to other Circumstances here, I observed all Parts the same. The *Anfractus* of the *Cerebrum* were alike ; as also the *Substantia Corticalis* and *Medullaris*. On the *basis* of the *Brain*, we may view all the *Ten* pair of *Nerves* exactly situated and placed as in a *Humane Brain* ; nor did I find their Originations different, or any Particularity that was so. I shall therefore refer to the figures I have caused to be made of the *Brain*, and their Descriptions ; where we may observe the *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 *Glandula 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 *Anterior* part ; but in the inward parts before the *Cerebellum*, there was hardly any : they in requital were much deeper in proportion. The *Apophyes*, 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 antierour 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 spacious. The *Corpora Striata*, the *Thalami Nervorum Opticorum* all alike. The *Plexus Choroides* the same ; as were also the three *Foramina* as in *Man* ; The *Glandula Pinealis* proportionably large. The *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 *Skeleton* 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 Chapter (81) recommends to his *Students*, when they cannot have an opportunity of Consulting an *Humane Skeleton*, then to

(81) *Galen. de Anat. administr. lib. 1. cap. 3. p. m. 29, 30.*

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 Skeletons* themselves, which he much prefers before Books. But since in his time *Humane Skeletons* 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 Offium 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 *Skeletons* 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 *Skeleton*. But saith he, σὺ δ' εἰ μὴδὲ τοιῦτον μὴδὲν δ' τύχῃσιν διαδοῖται, πίδμον ἐν ἀνατεμαίν, ἐπ' αὐτῇ καλάνοσον ἔκασον τῶν ὀστέων 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, ἀπὸ πάντων, ὡς ἔφην, τῶν ὀστέων καλάνοσαι καὶ τὴν φύσιν εἶτ' ἔπειτα ἀνθρώπου σώματι, εἶτ' ἐν πιδμον εἰ διωκθεῖς. ἀμεινον δ' ἔπειτα ἀμφοῖν, εἰδ' ἕξῃς ἔπειτα τῶν μὲν ἀνατομῶν 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 unconvincive.

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 Andrea Vesalio Apologia*. *Sylvius* afterwards procures a Disciple of his to write against *Vesalius*, who puts out, but unsuccessfully, *Apologia pro Galeno contra Andream Vesalium Bruxellensem*, *Francisco Puteo Medico Vercellensi Authore*. A Scholar of *Vesalius*, *Gabriel Cunnæus*, 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*

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, talentum 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 justify *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 *Skeleton* 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 *Skeleton* with that of a *Man*, and an *Ape*, and a *Monkey*, I thought I could not do better, than to insert this Discourse of *Riolanus*; and by Commenting upon it, to shew wherein our *Pygmie* a-

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

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

C A P. II.

De Capitis & Faciei Ossibus.

Simiae Caput (a) rotundum est, humano simile, cynocephali verò caput oblongius. Utriusque (b) Suturae adeo sunt obscurae, ut earum nullum appareat vestigium. Propterea potius harmoniae dici merentur, quam suturae, quia rerum consutarum figuram non æmulantur. Attamen Volcherus Coiter suturas attribuit simiis, parum ab humanis discrepantes. In cercopitheco squamiformes desiderantur. (c) Frontis Os in calvariae 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) Simiae 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 *Zygoma* (m), quâ parte ab Osse orbitario procedit, crassum & robustum est, atque ejus in medium lineâ potius 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) Suturae 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 prærepit, ipsumque palatum dirimit.

Maxilla inferior (p) integra est, nullâ lineâ in mento dissecta, brevissima est corporis proportionem, ita ut ex omni animantium genere nullum breviorē habeat, excepto homine. Extremitas quæ cavitati temporum articulatur, est condylodis, ut in homine. Quare non est gynglymoides hæc articulatio, ut scripsit Volcherus Coiter.

(q) Simia in dentibus caninis & molaribus differt ab homine. Caninos quidem habet dentes humanis similes, in unaquaque maxilla binos, qui utrimque assident & accumbunt incisoriis. Singulas radices ut incisores habent, sed aliis infixas robustioresque, minus etiam ex anteriore parte, quàm posteriore pressas & angustas. Ac simia cynocephalos dentes caninos longiores prominentioresque, quàm vera simia obtinet. Molarium dentium numerus in homine incertus est, auctore 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 tantum apicem obtinet: Attamen in posteriorum dentium mensis, secundum longitudinem maxillarum, profunda admodum linea exsculpta est. Quam lineam altera etiam transversa, quæ in quinto dente simiæ non caudatæ gemina est, intrinsecus & extrinsecus ad gingivam usque protractata intersecat. Quo fit, ut singuli ejusmodi dentes eminentias, ut plurimum quatuor in angulis (nam quinto sex sunt) tres verò foveas in medio habentes, duarum ferrarum mutuo sibi occurrentium modo committantur: quod profectò accuratissimus Author Galenus explicare minime prætermisisset, si molares simiarum descripsisset.

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

(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 *Skeleton* 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 *Vertex* round by the Ears to the *Vertex* 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 *Vertex* to the *Foramen* where the *Medulla Spinalis* passes out, was about Three Inches and a quarter; in the *Monkey* Two Inches. So that in the largeness of the *Cranium*, the *Pygmie* much exceeds the *Monkey*, as also *Apes*, and more resembles a *Man*.

(b) The *Sutures* in our *Pygmie* perfectly resembled those in an *Humane Cranium*; The *Sutura Coronalis*, *Sagittalis*, and *Lambdoides* being all *ferrated* or indented very curiously, as in *Man*. In the *Lambdoidal Suture* I observed Nine *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 *ferrated* 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 *ferrated*; then the *Suture* disappeared, and there was formed here a rising ridge of the *Cranium*, which was continued to that *Apophysis* which makes the hinder part of the *Os Zygomaticum*. There was no such bony ridge in the *Cranium* of the *Pygmie*. In the *Monkey* too I saw the *Squammos Sutures* very plain, tho' *Riolan* denies them; which likewise in our *Pygmie* was very apparent. Our *Pygmie* therefore in the Structure of the *Sutures* exactly resembled a *Humane Cranium*, and more than *Apes* and *Monkeys* do: For in them the *Coronary* and *Lambdoidal Sutures* were only in part *ferrated*; and they had no *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 numbered about Thirty *Foramina*; here was likewise that long ridge, (which is call'd *Crista Galli*) as in a *Man*, to which the *Dura Mater* was fastened.

(d) In

(d) In the *Cranium* of the *Monkey* there was no *Crista Galli* ; and where the *Os 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 spongy and cavernous, and might answer the same end, tho' not formed perfectly alike.

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

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

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

(l) Because I would not spoil the *Skeleton*, 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' *Casseri* 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, Ἀπάντων γὰρ τῶν ζώων ἀνθρώπου ἔχει βραχυτάτω τὴν γένιν, ὥς πρὸς τὴν ἀναλογίαν δηλονότι τῷ παντὶ σώματι. εἰδ' ἐξ ἧς ἀνθρώπου πῖθκος, εἴτα λύγκες, καὶ σάτυρες, καὶ περὶ ἐξ ἧς κύνόκεφαλοι. 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 *Condylroides*, 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. Administ. lib. 4. cap. 3. p. 94.*

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

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

C A P. III.

De Spina & Ossibus & Adnexus,

SIMIÆ (a) *Cervix brevis est, septem vertebrae extracta, 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 vertebrae humanæ obtusa quædam eminentia apparet, quæ in simia magis extuberat, & in mucronem producitur. Quod si vertebrae & 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 adeptæ est, eumque bifidum, magisque recurvum & aduncum, quàm in aliis vertebrais. 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 transversæ ascendenti utrimque foramen habet, ad nervum transmittendum, quo humana caret vertebra, septima colli vertebra in homine sæpius est perforata: Unde evenit, quod transversæ processus hujus vertebrae non sunt similes apophysibus transversis colli, sed potius thoracis apophysibus transversis assimilantur. (e) Vertebrae dorsi corpora parum ab humanis differunt, neque apophyses multum dissimiles sunt, exceptis rectis ultimarum duarum vertebrarum, quæ rectiores sunt in simiis, paulum deorsum inclinat in hominibus. In (f) postremis vertebrais dorsi reperiuntur quatuor infernæ apophyses articuli gratiâ constructæ. In humanis vertebrais duæ tantum notantur, quas etiam in lumborum vertebrais 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 vertebrae lumbos efformant, in simiis non secus, quàm in aliis quadrupedibus sex adsunt. (i) Harum vertebrarum processus ab humanis differunt. Si quidem transversi in homine teretes sunt & oblongi, nonnihil in exteriora conversi, costularum vicem gerentes. In simia sunt ampli, intro spectantes, & instar squammæ tennes: figurâ caudam hirundinis referunt, aut cornu reortum, 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 hiato 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 apophyseon 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 sterni committuntur. Quinque vero nothæ costæ non desinunt in perfectam cartilaginem versus sternum invicem constrictæ, ut in homine, sed osseæ magis quàm cartilaginosæ, à se mutuo disjunguntur. 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 rectè procedit, inde ad acromion usque multùm curvata intumescit : huic articulationi interjectum est ossiculum, quod in homine ad decimum octavum annum & ultra, 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 Skeleton*.

(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 Skeleton* : 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, supràve suscipitur*.

(b) The

(b) The *Vertebræ* of the *Loins* in our *Pygmie* were about two Inches long; and their number the same, as in a *Man*, viz. five; and not six, as are in *Apes* and *Monkeys*: But the *Os Illium* 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 diffecans, interdum quatuor ex Ossibus componi inquit. Sub Osse inquam Sacro largius sumpto, Coccygem quoque comprehendens: (quem Coccygem pro uno Osse, ut in præsentî 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 Vertebrais.* 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 *Skeleton* of a *Monkey* I observed but three *Bones* or *Vertebræ* which did make up the *Os Sacrum*.

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

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

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

Monkey, there are more Bones, and those perforated, as *Riolan* describes them. Hence *Julius Pollux* styles it, $\delta \tau \epsilon \nu \lambda \delta \varsigma \kappa \acute{o} \kappa \kappa \upsilon \zeta$, *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 Skeleton*; 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 Extrems 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 Extrems of the *Nothæ* were *Cartilaginous*, not *Ossious*, and continued to the *Sternum* as in an *Humane Skeleton*; and the Articulation of the *Ribs* was more on the Body of the *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 Skeleton*, than the *Monkey's*, being much broader and larger, and as far as I observed just alike.

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

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

narrower, and the *Basis* was proportionably longer. But this I suppose might happen in preparing the *Skeleton* 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.

C A P. IV.

De Artubus Superioribus.

(a) **S**IMIÆ & *Hominis Omoplatæ omnino similes sunt.*
 (b) *Humerus simiæ non admodum ab humano differt, in caudata dissimilis est juxta inferius caput, quod cubito articulatur. Hac enim regione reflectitur ab exteriori parte introrsum, atque in illa flexura canaliculum acquirit ex opposito latere pervium.*

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

(d) *Carpus simiæ non valde differt ab humano, obtinuit tamen nonum os, de quo sic loquitur Eustachius: Hoc ossiculum non in prima brachialis acie est locatum, sed tertio ejusdem aciei ossi incumbit, atque inter ea quæ indicem & medium digitum sustinent seipsum inserit: vocatur à Galeno *trapezium*, 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 have already mentioned that the *Scapula* or *Omo-plata* 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 *Skeleton* 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 ἀντίχειρ, 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*, εἴτ', ὃ πρὸς θεῶν ἐδὲν ἔχοντες ἐν ποσάταις χαλαρῶσαι μέμψασθαι, οὔτ' ἐν τῷ ὅσῳ τῶν τεχνίων, ἅτε τὸ τόπον, οὔτε τὸν τρόπον τῆς ἐμψύσεως, ἀλλ' ἐν ἀπάσαις αὐταῖς θωμάσι ἀναλογίαν ὁρῶντες, μᾶς μόνως ἀπολλυμένης κατὰ τὸ αὐτὸν τρόπον ἐν ἀμφοτέρω τοῖς μεγάλῳις δακτύλοις, καὶ ταύτης ἐκ ἀλλ-

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

ως, ἀλλ' ὅτι μὴδὲν αὐτῆς ἐχέζομεν, εἰμὴ φάτε, καὶ χεῖρς τέχνης, ἀπαντα τὰ τοιαῦτα γεγονέναι. i. e. Vos, per Deos immortales, cū nihil habeatis, quod in tot Insertionibus reprehendatis, neque Tendonum molem, neque locum, neque Insertionis modum, sed in his omnibus mirabilem quandam Proportionem videatis, unā solā in utroque magno digito similiter perditā (& hoc non sine ratione, quod eā non egebamus) temerē 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.

C A P. V.

De Artubus Inferioribus.

OSSA (a) Ilium in utraque simia, tam caudata quā in non caudata, toto habitu, & figura distant ab humanis: debiscunt 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 quā in homine. Nam secundum

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 mutuo 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 observavit differentiam, quàm 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 equalis 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, debiscit 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 Debiscence or Separation of the Os Pubis, as Coiter has given in his Figure of the Sceleton of a Monkey, and as he describes it ; from whence I suppose Riolan borrows this Description : for in the Sceletons of two Monkeys I observed these Bones were joined together, and in the Pygmie they are closed as in a Man. When the Cartilage that joins them is divided, they will part asunder ;

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

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

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

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

(c) The Neck of the Head of the *Thigh-bone* in our *Pygmie* was not different in it's length, as I did observe, from that of a *Man's*, but the same proportionably ; as were likewise the two *Apophyses*, called *Trochanteres*.

(d) The *Patella* in our *Pygmie* was not yet ossified. As much as I could discover of it's shape, it was the same as in *Man* ; round and not long ; and but one Bone, and not two, as *Riolan* describes it in the *Monkey*. In the *Skeletons* of the *Monkeys* I used, these Bones were lost, so that I did not observe them.

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

(f) What makes the foot of the *Pygmie* seem different from a *Man's*, is chiefly the length of the *Toes*, and the Structure of the great *Toe*. In other respects, it has a great resemblance with it. For the Bones of the *Metatarsus* here, seemed proportionably as long as in *Man*. The *Os Calcis*, *Calcaneum* or *Heel-bone* was not narrow, but broad ; and forewards, where 'twas joined to the *Os Cuboide* or *Cubiforme*, not broader, nor longer, than behind ; where it juts out so far, as sufficiently secures it's

standing or walking erect. The *Astragalus* I did not observe different from a Man's. The *Scaphoides* or *Naviculare* here was *Cartilaginous*. If one reckons three Joints in the *great Toe*, then there can be but four Bones in the *Planta Pedis*, or *Metatarsus*; which with *Eustachius* I am more inclined to, because really this Part performs upon any occasion the use of an *Hand* too; and the *great Toe*, (like the *Thumb* in the *Hand*) stands off from the range of the other *Fingers*. Besides, I observed a difference in the Colour in the Bones of the *Metatarsus* and the *Toes*: for the Colour of the *Toes* was white and opaque; 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 *Skeleton* 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 *Skeleton* 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 Sefamoideis.

IN Homine Ossa Sefamoidea pauca sunt, magnaque ex parte cartilaginosa, & si ea quæ pollicis 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 Sefamoidea* 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 *Skeleton* of a *Man*, an *Ape*, and a *Monkey*; and shewn wherein the *Skeleton* 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 *Skeleton*, 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 *Skeleton* 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 Skeleton*, from the end of the *middle Finger* to the lower part of the *Patella*, it wanted five Inches and an half: Our *Pygmie* therefore herein imitated the *Ape-kind*. From the head of the *Thigh-bone*, to the bottom of the *Os Calcis* in the *Pygmie*, was about ten Inches. From the setting on of the first *Rib*, to the fastening on of the last, was four Inches. The distance between the last *Rib*, and the *Spine* of the *Os Ilium*, not full two Inches. From the *Spine* of the *Os Ilium*, to the bottom of the *Os Pubis*, in a strait Line, was four Inches and three quarters. The distance between the end of the *Scapula*, and *Spine* of the *Os Ilium* about three Inches.

Both when it was alive, and after it's death, I admired the straitness and shape of it's *Back*. Now the *Scapula* coming down so low on the *Ribs*, and inclining towards the *Vertebrae* 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 *Skeleton* 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 *ακμή* of growth sooner or later, according to their *Longevity*, as a *Man*, (till he is past the *Age* that any of these *Creatures*, it may be, arrive to) does not leave growing : this inclines me to think, since we found most parts of the *Body* so perfected here, that it might not in time much exceed the height it had already acquired. I could have wished that those that have wrote of any of this *Species* of *Animals*, had given us their *Dimensions* and *Ages*; but they are silent herein, or at least too general : only *Le Compte* observed an *Ape* in the *Straits* of *Molucca* four foot high ; but this may not be our sort. As to those of *Borneo*, I was informed by a *Sea-Captain* who used those *Parts*, that the *King* there formerly had one as tall as a *Man*, that would frequently come down to the *Town*, and a great many *Stories* are told of him. The same *Captain* had two given him, both young, and about the height of our *Pygmie* ; but these were not hairy, but naked as a *Man* ; and one of them that he carried to *Batavia*, was looked upon as so great a *Rarity*, that all the time he staid there, his *Ship* was constantly visited by such as came to see it. But 'tis *Matter of Fact*, not *Reasoning*, that will best determine this doubt, and a faithful *Observation* that must inform us, to what tallness this sort of *Animal* in *Angola*, and the *Countries* thereabout, does usually grow ; for in different *Countries* they may be different in this respect, tho' the same *Species*, as is seen even in *Mankind*.

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

Subject to be exactly the *Pygmie* of the Ancients: Of this *Quadrumanus* 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 *Skeleton*, only four and twenty Inches. Not but *Strabo* (92) out of *Megasthenes*, does mention too, the *πενταπλάμυς ἀνθρώπος*, as well as the *τετραπλάμυς*; 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.*

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 flexion 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 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 ἐν ἀνθρώπῳ (saith he) οὐδ' εἰ βέλῃ βεβήκειν ἐπὶ τῶν τετάρων κάλων δυνάμει, ἀπὸ τῶν ἀποτρίψαντων τὸ δώδεκα τῶν κατὰ τὰς ὁμοπλάτας ἄρθρων. i. e. Merito itaque Homo ne, si volet, quidem ambulare quatuor artubus queat, quod in ipso Scapularum Articuli longè à Thorace sint abducti. And *Galen* all along owns, that the Structure of the *Scapula* in the *Ape*, is the same as in a *Man*; and tells us that an *Ape* is exactly neither a *Quadruped*, nor a *Biped*, but amphibious between both. For in the same Chapter, speaking of the *Ape*, he saith, Τὰ δὲ καὶ ὁμοπλάτας καὶ κλεῖς ἀνθρώπου, καὶ μάστιγα προσέκειν, καὶ τοὶ γ' εἰ δεόμενοι εὐκλείας ταύτης τοῖς ἀνθρώποις εἰς ὠκύτητα βεβήκειν ἀπαμφοτερίζουσι τοιχαρὲν ἐκείνοις τοῖς γένουσιν, καὶ ὅτε διπὴν ὄντι ἀκρίβειαν, ὅτε τελεόπουν, ἀλλὰ καὶ ὡς διπὴν χαλῶν, εἰ γὰρ ἀκριβῶς ἐρῶν εἶναι δύναται, καὶ ὡς τελεόπουν, ἀνάπνευσιν τε αἵμα, καὶ βραδύ, διὰ τὸ πλείστον ἀπὸ τῆς τῆς δώδεκα αὐτὸ τὸ καὶ ὁμοπλάτας ἄρθρον, καθάπερ εἰ καὶ τῆς ἄλλων τινὸς ζώων ἀποπαυδὲν τῆς δώδεκα ὁμοπλάτας ἀποχωρήσειεν. i. e. Quod verò ad Scapulas & Claves attinet, homini maxime est similis, quamquam eà parte homini similis esse non debebat, nam quod ad ambulationis celeritatem pertinet, simia inter genus utrumque ambigit, neque enim Bipes penitus est, neque Quadrupes; sed quatenus est Bipes, clauda est, non enim rectè planè stare potest; & quatenus est Quadrupes, mutila simul est, ac tarda, quòd Humeri articulus à Thorace plurimum sit abductus, quemadmodum si idem articulus in alio quopiam animante à Thorace divulsus extra secessisset. Now altho' *Galen* tells us here, that an *Ape* can scarce stand upright; yet in another place he declares quite the contrary; for, saith he (95), Ἐστὶ δ' ὁμοιότατον ἀνθρώπῳ πίθηκος, ὡς ἂν στρογγύλον τε μάστιγ' ἔχων τὸ πρόσωπον, καὶ τὰς κυνόδοντας μικρὰς, τὸ σῆρνον πλατὺ, καὶ τὰς κλεῖς μακροτέρας, καὶ ἡμισὴ δασύς, καὶ ὀρθὸς ἰσταὶ χαλῶς, ὡς καὶ βεβήκειν ἀμέμπτως, καὶ δεῖν ὠκύως δυνάσθαι. i. e. Est autem simillima homini Simia, ut quæ rotundam præcipuè habet faciem, Dentes Caninos parvos, latum Pectus, Claviculas longiores, minimum 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, *πιδναὶ γὰρ ὁ πιδναὶ, καὶν χερσὶν ἔχον σύμβολα.* (96) *An Ape is an Ape, tho' finely clad.*

This Proverb, perhaps, might have it's rise from some such occasion as *Lucian* mentions in another place; and the Story being pleasant, and relating to what we have been just now discoursing upon, viz. it's manner of Motion, we will insert it here, and then proceed to the *Myology*. *Lucian* (97) therefore saith, *Ἀλέξανδρος ὁ ἐν βασιλείᾳ τῆς Αἰγύπτου, πιδνας ὡς τὸ πιδναίῃς διδάξαι, &c.* i. e. *Fertur Ægyptius Rex quidam Simias ut tripudiarent instituisse, Animaliaque (nam admodum ad res humanas imitandas sunt apta) celerrimè didicisse, ut Personata ac Purpurata saltarent: eratque admodum visu res digna, donec Spectator quispiam*

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

urbanus nuces è sinu depromptas in medium abjiceret : id simiæ videntes, tripudij obliti, 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.

T H E
M Y O T O M Y
 O R
 D E S C R I P T I O N
 O F T H E
M U S C L E S.

Of the Muscles of the Abdomen.

TH E *Obliquus Descendens* (Fig. 3. 38.) agreed in it's situation and progress, with that of a *Humane* Body, as the accurate *Galen* and *Vesalius* describe it, and did not partly spring from any of the *Transverse Processes* of the *Vertebræ* of the Loins; or their Ligaments and Membranes, as the later Writers would have it in *Humane* Bodies. Neither did any part of the *Obliquus Ascendens* (Fig. 3. 39.) arise from the *Lumbal Vertebrae*, 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 Vescicæ* 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 Visus*, Fig. XII. & XIII. Nor was there any *Musculus Septimus Brutorum* in this Animal. The *Alæ Nasi* of the *Pygmie* being small, those *Muscles* only appear'd, which from their Office are call'd *Constrictores Alarum Nasi*, ac *Depressores Labij superioris*.

The *Quadratus Genæ*, or *Platusma Myoides*, by reason of the Leanness of the Subject, (as I suspect) did not appear Fleshy. The *Buccinator* (Fig. 3. 7.) was longer than that in *Man*. Nor was it any where intertext with various orders of Fibres, as *Anatomists* commonly represent it in *Man*; or seem'd to arise from any other Parts, but the *Processus Coronæ*; from whence it's Fibres had a strait progress to the Angle of the *Lips*; as in *Men*: This and the former *Muscles*, are counted *Common Muscles* to the *Cheeks* and *Lips*.

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

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

The *Sternohyoides*, *Coracohyoides*, *Mylohyoides* and *Geniohyoides*, did not differ from those in *Men*; which *Drelincourt* has also observed of the former in the *Female Ape*. The *Stylohyoides* 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 *Stylohyoides*. The other *Muscles* appear'd in this *Animal* belonging to it's *Tongue*. The *Sternothyroides*, *Hyothyroides*, *Cricothyroides*, *Cricoarytenoides*, *Posticus* and *Lateralis*; the *Thyroarytenoides*, and *Arytenoides* varied not from those in *Men*. The *Muscles* of the *Fauces* also, differ'd not from those in *Man*, (*viz.*) The *Stylopharyngeus*, *Pterygopharyngeus*, *Oesophageus* and *Vaginalis Gulae*. 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* pass'd over the *Masseter*, and enter'd 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 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 Scapulae*, and upper part of the *Cucularis*, in raising the whole *Shoulder*. The situation of this *Muscle*, is not unlike the upper part of that represented by *Vesalius* in his sixth Table of the *Muscles* O. T. P. Q. which he says is found in *Dogs* and *Apes*, and described by *Galen* in *Humane Bodies*, in whom it is not existent. *Drelincourt* calls it *Levator Omoplate*, (adding) *ab Apophysibus transversis cervicalibus in Acromion & extremum claviculae extenditur*.

The *Muscles* employ'd in the Motion of the *Scapula*, are the *Cucularis*. (Fig. 4. 1. 1. 1.) *Rhomboides* (Fig. 4. 6.) *Levator Scapulae* (ib. 5.) These also agreed with the *Humane*: The like being taken notice of by *Drelincourt* of the *Cucularis*, in the *Female Ape*. The rest of the *Muscles* of the *Thorax*, are the *Serratus superior posticus*, (Fig. 4. 7.) the *Serratus inferior posticus* (Fig. 4. 32. 32.) These differ'd not from those in *Men*. The *Sacrolumbalis* (Fig. 4. 29.) was not so thick as in *Men*, but was every way slenderer.

The *Muscles* employ'd in the Motion of the *Head* of the *Pygmie*, 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 *Mastoidens* (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 Dorsi (Fig. 4. 28.) not unlike the *Sacro-lumbalis* above noted, was not so thick and fleshy at it's Origin from the *Os Ilium*, *Sacrum*, and *Vertebrae* 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 *Skeleton*. 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 dispatched, we come next to those of the *Limbs*; and first of the *Arm* or *Os Humeri*. The *Pectoralis* (Fig. 3. 33.) was much broader at it's Original, from the *Sternum*, than in *Man*: it's Fibres were decussated near it's Insertion. *Galen* and *Jacobus Sylvius* take notice of another *Muscle* under the *Pectoralis* in *Apes*, which is implanted into the *Arm* near the *Pectoral Muscle*. The *Deltoides* (Fig. 3. 15. and 4. 12.) was also broader at it's Original. *Jac. Sylvius* tells us, this *Muscle* in *Apes* is like that of a *Man*. The *Supraspinatus* (Fig. 4. 8.) agreed with the *Humane* in it's situation; but was somewhat broader at it's Origin from the upper part of the *Basis Scapulae*. The *Infraspinatus*, as the former *Muscle* was broader at it's Original from the *Scapula*, this on the contrary was there narrower than the *Humane*. *Sylvius* and *Drelincourt* mention these *Muscles* in *Apes*; but whether they resemble those of *Men*, or this *Animal*, do's not appear by their Accounts. *Teres minor*, (Fig. 4. 10.) this is sometimes wanting in *Men*: it was somewhat shorter and thicker in this *Animal*. The *Teres major*, (Fig. 4. 11.) was very large in the *Pygmie*. The *Latissimus Dorsi* agreed with the *Humane* in it's Original and Progress towards the *Arm*; but when it arrived at the *Axilla*, it parted with a fleshy Portion, which descended on the inside of the *Arm*, with the *Musculus Biceps*, and becoming a slender Tendon is inserted to the internal protuberance of the *Os Humeri*: (vide Fig. 8. C.) which represents the production of this *Muscle*. This *Appendix* or *Accessory Muscle* of the *Latissimus Dorsi*, is not peculiar to this *Animal*; the like being found in *Apes* according to *Jacobus Sylvius*, who, I am inclin'd to think is mistaken, in representing it's Insertion at the *Olecranon* of that *Animal*: This part of the *Latissimus Dorsi* seems a proper Instrument in turning the *Os Humeri* to a prone Position, when these *Animals* go on all four, for the more advantageous stepping with the Fore-feet, by raising the *Os Humeri*, and turning it backwards. *Galen* in *Lib. de Musculis*, Cap. XIX. describes this *Appendix* of the *Latissimus Dorsi*, under the Title of a *small Muscle* found in the Articulation of the *Shoulder*. The *Coracobrachialis* was like that in *Man*, but had no division in it for any Nerve to pass through. The *Subscapularis* was also like that in *Man*.

The *Muscles* employed in Bending and Extending the *Cubit*, differ'd very little from the *Humane*, viz. *Biceps*, (Fig. 3. 16. 16.) *Brachæus internus*, (ib. 18.) *Gemellus*, (Fig. 4. 14.) *Brachæus 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 *Membranofus* 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 *Gluteus 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 *Seminembranosus*, 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 *solenus*, (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. **I**N 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 Biliaris* 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 Vertebra* 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 *Pyramiformis* 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. **I**N the littleness of it's Stature.
2. In the flatness of the *Nose*, and the slit in the *Ala 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 *Os Sacrum* altogether like the *Ape-kind*, only in the number of the *Vertebrae*.
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 *Globose Figure* of the *Head*; the straitness of the *Back*; and that 'tis more hairy behind, than before; the *Fingers* of the *right Hand* are represented bending, to shew the *Action*, when it goes on all four; for then it places only the *Knuckles*, not the *Palms* of the *Hands* to the *Ground*. The *Sole* of the *left Foot*, by reason of the length of the *Toes*, and the setting on of the *Great Toe*, looks like the *Palm* of the *Hand*: but the *right*, having so long a *Heel*, and its *Toes* being hid, appears rather like a *Foot*, and upon occasion performs the Office of both, either of a *Foot* or *Hand*. A little above the *Anus*, there is a black Spot, which represents a small Protuberance of the *Os Coccygis*.

The Third Figure

Represents the *Muscles* which appear on the *Fore-part* of the *Body*.

- A. Part of the *Coronary Suture*.
- B. The *Division* of the *Cranium* made by the *Saw*.
- c. The *Meatus Auditorius*.
- d. Part of the *Os Jugale*, or *Zygomaticum*.
- e. The *Parotid Gland*. * The *Salival Duct*.
- f. The *Inferior Maxillary Gland*.
- g. g. The *Claviculae*.
- h. Part of the *Spina Scapulæ*, as joyned to the *Clavicle*.
- j. The *Nerves*, and *Blood Vessels* which pass to the *Arm*.
- k. The *Trunk* of the *Nerve* in the *left Arm*, that goes to the *Fingers*.
- l. A large *Trunk* of the *Arterie*, and a *Nerve* in the *Cubit*, as in *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*.
Nº 1. The *Musculus Temporalis*.
2. The *Orbicularis Palpebrarum*.
3. *Zygomaticus*, seu *distortor oris*.
4. *Elevator Labij superioris proprius*.
5. *Elevator Labij inferioris proprius*.
6. *Masseter*.
7. *Buccinator*.
8. 8. *Mastoidens*.
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 *Pectineus*.
48. The *Gracilis*.
49. 49. The *Tibialis Anticus*.
50. Part of the *Gastrocnemius*.
51. Parts of the *Peronei*.
52. The *Extensor Pollicis longus*.
53. The *Extensor Pollicis brevis*, which differ'd in this *Animal*, from that in Man.
54. The Tendons of the *Extensor Communis digitorum*, as they pass between the *Interossea*.
55. The *Abductor minimi digiti*.
56. The *Pronator Radii Quadratus*.
57. Part of the *Supinator Radii brevis* ; at it's Insertion to the *Radius*.

Figure the Fourth

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

- a. **T**HE *Sagittal Suture*.
- b. The *Lambdoidal Suture*.
- c. c. c. The *Spines of the Superior Vertebrae 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*.

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

2. Part of the *Splenius*.

3. Part of the *Mastoidens*.

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 *Gastrocnemius externus*, that of the right side hanging to its Insertion, at the *Os Calcis*.
44. The *Gastrocnemius 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 *Skeleton*, or the *Bones*.

1. **T**HE *Os Frontis*.
2. The *Os Bregmatis*.
3. Part of the *Os Occipitis*.
4. *Os Temporale*, *sen Squamosum*.
5. *Os Jugale*, *sen 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 Sphenoides*.
11. The *lower Jaw*.
- a. The *Processus Condylodes* of the *lower Jaw*.
- b. The *Processus Corone*.
- c. The *Coronal Suture*.
- d. The *Sutura Offis Temporalis*, seu *Squammosi*.
- e. A *Foramen* for the passing the Nerves, and the Blood Vessels in the *upper Jaw*.
- f. A like *Foramen* in the *under 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 *Ifchij*.
 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. **T**HE 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*.

2. The upper part of the *Intestinum Rectum*.

The seventh Figure

Shews the Organs of GENERATION.

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

B. The *Penis*.

C. C. The two *Ureters*.

D. D. The *Vasa 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 Spermatidis*.

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 compressed, and it's Contents forced out.

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

H. The *Cavernous Body* of the *Urethra*.

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

K. K. The *Musculi Directores Penis*.

The Eighth Figure

Exhibits part of the *Musculus Latissimus Dorsi* dissected.

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

B. 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. **T**HE 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.

b. b. 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*.

ƒ. ƒ. 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 *Annular Cartilage*.

D. D. The *Musculi Hyothyroidei*.

E. E. The *Musculi Sternothyroidei*.

c. c. The *Musculi Cricothyroidei*.

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

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

H. H. The *Lungs*.

P

ƒ. The

J. The *Cone* of the *Heart*.

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

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

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

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

O. O. The two *Subclavian Arteries*.

P. The *Carotid Arteries*.

The eleventh Figure

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

A. **T**HAT part contained in the *Ventricle*.

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

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

D. That part that 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. **T**HAT part contained in the *Ventricle*.

B. The Impressions made by the *Valvula sigmoidea*.

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

The thirteenth Figure

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

A. A. **T**HE two anterior or fore *Lobes* of the *Brain*.

B. B. The two posterior or hinder *Lobes* of the *Brain*.

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

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

C. C. The *Cerebellum*.

D. The *Principium Medullae 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 *Glandule 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. **P**arts 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*.
Ʒ. Ʒ. 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 *Protuberantie 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 *Protuberantie orbiculares*.
s. The *Rima* or *Foramen*, that leads to the *Infundibulum*.

The fifteenth Figure

Is a Copy of the Figure that *Nicholans Tulpinus* 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*.

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.

PHYSIOLOGICAL

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Concerning the

P Y G M I E S

O F T H E

A N C I E N T S.

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

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

not only *Strabo* of old, but our greatest Men of Learning of late, have wholly exploded them, as a meer *figment*; invented only to amuse, and divert the Reader with the Comical Narration of their 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 useless, that I have had in this Enquiry.

My Design is not to justify 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.*

Ἄϊ τ' ἐπεὶ ἐν χειμῶνα φύγον, καὶ ἀδέσφατον ὄμβρεν
Κλαγγῇ τὰ γὰρ πέτονται ἐπ' ὠκεανοῦ ῥοάων
Ἀνδράσι πυγμαίοισι φόβον καὶ κῆρα φέρεσθαι. 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 Danaïs vestigia Troës
Ibant, sublato Campum clamore replentes :
Non secus ac cuneata Græum sublime volantum
Agmina, dum fugiunt Imbres, ac frigora Brumæ,
Per Cælum matutino clangore feruntur,
Oceanumque petunt, mortem exitiumque cruentum
Irrita Pigmæis moturis arma ferentes.*

By 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*, ἐ γὰρ καὶ ἄγνοιαν τῶν τοπικῶν λέγειν, 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), ἐ γὰρ καὶ ἄγνοιαν τῆς ἰστορίας ἀποληπτόν γενέσθαι τῶτο, ἀλλὰ τερψιδίας 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 *Pygmean Men*, or the *Cranes* and *Apes*, which from their Stature he calls *Pygmies*, and from their shape *Men*; provided that when the *Cranes* go to engage, they make a mighty terrible noise, and clang enough to fright these little *Wights* their mortal Enemies. To have called them only *Apes*, had been

(b) *Homeri Ilias Latino Carmine reddita ab Helio Eobano Hess.*

(c) *Strabo Geograph. lib. i. p. m. 25.*

(d) *Strabo ibid. p. m. 30.*

flat and low, and lessened the grandieure of the Battle. But this *Periphrasis* of them, ἀνδρες πύγμαροι, 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*, ἐπελάμβανεν τὴν τῶν Ὀμηρικῶν καὶ Πυγμαλῶν γεγενομένην τριαντάμηναι εἰρήνην, for reviewing the *Homeric* 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 likelihood 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 justify all that they say, I could rest satisfied in great part of their Relation: For *Pliny* (h) tells us, *Veris tempore universo*

(e) *Strabo Geograph. lib. 2. p. m. 48.*

(f) *Athenæi Deipnosoph. lib. 9. p. m. 393.*

(g) *Ælian.*

Hist. Animal. lib. 15. cap. 29.

(†) *Pomp. Mela de situ Orbis, lib. 3. cap. 8.*

(h) *Plinij Hist. Nat.*

lib. 7. cap. 2. p. m. 12

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), Περὶ τὰς τριακτάμους πόλεμον εἶ) ταῖς Γεράνοις (ὅν καὶ Ὅμηρον διλοῦν) καὶ τοῖς Πέρδιξι, ὧς χινομεγέθεις εἶ) τέρας δ' ἐκλέγειν αὐτῶν τὰ ὠὰ, καὶ φθείρειν· ἐπεὶ γὰρ ὡς οὐκ εἶναι τὰς Γεράνας· διόπερ μὴδ' αὖ μὴδ' ὠὰ ἐν ἐπισκευαῖς Γεράνων, μὴ' 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 Pygmean 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 quatere: sed illic,
Quaquam eadem assidue 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 *Pygmaeomachia* looks like a true Story; and there is nothing in *Homer* about it, but what is credible. He only expresses himself, as a Poet should do; and if Readers will mistake his meaning, 'tis not his fault.

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

(k) *Juvenal. Satyr. 13. vers. 170.* (l) *Aristotle. Hist.*

'Tis not therefore the *Poet* that is to be blamed, tho' they would father it all on him ; but the fabulous *Historians* in after Ages, who have so oddly 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 ἦ ἐν ταῖς δούπερ τοῖς Ἰνδικῶν, οἱ μικροί, φησὶν, ἄνδρες οἱ ταῖς Γεργάνοις διαπολεμῆντες Πέρδιξιν ὀχήμασι χερῶνται. For presently afterwards he tells us from *Meneclæus*, that the *Pygmies* not only fight the *Cranes*, but the *Partridges* too, Μενεκλῆς ἦ ἐν πρώτῃ τῆς σωμαγωγῆς οἱ πυγμαῖοι, φησὶ, τοῖς πέρδιξι, καὶ ταῖς Γεργάνοις πολέμει. 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, πλεῖστα δ' ἐπιπίπτον γεργον χαλκῷ ἔχουσαν ἀκίδα ἀπὸ τοῦ ἐκείθεν πλημύαται (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), Πάδιον δ' ἂν τις Ἡσίοδω, καὶ Ὀμήρῳ πισδύσειεν ἥρωολογέσι, καὶ τοῖς τραγικοῖς ποιηταῖς, ἢ Κλῖσιᾳ τε καὶ Ἡερόδοτῳ, καὶ Ἑλλαντικῶ, καὶ ἄλλοις τοιούτοις i. e. That one may sooner believe *Hesiod*, and *Homer*, and the *Tragick Poets* speaking of their

(m) *Athenæi Diepnsoph.* 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, 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); *Ἀπαντες μὲν τοίνυν οἱ περὶ τῆς Ἰνδικῆς γράψαντες ὡς ὅτι τὸ πολὺ ψευδολόγοι γέγονασι, καὶ ὑπερβολῶς δὲ Δαίμαχα· τὰ δὲ δέπια λέγει Μεγαθένης, Ὀνησιχρίδης 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 μύθεος ἐν ταῖς Ἱστορίαις ἔρεϊ κρεῖττον, ἢ ὡς Ἡρόδοτος, καὶ Κλυσίας, καὶ Ἑλλάνικος, καὶ οἱ τὰ Ἰνδικὰ συγγραψάντες* 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 ἀγριώτερά ἐν τῇ Ἀσίᾳ, ἀνδρείότερά δὲ πάντα τὰ ἐν τῇ Εὐρώπῃ, πολυμορφότατα δὲ τὰ ἐν τῇ Λιβύῃ· καὶ λέγειν δὲ τις παροιμία, ὅτι αἰεὶ φέρει τὴ Λιβύην 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, artificii 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 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 ὁμολῶσιν Ἰνδοῖς· μικροὶ δὲ εἰσι λίαν· οἱ μακρότατοι αὐτῶν πηχέων δύο, οἱ δὲ πλείστοι, ἐνδὸς ἡμίσεος πηχέως, κόμην δὲ ἔχουσι μακροτάτῃ, μέλει καὶ ἐπὶ τὰ γόνατα, καὶ ἐπὶ κατώτερον, καὶ πύγωνα μέγιστον πάντων ἀνθρώπων· ἐπειδὴν ἔν τὸν πύγωνα μέγα φύσσουσιν, ἐκείνῃ ἀμφιένυσται ἐδὲν ἱματίον· ἀλλὰ τὰς τρίχας, τὰς μὲν ἐκ τῆ κεφαλῆς, ἐποδὲν καθεύδουσιν πολὺ κῆτω τῶ γονάταν· τὰς δὲ ἐκ τῆ πύγωνος, ἐμπεσόντων μέλει ποδῶν ἐλκομένους. Ἐπειτα περιπυκνάζονται τὰς τρίχας περὶ ἅπαν τὸ σῶμα, ζώνουσιν, χρώμενοι αὐταῖς ἀντὶ ἱματίου. αἰδοῖον δὲ μέγα ἔχουσιν, ὥστε φαίνειν τῶν σφυρῶν αὐτῶν, καὶ παχύ. αὐτοῖς σιμοί τε καὶ αἰχροί. τὰ δὲ πόδια αὐτῶν, ἕς ἄρνες. καὶ αἱ βόες καὶ οἱ ὄνοι, σχεδὸν ὅσον κριοί. καὶ οἱ ἵπποι αὐτῶν καὶ οἱ ἡμίονοι, καὶ τὰ ἄλλα πάντα ζῶα, ἐδὲν μέγαν κριῶν. ἔπονται δὲ τῷ βασιλεῖ τῶ Ἰνδῶν, τέτταν τῶ πυγμαίων ἄνδρες τετραχίλιοι. σφόδρα γὰρ εἰσι τοξόται· δικαιοτάτοι δὲ εἰσι καὶ νόμοισι χρώμενται ὥσπερ καὶ οἱ Ἰνδοί. Λαγῶές τε καὶ ἀλώπεκας θηρεύουσιν, καὶ τοῖς κυσίν, ἀλλὰ κόραξι καὶ ἰκτίσι καὶ κορώναις καὶ ἀετοῖς.

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

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

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

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

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

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

Ctesias was Physician to *Artaxerxes Mnemon* as *Diodorus Siculus* (y) and *Strabo* (z) inform us. He was contemporary with *Xenophon*, a little later than *Herodotus*; and *Helvicus* in his *Chronology* places him three hundred eighty three years before *Christ*: He is an ancient Author, 'tis true, and it may be upon that score valued by some. We are beholden to him, not only for his Improvements on the Story of the *Pygmies*, but for his Remarks likewise on several other parts of *Natural History*; which for the most part are all of the same stamp, very wonderful and incredible; as his *Mantichora*, his *Gryphins*, the horrible *Indian Worm*, a Fountain of *Liquid Gold*, a Fountain of *Honey*, a Fountain whose Water will make a Man confess all that ever he did, a Root he calls *πάριον*, 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 γράφει καὶ μυθολογῶν Κτησίας. λέγει τ' ἀληθὲς αἰσα γράφειν ἐπὶ τὰν ὥς τὰ μὲν αὐτὸς ἰδὼν γράφει, τὰ δὲ παρ' αὐτοῦ μαθὼν τῶν εἰδότες. πολλὰ δὲ τέτων καὶ ἄλλα θαυμασιώτερα παραλιπεῖν, διὰ τὸ μὴ δοῦναι τοῖς μὴ ταῦτα θεωρομένοις ἀπιστᾶν συγγραφεῖ. i. e. *These things* (saith he) *Ctesias writes and feigns, but he*

(y) *Diodor. Siculi Bibliothec. lib. 2. p. m. 118.*

(z) *Strabo Geograph. lib. 14. p. 451.*

himself says all he has wrote is very true. Adding, that some things which he describes, he had seen himself; and the others, he had learn'd from those that had seen them: That he had omitted a great many other things more wonderful, because he would not seem to those that have not seen them, to write incredibilities. But notwithstanding all this, Lucian (a) will not believe a word he saith; for he tells us that Ctesias has wrote of India, 'Α μήτε αὐτὸς εἶδε, μήτε ἄλλος εἰπόντι ἢ 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: 'Εν τῇ τῇ Ἰνδικῇ ὡς φησι Κίσιος, ἐκ ὧν ἀξίωσις (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 Brundisium, in his return from Greece into Italy; he gives this Character of them and their performance: *Erant autem isti omnes libri Græci, miraculorum fabularumque pleni: res inaudita, incredula, Scriptores veteres non parvæ authoritatis, Aristæas Proconnesius, & Isagonus, & Nicæensis, & Ctesias, & Onesicritus, & Polystephanus, & Hegesias.* Not that I think all that Ctesias has wrote is fabulous; For tho' I cannot believe his speaking Pygmies, yet what he writes of the Bird he calls Βίβακος, 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 surprizing 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 δὲ τὸ ἔφασκάν πλείονι τὰς Νον-
νόσου, ὅτι τὸ ἐχάτω τῷ νήσῳ καλλιπ-
κίτι τοῖον δὲ τι συλίσθη, θαῦμα καὶ ἀνε-
σαι. εἰέτοκε γάρ ποι μορφή μὲν καὶ ἰδέ-
αν ἔχουσιν ἀνθρωπίνῳ, βραχυλάτοις δὲ τὸ
μέγεθος, καὶ μέλασι τὸ χεῖρας. ὡς δὲ
τερχῶν δεδαστυμένοις διὰ πάντες τὰ
σώματα. εἰποντο δὲ τοῖς ἀδελφοῖς καὶ
γυναικίς παραπλήσια καὶ παιδεία ἐπὶ
βραχύπερα, τῷ παρ' αὐτοῖς ἀνδρῶν.
γυμνοὶ δὲ ἦσαν ἅπαντες πλὴν δερματι-
νῇ μικρῇ τὸ αἰδῶ περιεκάλυπτον, οἱ
προβεβηκότες ὁμοίως ἄνδρες τὲ καὶ γυ-
ναῖκες. ἀγχιον δὲ ἐδὲν ἐπεδείκνυστο ἐδὲ
ἀνήμερον ἄλλὰ καὶ φωνῇ εἶχον μὲν
ἀνθρωπίνῳ, ἀλυσον δὲ παντάπασι τὸ

Naviganti à Pharsa Nonnoso, &
ad extremam usque insularum delato,
tale quid occurrit, vel ipso auditu ad-
mirandum. Incidit enim in quosdam
forma quidem & figura humana, sed
brevissimos, & cutem nigros, totum-
que pilosos corpus. Sequebantur viros
æquales feminae, & pueri adhuc bre-
viores. Nudi omnes agunt, pelle tan-
tum brevi adultiores verenda tecti,
viri pariter ac feminae: agreste nihil,
neque efferum quid præ se ferentes.
Quin & vox illis humana, sed omni-
bus, etiam accolis, prorsus ignota lin-
gua, multoque amplius Nonnosi sociis.
Vivunt marinis ostreis, & piscibus &

(a) Lucian lib. 1. vera Histor. p. m. 373. (b) Arist. Hist. Animal. lib. 8. cap. 28. (c) A. Gellij Noctes Attic. lib. 9. cap. 4. (d) Henr. Stephani de Ctesia Historico antiquissimo disquisitio, ad finem Herodoti. (e) Photij Bibliothec. cod. 3. p. m. 7.

δι' αὐτὸν τοῖς τὲ περὶ τοὺς ἀπασιν, καὶ ἐκ τοῦ ἁπλοῦς τοῖς περὶ τὸν Νοννοσόν, διέ-
 ζων ὅτι ἐκ θαλάσσιων ὄψεσιν, καὶ ἰχθύων, ὅτι ἀπὸ τῆς θαλάσσης εἰς τὴν νῆσον ἀπορρίπ-
 τωμένων· θάρσος ὅτι εἶχον ἐδὶν. ἀλλὰ καὶ
 ὁρῶντες τὰς καθ' ἡμᾶς ἀνθρώπους ὑπέπλινσαν, ὥστε ἡμεῖς τὰ μάλιστα τῶν θνητῶν.

‘ That *Nonnosus* sailing from *Pharfa*, when he came to the farthest
 ‘ 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 sta-
 ‘ ture, followed the Men : They were all naked, only the Elder of them,
 ‘ both Men and Women, covered their Privy Parts with a small Skin.
 ‘ They seemed not at all fierce or wild ; they had a Humane Voice, but
 ‘ their *Dialect* was altogether unknown to every Body that lived about
 ‘ them ; much more to those that were with *Nonnosus*. They liv’d upon
 ‘ Sea Oysters, and Fish that were cast out of the Sea, upon the Island.
 ‘ They had no Courage ; for seeing our Men, they were frighted, as we
 ‘ are at the sight of the greatest wild Beast.

Φωνὴν εἶχον μὲν ἀνθρωπίνην 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 its *Voice* was like
 the *Humane*, and it would make a Noise like a Child, but never was ob-
 served 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) men-
 tions, *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 Capitis Caninis, ferarum pellibus velari, pro voce latri-
tum 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 Γα-
 γμαίνες εἶσι τὰς τραγλοδύτας Αἰθιοπίας ἀγέλας ποῖα τελέωποισι. Οἱ γὰρ*

(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 αἰθιοπες πόδας τεχισοι ἀνθρώπων πάντων εἰσι, τῇ ἡμεῖς πέρι λόγος ἀπορεσμένους ἀκούμεν. Σίλόναι δ' οἱ Τρωγλοδύται ὄφεις, καὶ Σαύρες, καὶ πᾶσι τοῖσι τῇ Ἑρπετῶν. Γλῶσσαν δ' ἐδεμῆ ἀλλή παρομοίῳ νενομίχασι, ἀλλὰ τελέυχασι 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' εἰσι τῷ βίον. And so *Philostatus* (k), Τὸς δ' πύγματες οἰκεῖν μὲν ὑπὸ γαῖας. And methinks *Le Compté'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 ἀνδρες μικρὸς μέλειαν 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 πάλαι εἰ τοῖσι ἄγασι τὸ μέγεθος ἴσας, χροῶμα δ' 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) *Philostatus. in vita Apollon. Tyanae, lib. 3. cap. 14. p. m. 152.* (l) *Lewis le Compté Memoirs and Observations on China, p. m. 510.* (m) *Herodotus in Euterpe seu lib. 2. p. m. 102.*

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

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

Had *Albertus* only asserted, that the *Pygmies* were a sort of *Apes*, his Opinion possibly might have obtained with less difficulty, unless he could have produced some Body that had heard them talk. But *Ulysses Aldrovandus* (q) is so far from believing his *Ape Pygmies* ever spoke, that he utterly denys, that there were ever any such Creatures in being, as the *Pygmies*, at all; or that they ever fought the *Cranes*. Cum itaque *Pygmæos* (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; Έωγενὰς μὲν γὰρ εἰδὲς ἔνθενται τῷ πῖστος ἀξίον 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 justify them: Sic nostra ætate (saith he) non desunt, qui eandem de *Pygmæis* lepidam fabellam renouent; 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 Siluestres, sicut Pygmæus, non secundum unam rationem nobiscum dicti sunt Homines, sed aliquod habent Hominis in quadam deliberatione & Loquela, Sic. A little after adds, Voces quadam (sc. Animalia) formant ad diversos conceptus quos habent, sicut Homo & Pygmæus; & quadam non faciunt hoc, sicut multitudo fere tota aliorum Animalium. Adhuc autem eorum quæ ex ratione cogitativa formant voces, quadam sunt succumbentia, quadam autem non succumbentia. Dico autem succumbentia, à conceptu Anima cadentia & mota ad Naturæ Instinctum, sicut Pygmæus, qui non, sequitur rationem Loquela 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 Casaubon*

Nota & 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 πύγμαι & 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 Medioris stature, & 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 τῆς ψυχρῶν πόλεων τὴν ἐπὶ τὴν χειμῶνα μετὰ τὴν ἱαρινὴν, ἐκ τῆς θέρμης, εἰς τὰς τόπους τὰς ψυχρὰς, πορεύμενα τὰ καύματα· τὰ μὲν, καὶ ἐκ τῆς ἐγγύς τόπων ποιέμενα τὰς μελαρολάς, τὰ δὲ, καὶ ἐκ τῆς ἐχάτων, ὡς εἰπεῖν, οἷς αἱ γέγραφοι ποιεῖσι. Μεταβάλλουσι γὰρ ἐκ τῆς Σκυθικῆς εἰς τὰ ἐλθὼν τὰ ἀνω τῆς Αἰγύπτου, ὅθεν ὁ Νεῖλος ῥεῖ. Ἔστι δὲ ὁ τόπος ἐστὶ περὶ ὃν οἱ πύγμαι-

Jam ab Autumnali Æquinoctio ex Ponto, Locisque frigidis fugiunt Hyemem futuram. A Verno autem ex tepida Regione ad frigidam sese conferunt, æstus 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.

οι καλοικῶσιν· ἐ γάρ ὅτι τὸ το μῦθος, ἀλλ' ἐστὶ κατὰ τὴν ἀλήθειαν. Γένε μὲν, ὡς περ λέγεται, καὶ αὐτοὶ καὶ οἱ ἴωποι· 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, Γένε μὲν, ὡς περ λέγεται, καὶ αὐτοὶ, καὶ οἱ ἴωποι. 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 *Durval* 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*) *Pygmaeorum Historiam esse fabulosam, quod & Strabo sentit, & nostra ætas, cum omnia nunc ferme 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 of it, he leaves out indeed the *Cranes* fighting with the *Pygmies*, yet makes them *Men*, which *Aristotle* do's not; and by anti-placing, *ut aiunt*, he renders *Aristotle's* Assertion more dubious; *Neque enim* (saith he in the Translation) *id est fabula, sed revera, ut aiunt, Genus ibi parvum est tam Hominum quam Equorum.* *Julius Caesar Scaliger* in translating this Text of *Aristotle*, omits both these Interpretations of *Gaza*; but on the other hand, is no less to be blamed in not translating at all the most remarkable passage, and where the *Philosopher* seems to be so much in earnest; as, ἐν τῷ ἐστὶ τὸ πρὸς μῦθον, ἀλλ' ἐστὶ κατὰ τὴν 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. *Pygmies*) *Herodotus*, at *Philosophus semper moderatus & prudens etiam addidit, ὡς αὖτε λέγειται*, 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 ὡς αὖτε λέγειται 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 ἄνδρες ποὶ μικροί, or μέλανες; he only calls them πύγμαιοι. 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.*
or, *Enquiries into Vulgar Errors, lib. 4. cap. 11.*

(b) *Sir Thomas Brown's Pseudodoxia,*

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 ὄφεις οἱ ὑπερμεγάρτεες, καὶ οἱ λέοντες καὶ τὰ τέττα εἰσὶ, καὶ οἱ ἐλέφαντες τε καὶ ἄρκτοι, καὶ ἀσπίδες τε καὶ ὄνοι οἱ τὰ κέρατα ἔχοντες καὶ οἱ κυνοκέφαλοι (in the Margin 'tis ἀκέφαλοι) οἱ ἐν τοῖσι σήδεσι τὰς ὀφθαλμοὺς ἔχοντες (ὡς δὲ λέγειται καὶ ὑπὸ Λιβύων) καὶ ἄρχει ἀνδρες, καὶ γυναῖκες ἄρχει καὶ ἄλλα πολλὰ πολλαὶ θηρία ἀκράτα ἴσα 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 ἄρχει ἀνδρες, καὶ γυναῖκες ἄρχει are only θηρία or wild Beasts; and tho' they are call'd ἀνδρες, 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 καὶ θηρία οἷα ἐχ' ἐτέρωδι καὶ ἀνθρώπους μέλανας, ὃ μὴ ἄλλαι ἡπείροι. Πυγμαίων τε ἐν αὐταῖς ἐστὶν, καὶ ὑλακλέντων ἄλλο ἄλλῃ 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. Tyansæ, lib. 6. cap. 1.* p. m. 258.

and amongst them is the Nation of the *Pygmies*, and the *BARKERS*, that is, the *Cynocephali*. For tho' *Philostratus* is pleas'd 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 *Celius 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 pleas'd 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 pleas'd with *Homer's* *ἄνδρες πυγμαῖοι*, than if he had call'd *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 **Ἀμύκτερες* or **Ἀρρίνες*, 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 **Ἐνοτοκῆται*, whose Ears reach down to their Heels, on which they lye and sleep. The **Ἀσομοι*, 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 *Μονόμματοι* or *Μονόρθαλμοι*, 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 *Στεγνόρθαλμοι*, that have Eyes in their Breasts. The *Πάναι σφηνοκέφαλοι* with Heads like Wedges. The *Μακροκέφαλοι*, with great Heads. The **ἑξάχρονοι*, who live a Thousand years. The **ᾠκύποδες*, 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) *Celii Rhodigini Lestion. Antiq. lib. 17, cap. 13.*

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

Now by *Men Pygmies* we are by no means to underſtand *Dwarfs*. In all Countries, and in all Ages, there has been now and then obſerved ſuch *Miniture* of Mankind, or under-ſized Men. *Cardan* (h) tells us he ſaw one carried about in a Parrot's Cage, that was but a Cubit high. *Nicephorus* (i) tells us, that in *Theodoſius* the Emperour's time, there was one in *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) *Hap-*
pelius in *Relat. curioſis*, N^o. 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 ἀνδρες, 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 extremum 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 Auctoritatibus 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 *Scholias*. *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 sua Geograph.* (q) *Joh. Cassanius libello de Gygantibus*, p. 73.

De Pygmæis fabulosa quidem esse omnia, quæ de iis narrari solent, aliquando existimavi. Verum cum videam non unum vel alterum, sed complures Classicos & probatos Autores de his Homunculis multa in 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 solum olim fuisse, sed nunc etiam esse, & homines esse, nec parvitatem illis impedimento esse quo minus sint & homines sint.* But were there such *Men Pygmies* now in being, no doubt but we must have heard of them; some or other of our Saylor, 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 consiciunt & 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 Æthiopie*. p. m. 71.

and others extreamly little, he infers, *Quæ certè cum in Animalibus & Vegetabilibus fiant ; cur in Humana specie non sit probabile, haud video : imprimis cum detur magnitudinis excessus Gigantæus ; cur non etiam dabitur Defectus ? Quia ergo dantur Gigantes, dabuntur & Pygmæi. Quam consequentiam ut firmam, admittit Cardanus, (t) licet de Pygmæis hoc tantum concedat, qui pro miraculo, non pro Gente.* Now Cardan, tho' he allows this Consequence, yet in the same place he gives several Reasons why the Pygmies could not be Men, and looks upon the whole Story as fabulous. Bartholine concludes this Chapter thus : *Ulterius ut Probabilitatem fulciamus, addendum Sceleton Pygmæi, quod Dresdæ vidimus inter alia plurima, servatum in Arce sereniss. Electoris Saxonix, altitudine infra Cubitum, Ossium soliditate, proportionequæ 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 Eggshells. And this mutation of their Habitations he thinks is very plain from Pliny, where speaking of Gerania, he saith, *Pygmæorum Gens fuisse (non jam esse) proditur, creduntque à Gruibus fugatos.* Which passage (saith Bartholine) had Adrian Spigelius considered, he would not so soon have left Aristotle's Opinion, because Franc. Alvares the Portuguese did not find them in the place where Aristotle left them ; for the Cranes, it

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

may be, had driven them thence. His third Article is, their *Habitation*, which *Aristotle* saith is in *Caves*; hence they are *Troglodytes*. *Pliny* tells us they build Huts with Mud, Feathers, and Egg-shells. But what *Bartholine* adds, *Ed 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 *Virtues 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 *Bæotians*, *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 semias 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. Chryso.* (z) *Paulus Jovius lib. de Muscovit. Legatione.*

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 *Calinga* 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 Monocerotæ & alia negare liceret. 3. Qui maria pernavigant, vicinas paucas maritimas lustrant, adeo non terras omnes à mari distitas. 4. Neque in Oris illos habitare maritimis ex Capite quinto manifestum est. 5. Qui testatum se omnem adhibuisse diligentiam in inquirendo eos ut inveniret. 6. Ita in terra habitant, ut in Antris vitam tolerare dicantur. 7. Si vel maxime omni ab omnibus diligentia quesiti fuissent, nec inventi; fieri potest, ut instar Gigantum jam desierint nec sint amplius.

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

ly Writ : For Bartholine and others insist upon that Text in Ezekiel (Cap. 27. Vers. 11.) where the *Vulgar Translation* has it thus ; *Filij Arvad cum Exercitu tuo supra Muros tuos per circuitum , & Pygmæi in Turribus tuis fuerunt ; Scuta sua suspenderunt supra Muros tuos per circuitum.* Now *Talentionius* 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 *Goliath*, 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 *πυγμα*, 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.

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 constituentur ? Sed omnia Genera Hominum, quæ dicuntur esse, esse credere, non est necesse.* And afterwards so fully expresses himself in favour of the *Hypothesis* I am here maintaining, that I think it a great Confirmation of it. *Nam & Simias* (saith he) *& Cercopithecus, & Sphingus, 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 *Νῦβαι 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 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 *Νῦβοι 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 stature, & 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 avolarunt atque auferunt; 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 Hierozoi pars Posterior, lib. 1. cap. 11. p. 76.*(g) *Bochartus ibid. p. m. 77.*

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

Isaac Vossius seems to unsettle all, and endeavours utterly to ruine the whole Story: for he tells us, *If you travel all over *Africa*, you shall not meet with either a *Crane* or *Pygmie*: *Se mirari* (saith (h) *Isaac Vossius*) *Aristotelem, quod tam serio 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 Γέραναι κραιῶν ἐς τὴν Λιβυὴν μέλαχωρῇ. '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 Tyrinus* (as I find him quoted in *Bochartus*) saith, Αἱ γέραναι ἃς Αἰγύπτῳ ὥρα θερμὴ ἀριστάμεναι, ἐκ ἀνεχόμεναι τὸ θάλαπτον, τεύασσαι πτερυγίας ὡσπερ ἰστιά, πτερόναι διὰ τῆς ἀέρος. ἐκ τῆς Σκυθῶν γῆς. i. e. Grues per astatem ex Ægypto abscedentes, quia Calorem pati non possunt, alis velorum instar expansis, per aerem ad Scythicam plagam recta 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.*
(k) *Isaac Vossius ibid.*

(i) *Aristophanes in Nubibus.*

Job Ludolphus (1) 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, Vossius 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 revenge the Death of *Antæus*, having found *Hercules* napping in *Libya*, 'mustered up all their Forces against him. One *Phalanx* (he tells us) 'assaulted his left hand; but against his right hand, that being the stronger, two *Phalanges* were appointed. The Archers and Slingers besieged his feet, admiring the hugeness of his Thighs: But against his Head, 'as the Arsenal, they raised Batteries, the King himself taking his Post 'there. They set fire to his Hair, put Reaping-hooks in his Eyes; and 'that he might not breath, clapp'd Doors to his Mouth and Nostrils; 'but all the Execution that they could do, was only to awake him, 'which when done, deriding their folly, he gather'd them all up into his 'Lion's Skin, and carried them (*Philostratus* thinks) to *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

(1) *Job Ludolphus* in *Comment. in Historiam Æthiopicam*, p. m. 71. p. m. 817.

(n) *Plutarch. in vita Q. Sertorij.*

(m) *Philostratus. Icon. lib. 2.*

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 *Pygmy*, 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 sevâ 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 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 Atblanta nivofum,
Pygmæos imbellæ 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 imbellæ, 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 ψῦδῶς, 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, 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 πύγμαῖοι*, 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 *ἄνθρωποι μέλανας*, yet both make them *ἄγρια* 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 ταῦταις οἰκεῖν ἄνδρες ἄγριοι*, but when he comes to describe them, tells us that they had no Speech;

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

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 *Satyr*s.

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 extreemly 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 βροχήματα αὐτοῖς ἐστὶ μικρά, πρόβατα καὶ αἴγες, καὶ κύνες μικροὶ, τετραὶ καὶ μάχιμοι (οἰκύντες μικροὶ ὄντες) τάχα δὲ καὶ τὰς πυγμαίας ἀπὸ τῆς τῶν μικροῦν 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 μικροῦν 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, γένετα 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 Laponas (saith he) in Regione inter Corum & Aquilonem perpetuâ oppressa Caligine Pygmaeos reperiri, aliqui eximia fidei testes retulerunt; qui postquam ad summum adoleverint, nostratis Pueri denum annorum Mensuram vix excedunt. Meticulosum genus hominum, & garritu Sermonem exprimens, adeo ut tam Simiae propinqui, quam 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. Bafman in Java majori) diversis Simiis magnis & parvis, hominibus simillimis, hos capiunt Venatores & totos depilant, nisi quod 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 Muscovitar. lib. p. m. 489.* (†) *M. Pauli Veneti de Regionibus Oriental. lib. 3. cap. 15. p. m. 390.* (x) *Jo. Jonston. Hist. Nat. de Quadruped. p. m. 139.*

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

(y) *Philostratus* in *vita Apollonij Tyanai*, 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 persuade 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 ἵ τοῖς ὄρεσι φησὶν ἀνθρώπους βιοῦν, κυνὸς ἔχοντας κεφάλῳ. Ἐδῆτας ἵ φορεῖσιν ἐκ τῆς ἀγρίων θηρίων: φωνὴν ἵ διαλέγοντο ἑδμήαν, ἀλλ' ὠρύνοντο ὡς κύνες: καὶ ἔτι συνίασιν αὐτῶν τὸ φωνήν. Ὀδόντας ἵ μείζους ἔχουσι κυνὸς, καὶ τὰς ὄνυχας ὁμοίως, κυνῶν, μακροτέρους ἵ καὶ στρογγυλοτέρους. Οἰκῶσι ἵ ἐν τοῖς ὄρεσι, μέχρι τῆς Ἰνδοῦ ποταμῆς. Μέλανες δὲ εἰσι καὶ δικαιοὶ πάντες, ὡς καὶ οἱ ἄλλοι Ἰνδοὶ, οἷς [καὶ] ὅππμῖννω. Καὶ συνίασι μὲν τὰ παρ' ἐκείνων λεγόμενα, αὐτοὶ ἵ ἐ δύναντο διαλέγεσθαι: ἀλλὰ τῇ ὀρυγῇ καὶ ταῖς χερσὶ, καὶ τοῖς δακτύλοις σημαίνουσιν, ὡς καὶ οἱ κωφοὶ καὶ ἄλαλοι· καλοῦντο ἵ ὑπὸ τῶν Ἰνδῶν καλύστριοι, ὅπερ ἔστιν ἐλλήνιστί κυνοκέφαλοι. Τὸ ἵ ἔστιν ὅστιν, ἕως δώδεκα μυριάδων.

que gentis capita numerari ad centum & viginti millia.

And a little afterwards he adds,

Ὅτι οἱ κυνοκέφαλοι οἰκοῦντες ἐν τοῖς ὄρεσιν, ἐκ ἐργάζονται: ὑπὸ θήρας ἵ ζῶσιν. Ὅτι ἂν [δὲ] ὑποκλίνουσιν αὐτὰ, ὁπῶς πρὸς τὸ ἥλιον. Τρέφουσι ἵ καὶ πρέσβια πολλὰ, καὶ αἶγας, καὶ οἷς. Πίνουσι ἵ γάλα καὶ ὀξύγαλα τῶν πρεσβύτων. Ἐδίσκουσι ἵ καὶ τὸ καρπὸν τῆς σπιτοχόρης, ἀπ' ἧς τὸ ἡλεκτρον: γλυχὺς γὰρ ἔστι καὶ ξυραίνοντες αὐτὰς, σπυρίδας συρράπτουσιν, ὡς ἐν τοῖς ἔλλησι τιλὸν σαρίδα. Οἱ ἵ κυνοκέφαλοι χειδιάν ποιοῦνται, καὶ ὅππιδνεις, ἀπάγουσι φόβον τέττα. Καὶ τῆς πορφυρέας τὸ ἀνδρος καθαρόν ποιῶσάντες, καὶ τῆς ἡλέκτρος ξ' καὶ σ' τάλαντα τῆς ἐνιαυτοῦ καὶ ἔτι

Degere iisdem hisce in montibus homines memorat canino capite, qui ferarum pellibus vestiantur. Sermone hos nullo uti, canum tantum more latratum edere, atque ita mutuo sese intelligere. Dentes illis esse quam canibus majores, & caninos similiter ungues, sed longiores, ac rotundiores. Montes incolere ad Indum fluvium usque, & colore esse nigro, insignesque 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] totiús-

& viginti millia.

Narrat insuper hos Cynocephalos in montibus habitantes nullum exercere opificium; sed de venatione vivere, feràsque quas occiderint ad solem torrere. Magnam nihilominus pecoris copiam alere, caprarumque & ovium: quarum quidem ovium lac atque oxygala propotu 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 quoque extemporariam construere, qua impostum hujus fructus onus, ut & purpuræ (sed purgato prius ejus flore) itemque electri, ad ducenta & sexaginta talen-

(a) Photij Bibliothec. Cod. 72. de Indis, p. m. 149, 86c.

τὸ ροινίκιον βάπτει τὴν φαρμάκῃ, ἔπειτα
 τοσαῦτα. Καὶ ἡλέκτρις χίλια πάλαντα
 ἀπάγει καὶ εἰσαγὼν τὰ Ἰνδῶν Βασι-
 λεῖ. Καὶ ἔπειτα ἡ καλὰ γούλις πωλεῖ-
 σι τοῖς Ἰνδοῖς, πρὸς ἄρτας καὶ ἄλρις καὶ
 ξύλινα ἱμάτια. Πωλεῖσι καὶ ξίρη, οἷς
 χρῶνται πρὸς τὴν θηρίων ἀγρῶν, καὶ
 τῶν καὶ ἀκόντια. Πάνυ γὰρ καὶ δεινοὶ εἰ-
 σὶν ἀκοντίζειν καὶ τοξόειν. Απολέμη-
 τοι δ' εἰσὶ, διὰ τὸ οἰκεῖν αὐτὸς ὄρεα ἄ-
 βυστος καὶ ὑψηλὰ. Δίδουσι καὶ αὐτοῖς διὰ
 πέμπτε ἔτους δῶρα ὁ Βασιλεὺς, ἃ μὲν
 μυριάδας τῶν καὶ ἀκοντίων τοσαύτας,
 πελτῶν καὶ δώδεκα καὶ ξίρη καὶ πεντακ-
 μύρια. Τέτοις τοῖς κυνοκεράλοις ἐκ
 εἰσὶν οἰκίαι, ἀλλ' ἐν ἀσπιδάροις διατῶνται.
 Θηράουσι καὶ τὰ θηρία, τοξόοντες καὶ
 ἀκοντίζοντες, καὶ διώκοντες καταλαμβάν-
 νουσι τὰ καὶ τρέχουσι λέων καὶ αἱ
 γυναικες αὐτῶν ἀπαῖ τὸ μνηστῆρ, ὅταν
 τὰ καταμνήναι αὐτῆς ἔλθῃ. ἄλλοτε δ'
 ἔ. Οἱ καὶ ἄνδρες ἐκ λέων καὶ μὲν, πᾶς δὲ
 χεῖρας ἀποκτείνουσι. Ἐλαίω δὲ χρῶνται
 τοῖς τὸ μῦθος, τὰ δὲ τὴν γάλακτι
 γινόμενα, καὶ ἐκλείβουσι δέρμασι.
 Τὴν δὲ ἐσθῆτα ἔχουσιν ἐκ δασείων, ἀλλὰ
 ψιλῶν τῶν μαθηματάων, ὡς λεπτω-
 τάτων, καὶ αὐτοὶ καὶ αἱ γυναικες αὐτῶν.
 Οἱ δὲ πλεσιώτατοι αὐτῶν, λίνα φορεῖ-
 σιν ἔτοι δὲ εἰσὶν ὀλίγοι. Κλίνειν δὲ αὐ-
 τοῖς ἐκ εἰσὶν, ἀλλὰ σισάδας ποιεῖν.
 Οὗτος δὲ αὐτῶν πλεσιώτατος νομίζεται
 εἰ, ὃ ἂν πλεῖστα πρὸς αὐτὰ ἦ: ἢ δὲ
 ἀλλῃ εἰσὶ, παρὰ πλεῖστα. Οὐρανὸν δὲ
 ἔχουσι πάντες καὶ ἄνδρες καὶ γυναικες,
 ὡς τῶν ἰσχυρῶν οἷαντες κύων με-
 ζεντα δὲ καὶ δασυτέρων. Καὶ μίσγονται
 ταῖς γυναιξὶ τετραποδισί, ὡς οἱ κύ-
 νες. ἄλλως δὲ μιγνῶν αὐτοῖς, ὅτιν αἰ-
 γρῶν. Δίκαιοι δὲ εἰσὶ, καὶ μακροβί-
 οτατοι πάντων ἀνθρώπων: ζῶσι γὰρ ἔτη
 ῥ' καὶ ο'. ἔτιοι δὲ αὐτῶν καὶ τ'.

*mulieres, supra clunes, caninae, similem, nisi quod major sit, & pilis den-
 sior. Quadrupedes item hos, canum more, cum mulieribus congregi aliūm-
 que congregiendi modum omnem pro turpi habere. Iustissimos eosdem esse,
 vitæq; reliquos inter homines longissimæ. Vivere namq; ad centesimum usq; &
 septuagesimum, nonnullosq; ad ducentissimum quoq; annum.*

*ta quotannis avehunt; additis ta-
 lentis totidem illius Pigmenti, quo
 infectores puniceum colorem inducunt.
 Electri præterea mille talenta quotan-
 nis ad Indorum regem advehere. Im-
 mō & alia plura devehere ad Indos
 venalia, pro quibus vicissim panes,
 farinam, & xylinas vestes accipiant.
 Habere quoque enses venales, quibus
 ipsi ad venatum utuntur, cum arcibus
 & jaculis. Peritissimos enim esse jacu-
 landi atque sagittandi: & præterea
 etiam, quod montes habitent altos at-
 que inaccessos, bello insuperabiles. Re-
 gem ipsis pro munere quinto quoque an-
 no præbere trecenta arcuum, totidem-
 que jaculorum millia; jam peltarum
 centum viginti, & gladiatorum quin-
 quaginta millia. Nullas item apud
 hos esse domos, sed in antris degere.
 In venatione jaculis potissimum feras,
 vel sagittis petere; easdemque perse-
 quendo, quod cursus velocitate præ-
 stent, etiam assequi. Horum uxores
 semel duntaxat per mensem, cum men-
 strua patiuntur, lavare; aliàs nun-
 quam. Neque viros unquam omnino
 lavare, sed manus tantummodo ab-
 luere. Oleo tamen ex lacte confecto ter
 saltem mensibus singulis ungi, & pel-
 libus deinde abstergi. Veste ad hæc uti,
 non villosa, sed è glabris maceratisq;
 pellibus quàm tenuissimis, ipsos æquæ
 atque uxores. Exceptis fortè ditissi-
 mis inter eos, & iis quidem paucis,
 qui lineos gestent amictus. Nec item
 lectorum novisse usum eos, qui extem-
 poraneos sibi toros exstruant. Hunc a-
 pud eos ditissimum haberi, qui pluri-
 mum habeat pecoris, ac reliquas opes
 his propemodum esse similes. Caudam
 insuper habere omnes, tam viros quàm*

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

‘ These *Cynocephali* that inhabit the Mountains, do not work, but live
 ‘ upon Hunting; and when they kill any wild Beast, they roast it in the
 ‘ Sun. They breed a great many Sheep, Goats and Asses; and drink the
 ‘ Milk and Butter-milk of the Sheep. They eat likewise the Fruit of the
 ‘ *Sipachora* Tree, from whence comes *Ambar*, the Fruit whereof is sweet,
 ‘ which having dried, they put up in Baskets, as the *Greeks* do *Raisins*.
 ‘ These *Cynocephali* having made a Boat, they load it with this Fruit, and
 ‘ with *Purpura*, the Flower being first picked, and with *Ambar*, to the
 ‘ quantity of Two hundred and sixty Talents, which they every Year
 ‘ ship off, and as much too of the Drug, with which the Dyers dye
 ‘ the Scarlet; and they carry every Year a Thousand Talents of *Ambar*
 ‘ to the *King of India*, and they take with them other Commodities,
 ‘ which they sell to the *Indians*; for which they receive Bread, and
 ‘ Meal, and Cotton Garments. And the *Indians* sell them likewise Swords,
 ‘ which they use in taking the wild Beasts; and Bows and Darts, for they
 ‘ are very skilful Archers and Darters. They are invincible, because
 ‘ they inhabit very high, and inaccessible Mountains. Every fifth year,
 ‘ the King bestows upon them Three hundred thousand Bows, and as
 ‘ many Darts: Also an Hundred and twenty thousand Shields, and Fifty
 ‘ thousand Swords. They have no Houses, but live in Caves. In hunt-
 ‘ ing the wild Beasts, they use their Bows and Darts, and pursuing
 ‘ them, they take them; for they run very swift. The Women bathe
 ‘ only once a Month, when they have their *Catamenia*, otherwise not.
 ‘ The Men don’t bathe, but only wash their hands; but they anoint
 ‘ themselves three times in a Month with Oyl made of Milk, and rub
 ‘ themselves with Hides. The Cloaths both of the Men and Women are
 ‘ 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 a-
 ‘ mongst them, who hath most Sheep, or such like Substance. They have
 ‘ all, both Men and Women, Tails on their Rumps, like Dogs, but lar-
 ‘ ger 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, Φζίνε) γδ (saith *Strabo*) ἐνδὺς ὅτι μῦθος παρεπλήκυσεν ἐκόντες ἐκ ἀγνοίας τῶν ὄντων, ἀλλὰ πλάσει τῶν ἀδυνάτων, περὶ γέλας ἢ τέρψεως κἀν.
i. e. *Statim enim apparet eos fabulas admiscere, non ob verorum ignorantiam, 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 *Peñtoroculati* 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 ἀνθρωποεικενοπερόσσωποι, 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 Cynoprofopi 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 & Sermone 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 perniciosissimi, & 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 interrimunt, & frustatim divisa ad solem assunt. Capras etiam & oves alunt, ut*

(b) *Strabo Geograph. lib. 1. p. m. 29.* (c) *Ælian. Hist. de Animal. lib. 10. cap. 25. p. m. 601.* (d) *Ælian. Hist. de Animal. lib. 4. cap. 46. p. m. 239.* (†) These *Canthari* are that sort of *Scaribæus* we call a *Lady-Cow*, and I have formerly given a Figure of, in *Philosoph. Transact. N. 175. p. 1202.* from the *Worm* or *Chrysalis* of which, come the *Cochineel*, for dying *Scarlet*, of which there is a good account here in *Ælian* out of *Ctesias*.

ex lacte potu fruuntur. Horum inter Animantes rationis expertes non temere mentionem feci, articulado 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 unusquispiam Cynocephalorum mercedem, Domini nomine sic scitè tanquam peritus aliquis Mendicis 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 μορφὴν τοῖς πιθήκοις, πλὴν μείζονες τ' εἰσὶ, καὶ ἰσχυρότεροι, καὶ τὰ πρόσωπα ἔχοντες κυνοειδέστερα. Ἐπὶ δὲ ἀγριώτερά τε τὰ ἦδη, καὶ τὰς ὀδόντας ἔχουσι κυνοειδέστερος καὶ ἰσχυρότερος.* 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 morfu, nunquam ita mansueti, ut non sint magis rabidi.* And (i) *Diodorus Siculus* describes them after the same manner: *Οἱ δὲ ὀνομαζόμενοι κυνοκέφαλοι τοῖς μὲν σώμασιν ἀνθρώποις δυσειδέσι παρεμφερεῖς εἰσὶ, ταῖς δὲ φωναῖς μυγμὸς ἀνθρωπίνος περιένθ'· ἀγριώτατα δὲ τὰ πάντα τὰ ζῶα, καὶ παντελῶς ἀπιθασάδρια καθεστῶτα, τὴν δὲ τῶν ὀφρύων πρόσφιν ἀνσηροτέραν ἔχει· ταῖς δὲ διλείαις ἰδιώτατον συμβαίνει, τὸ τὴν μήτερον ὀκτὸς τῶ σώματι φέρειν ἅπαντα τὸ χρόνον.* i. e. *Qui Cynocephali (à Canino Capite) dicuntur, Corporis aspectum Hominum deformium instar habent, quorum vocem miffitatione tantum exprimunt. Apprimè ferox est hoc Animal, nec ullo circurationem pacto admittit, & vultum à superciliis austerioribus præfert. Singulare quiddam femellis 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 ἔχον*

(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.* (i) *Diodori Siculi Biblioth. Histor. lib. 3. p. m. 168.* (k) *Photij Biblioth. Cap. 38. Cod. 250. p. m. 1364.*

γράφει, τὸ πρόσωπον δὲ κυνὸς φωνῇ δὲ ἀρίσῃ μυγμῷ παραπλησίαν ἄγειον
 δὲ ὑπερβολῇ καὶ τελείως ἀπιδάσειλον, καὶ τὴν ὄψιν ἐμπαῖνον ἀπὸ τε τῶν ὀφρύων καὶ
 τῶν ὀμμάτων αὐστηράν. Περὶ μὲν τ' ἄρ' ἔνα ταῦτα. Τῷ δὲ θήλει πρόσκει
 καὶ τὸ τὴν μήτραν ἔξω τῆ σώματος φορεῖν, καὶ οὕτω διαγίνεσθαι πάντα τ' εἶν.
 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 auste-
rum prodit. Ita Mas comparatus est. Fæmineo generi hoc est proprium, ut
uterum extra Corpus gestet, eoque habitu totam exigat vitam.

Salmasius (1) remarks that *Agatharcides* borrowed this Passage, as he hath some others likewise, from *Diodorus Siculus*. But that these Relations of *Ctesias* that are so extravagant and wild, should be copied from him, by so many and noted Authors too, seems somewhat strange. Yet we find *Ælian*, *Pliny*, *Solinus*, and a great many others have done it; tho' they have added by it little Credit to their Histories, and no doubt much lessened their own Reputation by transcribing the Errors of their Predecessors. In the *History* therefore of *Nature* we must not depend upon the Authority of the Number of those that only transcribe the same thing, without duly examining the Matter themselves: For the Authority here wholly depends on the veracity of the first Relator: And if what *Ctesias* saith is false, tho' never so many say the same thing from him, they must all be in the wrong. Especially in transcribing the Ancients, and believing their Reports, we ought to be very cautious, since 'twas a common Practice amongst them to disguise and conceal the Truths they would deliver, in *Ænigmatical* and *Mythological* Representations. Many times there is something of Truth contained in their Relations, but 'tis under such Vails, that you will not discover it, till you have taken them off. And tho' there are no such *Men*, as *Ctesias's Cynocephali*, and *Pygmies*; yet there are *Apes*, and *Monkeys*, and *Baboons*, that afforded him a ground for his Invention.

Now what sort of *Monkey* these *Cynocephali* were, I shall not at present enquire; that they are of the *Monkey-kind* is evident, because they have Tails: and *Aristotle* tells us, that they are bigger and stronger, and therefore I make them of the *Baboon-kind*. But not having seen any of them my self, I shall refer my Reader to the Authors who have wrote about them. 'Tis sufficient to my present purpose that they are a sort of *Monkeys*, and not *Men*, as formerly represented.

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

A
 Philological Essay
 Concerning the
 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. 3. p. m. 46.
 (c) Bocharti Hierozoic. seu de Animal. Sacra Scriptura. 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*, *Silennus*, 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 λέγουσι πρὸς αὐτὸν τὸ τῷ Σατύρων γένει, ὡς φαὶν' ἐπὶ τῆς ὀσφύος εἶναι νόμους, &c. i. e. *Dum in Æthiopia versatur (Osiris) Gens Satyrorum ei adducitur, quas pilos in lumbis (Osphyæ) habere ferunt. Risus enim amator erat Osiris & Musicæ Choreisq; gaudebat, &c. Satyri igitur quia ad tripudia, & decantationem Carminum, omnemque hilaritatem & lusum apti erant, in partem Militiæ venerunt.* He makes them likewise the Companions of *Bacchus*, and for the same reason (e), Τὰς δὲ Σατύρους ταῖς πρὸς γέλῳ συνεργότας ἐπὶ τῇ δόσει χρωμένους, παροικαδάζειν τῷ Διονύσῳ τὸν ἐνδαίμονα καὶ κεχαρισμένον βίον i. e. *Ita Satyri ludicris & ad risum compositis gestibus & actionibus, vitam Dionysio beatam, Gratiisque delibutam, reddunt.* And they are always represented as *Jocose* and *Sportful*, but *Scurrilous* and *Lascivious*; and wonderful Things they relate of their Revellings by Night, their Dancing, Musick, and their wanton Frolicks. For thus *Pliny* (f), describing the Parts about the Mountain *Atlas* in *Africa*, informs us, *Incolarum neminem interdiu cerni: filere omnia, non alio quam solitudinum horrore: subire tacitam*

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

(e) *Diodorus Siculus ibid. lib. 4. p. m. 213.*

Religionem animos proprius accedentium, præterque horrorem elati (sc. Montis) super nubila, atque in viciniam Lunaris circuli. Eundem noctibus micare crebris ignibus, Ægipanum, Satyrorumque lascivia impleri, Tibiarum ac Fistolæ Cantu, & Cymbalorum Sonitu strepere. And then adds, Hæc celebrati Authores prodidere. And so (g) Pomponius Mela, Ultra hunc sinum Mons altus (ut Græci vocant) *Θεὸν ὄχνημα*, perpetuis ignibus flagrat: ultra montem viret Collis longo tractu, longis littoribus obductus, unde visuntur patentes magis Campi, quàm ut prospici possint, Panum, Satyrorumque. Hinc opinio ea fidem cepit, quod cum in his nihil culti sit, nullæ habitantium Sedes, nulla Vestigia, solitudo in diem Vasta, & silentium Vastius, nocte crebri ignes micant, & veluti Castra late jacentia ostenduntur, Crepant Cymbala & Tympana, audiunturque 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 τῇ τῆς νυκτὸς φόβῳ σφίον ἐκπίπτει Πανικός. Τὰ γὰρ ἀπὸ αἰτίας ἐδεμῶς δαίμονες ἐκ τέρας φανὶ γίνονται* i. e. *Eâ nocte Panicus illos incessit terror. Terrores enim nulla ex causa Ortos ab eo (sc. Pane) immitti aiunt.* And so (i) Euripides:

Κεῖνός Πανὸς τρομερὰ μάλιστα φόβῳ.

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

And so (k) Dionysius Halicarnassensis speaking of the Faunus, says, *Τέρας γὰρ ἀνατιθέσθαι τῷ δαίμονι Ῥωμαῖοι τὰ Πανικά, ἢ ὅσα φάσματα ἃ ὅτε ἀλλότῃς ἰσχυρὰ μορφαῖς, εἰς ἑὴν ἀνθρώπων ἐρχοῦν, δαίμονα φερόντα* 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. Rheso.

(k) Dionysij Halicarnass. lib. 5. cap. 3.

(h) Pausanias in Phocidis.

(l) Ovid in Phædra.

(i) Euripides in:

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, Ἐστὶ τὸ πανικὸς λέγεσθαι παρὰ χὰς τὰς ἀρνιδίους, καὶ ἀλόγους, ἔτι καὶ πῶς καὶ αἱ ἀγέλαι, καὶ τὰ ἀπόδια ποιεῖται, ἴσως πῶς ἔξ ὕλης, ἢ τῶν ἐπὶ ἀνίστων καὶ παρὰ χὰς τῶν ἀνέσταντα. i. e. *Nil prohibet quin etiam Panicos tumultus dicamus, qui subito & sine ratione certa exoriuntur: sic enim interdum armenta & greges terrentur, dum sonus quidam subitus ē Sylva, aut ex Antris aut ex Terræ voraginibus affertur.*

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

*Sex etiam, aut septem loca vidi reddere voces
Unam cum jaceres: ita colles collibus ipsis
Verbarepulsantes iterabant dicta referre.
Hæc loca Capripedes Satyros, Nymphasque tenere
Finitimi fingunt, & Faunos esse loquuntur;
Quorum noctivago strepitu, Ludoque jocanti
Adfirmant volgo taciturna silentia rumpi,
Chordarumque Sonos fieri, dulceisque querelas,
Tibia quas fundit digitis pulsata canentum:
Et genus Agricolum late sentiscere, cum Pan
Pinea semiferi Capitis velamina quassans,
Unco 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 foriè 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. vers. 581.

(n) *T. Lucretij de Rerum Naturâ*, lib. 4.

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 juvenus
Fecere, & Pinu præcincti Cornua Panes.
Silvanusque suis semper juvenilior annis.*

And elsewhere he tells us (q),

Panes & in Venerem Satyrorum prona juvenus.

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* expressly tells us, that when the *Satyrs*

(o) *Ovid. Metamorph. lib. 6. vers. 392.*
Faunorum. (r) *Virgil. Georg. l. 2. vers. 494.*

(p) *Ovid. Metamorph. lib. 14. vers. 637.*
(s) *Plutarch. in Parallelis.*

(q) *Ovid. l. 1.*
(t) *Pausan. in Attic. p. m. 21.*

grow old, they are called *Sileni*: Τὲς γὰρ ἡλικία τῶ Σατύρων παρῳκονίας ὀνομαζέσσι Σαλῳές. 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,
Fauniquæ, 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 satisfy 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 oftentimes to be overcredulous, ἐμοὶ μὲν ἔπειτ' ἀλέγοντες, οἰκίσαν τὰ ἔργα αἰγίποδας ἀνδρες 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) *subsolani Indorum montibus* (*Catharcludorum dicitur Regio*) *perniciossimum 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. Quum autem Venantium strepitum sentiunt, & Ca-*

(u) *Ovid. Metamorph. lib. 1. vers. 192.* (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 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, ἑτέρῃ πλέον ἐδέλων ὁπίσσω, πολλοῖς αὐτῶν τέτων εἴνεκα ἐς λόγους ἤλθον. Ἐπεὶ δὲ Εὐφημὸς Κατ' ἀνὴρ πλέον ἐς Ἰταλίαν ἀμαρτεῖν ὑπὸ ἀνέμων τῶ πλῆ, καὶ ἐς τὴν ἕξω θάλασσαν, ἐς ἣν ἐκέπτε πλείους Ἰεαννεχθῆναι Νήσους δὲ εἶναι μὲν ἐρήμους πολλὰς, εἰ δὲ ταύταις οἰκεῖν ἄνδρας ἀγροῖας ἄλλαις δὲ ἐκ ἐδέλων νήτοις προσίχουσιν τὰς ναύτας, οἷα πρὸς τὴν τε πρὸς ἡνίοχον, καὶ τῇ ἐνοίκων ἐκ ἀπείρου ἔχοντας. Βιαδιώσας δ' ἐν καὶ τότε. Ταύτας καλεῖσθαι μὲν ὑπὸ τῇ ναυτῇ Σατυρίδας, εἰ δὲ τὰς ἐνοίκων καὶ πυρρὰς, καὶ ἵππων δὲ πολὺ μέγας ἔχειν ὅππῃ τοῖς ἰσίοις ἔσθας. Τέττος ὡς ἡδονὴ καταδραμόντας ὅππῃ τὴν ναυῶ, φωνὴ μὲν ἐδεμῆν ἰέναι, ταῖς δὲ γυναιξὶν ὁππῇ χεῖρῶν ταῖς ἐν τῇ νηί. Τέλος δὲ δεισιπνίας τὰς ναύτας, βάεβαρον γυναικὰς ὁρᾶσθαι ἐς τὴν νήσον. Ἐς ταύτῃ ἐν ὅσῃ ἔχουσιν τὰς Σατύρας, δὲ μόνον ἢ καθίστηκεν, ἀλλὰ τὰ τὸ πᾶν ὁμοίως σῶμα. Which (c) Conrad. Gesner. I find hath thus translated; Ceterum de Satyris, quinam sint, cum plura quam alij scire laborem, cum multis ea de re sum collocutus: Dixit autem Euphemus Car, se quum 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 incolis. Ad alias vero aiebat nautas desistere recusasse, quod antea quoque eo appulsi, Incolarum Inhumanitatem essent experti. Tempestatis denique violentia eo pervenisse. Insulas eas à Nautis vocari Satyrias. Incolas inesse rubicundos, & caudas imo dorso habere, Equinis non multo minores. Hos, ubi senserant, ad navigium accurrisse, nullamque vocem edidisse, sed mulieribus Navi unà advectis manus injecisse. Nautas verò timore correptos, Barbaram Mulierem in Insulam tandem projecisse. Eam Satyros, non solum qua parte consuetudo permittat, verum etiam toto corpore libidinosè violasse, referebat.

It appears therefore plainly that the Satyrs have Tails. But that there might not the least Scruple remain what sort of Animals these Satyrs were, I shall produce a Passage out of (d) Philostorgius which is very express, and comes fully up to our Business: For he tells us, Ἐστὶ δὲ καὶ τὸ (sc. Satyrus) πίθηκος, ἐρυθρὸν τὸ πρόσωπον, καὶ γοργὸς τὴν κίνησιν, καὶ ἔσθῃ ἔχων. i. e. That a Satyr is a sort of Ape with a red face, swift of motion, and ha-

(b) Pausanias in Atticis, p. m. 21. (c) Gesner. de Animal. p. 865. (d) Philostorgij Hist. 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 *Ape*, 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 summa* (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 Desert 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 Desert 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 *Demons*, 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 Hermit* by *St. Jerome*, and in that of *St. Anthony* by *St. Anastasius* of a *Satyr* meeting *St. Anthony* in the Desert, 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) *Pliny ibid. lib. 5. cap. 8. p. m. 549.* (k) *Pliny Nat. Hist. lib. 10. cap. 72. p. m. 466.*

fabulous or a Delusion. *Non assentior* (saith (1) *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 ζῴων εἰδήσεσι τῆς πιθικίας μορφῆς ἐπιμεινόμενης· καὶ δῆλον ταῦτα εἶναι, πολλῶν εἰς ἡμᾶς κομιζομένων, οἷα δὲ καὶ ὁ Πάν ἐπικληθεὶς ὑπάρχει, ὅς τινι κεφαλῇ αἰγοπερὶ σῶπός ἐστι, καὶ αἰγόκερος, καὶ ἐκ λαγόνων τὰ καὶ τῶ αἰγοσκελὲς, τινὶ δὲ κοιλίαν καὶ τὸ σέρνον καὶ τὰς χεῖρας καθαρὰς πιθικῶν, ὃν καὶ ὁ τῶ Ἰνδῶν Βασιλεὺς Κῶνσταντίῳ ἀπεσάλκει. Τῆτο δὲ τὸ ζῷον ἐξῆ μὲν φερόμενον ἄχει τινὸς ἐν τινὶ πλέγματι διὰ τὸ θυμῶδες εἰρμύμενον, ἐπεὶ δὲ ἀπέθανε, περιχέουσιν αὐτὸ οἱ κομιζόντες, δαμάσκειν παρὰ χεῖρας ἀσυνήθους εἰκόνα, μέχρι τῆς Κωνσταντίνου διεσώσαντο πόλεως. Καὶ μοι δοκεῖ τὸ ζῷον τῆτο Ἕλληνας πάλαυ ἰδεῖν, καὶ ἐκπλαγέντες τὰ ξένον τῆς θείας, Θεὸν σφίσιν νομίσαι, εἰδωμένον αὐτοῖς τὰ παρὰ δόξαν θεοποιεῖν. Ὡστερ καὶ τὸ Σάτυρον. i. e. This Ape-form is mixt with other Species of Animals; and this is plain, several being sent over to us; as that which is called Pan, which in its Head had a Goat's face and Goat's horns, from its Loins downwards Goat's Legs; but in its Belly, Breasts, and Hands was a pure Ape. Such an one the King of India sent to Constantius. This Animal lived for some time, and was carried about inclosed in a Cage, being very wild. When it died, those that looked after it, having embalmed it to make a shew of this unusual sight, sent it to Constantinople. Now I am apt to believe the ancient Greeks had seen this Animal, and being surpris'd 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 *πιθικῶν* here is generical, and includes both. But there being several Species of them, they received a denomination according to the resemblance they had to other Animals; as in *Philostorgius* are mentioned before, the *Leontopithecus*, the *Arctopithecus*, the *Cynocephalus* and *Aegopithecus*, which last seems to be our Satyr, from the resemblance it hath in its Head and Legs to a Goat. That their Legs and Face are like a Goat's, is easie enough to be believed: but the Horns that they clap upon his Head, seem to me as an addition of the Poets, or the Painters, or both. But what gave a foundation to this Invention, possibly may be the large-

(1) *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*, Τὴν τε γὰρ αὐτὰς οἰκίαν οἱ πῖθηκοι κατέκταναν τοῖς ἀνθρώποις, θεοὶ παρ' αὐτοῖς νομιζόμενοι, καθάπερ παρ' Αἰγυπτίοις οἱ κύνες· ἐκ τε τῆς παρεκδραμμένων ἐν τοῖς ταμείοις τὰ ζῶα τὰς τετραῖς ἐλάμβανον ἀκωλύτως ὅποτε βέλοισι. Καὶ τὰς προσηγορίας δ' ἐτίθεσαν γυνεῖς τοῖς παισὶ κατὰ τὸ πλεῖστον ἀπὸ τῆς πῖθηκας, ὥστε παρ' ἡμῶν ἀπὸ τῆς θεῶν. Τοῖς δ' ὑποκρίνασι τὸ τοῦ ζῶον, ὡς ἡτεροκόλ τὰ μέγιστα, θάνατον ὥραιο πρόσμιον. Διὸ δὲ καὶ παρὰ πῶν εἰσέρχεται ἐν παροικίας μέγιστον λεγόμενον ἐπὶ τῆς ἀναλεινομένων, ὅτι πῖθηκος αἷμα πόλλισται. 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 bestie sumunt, nominaque ut plurimum 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

(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 India Orient. part. 2. cap. 46. p. m. 111.* (t) *J. Euseb. Nieremberg. Hist. Nat. l. 9. cap. 46. p. 180.*

same Story, but varies in the Account of some Particulars. And *Joh. Petrus Maffei* (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 *Chimera*, than a real Being: You may see his words in the Citations.

(u) *Joh. Pet. Maffei Hist. Indic. lib. 1. p. m. 36.* (w) *Albert. Magnus de Animalib. lib. 22. p. m. 223.* *Pilosus est Animal Compositum ex homine superius, & Capra inferius; sed Cornua habet in fronte; & est de genere Simiarum; sed multum monstruosum; & aliquoties incedit erectum, & efficitur dormitum. Hoc asserunt in Disertis habitare Æthiopiæ; & aliquoties captum & in Alexandriam deductum, & mortuum sale infusum & in Constantinopolin delatum.*

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, ἡ μελέγος μὲν Ἐχιδνῆς ὤν, Παλῆγος δὲ, Τυφῶντος, εἶχε δὲ πρόσωπον μὲν γυναικὸς σῆθεν, καὶ βῆσαν καὶ ἑσθλὴν λέοντος, καὶ πτέρυγας ὀρνίθου. 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 *Fancies* govern'd them, so they made their description. *Clearchus* (as I find him quoted in (c) *Natalis Comes*) has out-done them all; At *Clearchus* (saith he) *Caput & Manus Puellæ, Corpus Canis, vocem Hominis, Caudam Draconis, Leonis unguis, Alas Avis, illam habuisse scripsit. Palephatus* (d) is somewhat different in his Account, where he tells us, Περὶ τῆς Καδμείας Σφίγγος λέγουσιν ὡς θηρίον ἐγένετο, σῶμα μὲν ἔχον ὡς κυνὸς, κεφαλὴν δὲ, καὶ πρόσωπον κόρης, πτέρυγας ὀρνίθου, φωνὴν δὲ ἀνθρώπου. i. e. They say that the *Cadmean Sphinx* 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 σῆθεν καὶ πόδας λέοντος. So the *Scholiast* upon (f) *Aristophanes*, οἱ δὲ Σφίγγος πόδες λεοντάδεις 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' ἰσχυλῆσ' ὑπὸ λεοντόπεν βῆσαν
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

(a) *Apollodori Bibliothec.* l. 3. c. 5. § 8. p. m. 170. (b) *Ausonius in Grypho Ternarij.* (c) *Natalis Comes Mytholog.* l. 9. c. 18. (d) *Palephatus de incredibilibus Historiis Cap. de Sphinge.* p. m. 14. (e) *Eurip. in Phanissis.* (f) *Aristophan. in Ranis.* (g) *Ælian. de Animal.* l. 12. c. 7. (h) *Ælian. de Animal.* l. 12. cap. 38.

us, *Sphingem quicunque vel Picturæ vel Plastica operam dant, fingere alatum 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, Elephanti, 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 κῆροι παρὰ πέμπτον εἰς τὴν Ἀλεξανδρείαν ἐκ τῆς Τρωγλοδυτικῆς, καὶ τῆς Αἰθιοπίας· εἰσι δὲ αἱ μὲν σφίγγες ταῖς γεφομέναις παρόμοιαι. Πλὴν ὅτι πᾶσαι δασεῖαι, καὶ ταῖς ψυχαῖς ἡμεροὶ καὶ πρᾶτοι. Καὶ πανεργίας κοινωνοὶ πλείους, διδασκαλίας τὲ μεθοδολικῆς ἐπὶ 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 γήρουν μὲν περὶ τὴν Τρωγλοδυτικὴν, καὶ τὴν Αἰθιοπίαν, ταῖς δὲ μορφαῖς ὑπάρχουσιν ἐκ ἀνόμοιοις ταῖς γεφομέναις, μόνον δὲ ταῖς δασύτησι διαλλάττειν. Τὰς δὲ ψυχὰς ἡμέρας ἔχουσι καὶ πανέργες, ἐπὶ πλείον καὶ διδασκαλίαν μεθοδικῶς ἐπιδέχον. i. e. Sphinges circa Troglodyticam & Æthiopiam existunt, formâ his non absimiles, quæ Arte Pictorum exhibentur, nisi quod 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 Σφίγξ γένεθ' ἐξ ἀνθρώπων (αὐτὸς γὰρ δεῖξαι μὲν οὖν γράφω) ὥς τὸ μὲν ἄλλο σῶμα λάσιν ὅσιν, ὡς τοῖς ἄλλοις ἀνθρώποις· τὸ δὲ στήθεον ἄχει γὰρ αὐτὴ τῶν τευχῶν ἐν ἑαυτῇ, μαζὰς δὲ γυναικὸς ἔχει. Ἐρυθρὰ τινὸς βραχίονα καὶ χροῖον δὲ ἐπαναστήματι ἅπαν ἐν κύλῳ τὸ γυμνωμένον τῶν σώματι περιδεδυμένον, καὶ εἰς πολλὴν τινα ἐνπρέπειαν ἀνθρωποειδὲς ὄντι τῷ ἐν μέσῳ χρώματι συναρπάζομεν. Τὸ δὲ πρόσωπον ἐν ἐξελχίσθῃ μάλλον, καὶ εἰς γυναικίαν ἔλκει μορφῇ. Ἡ δὲ φωνὴ ὁπτακὶς ἀνθρωπεία, πλὴν ὅσον ἐκ εἰς ἄρθρα διακεκομμένη, ἀλλὰ τινὶ ταχέως. καὶ οἷον μετὰ τινος ὀργῆς τὴν καὶ ἀχθῆναι ἀσπασίαν ὑποφθιζομένης προσεκοιμήσθαι βαρύνειν τε μάλλον ὅσιν ὀξυνομένην ἀγέρον τὴν δὲ δεινῶς τὸ θυμὸν, καὶ πανουργία, καὶ ἐδὲ ῥαδίως πηλασεύμενον. i. e. A Sphinx is a sort of Ape (I shall write what I saw my self) all the rest of whose Body is hairy like other Apes. But it's Sternum or Breast is smooth without hair up to the Throat. It has Mammæ or Breasts like a Woman; little reddish Pimples like Millet Seeds, running round that part of the Body that is bare; very prettily suiting with the Flesh colour in the middle. It's Face is roundish, and resembles a Woman's. It's Voice is very much like the Humane, only it is not articulate, but precipitate; and like one that speaks unintelligibly thro' Anger and Indignation. When 'tis incensed, it's Voice is deeper. This Animal is very wild, and crafty, and not easily tamed. And *Pierius*, as I find him quoted by (q) *Philip Camerarius*, gives us much the same description of one he saw at *Verona*. *Harum ego unam* (saith he) *Veronæ quum essem vidi; Mammis illi & Glabris & Candidis, à Pectore propendentibus. 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 prioribus, dorso hispido supra modum, fusco & oblongo Pilo, eoque densissimo.*

What has been said, I think fully makes out, that the *Sphinx* is not a meer Figment of the Poets, but an *Animal* bred in *Africa*, of the *Ape* or *Monkey-kind*. 'Tis different from our *Orang-Outang* in the colour of it's Hair; in the roundness and comeliness of it's Face; in it's Breasts, being pendulous and long; and the red Pimples it hath on the naked part of it's Body. *Pliny* tells us (as I have elsewhere remarked) that the *Sphinges* have Pouches in their Chops as *Satyrs* and *Monkeys* have; and the Poets describing them with a Lion's Tail, make me apt to think, that they are of the *Monkey-kind*.

(q) *Phil. Camerarij Opera subscissa sive: Meditat. Hist. Cent. 1. Cap. 71. p. m. 325.*

FINIS.

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