

¹ The number of teeth varies even among the same species. ² In some species.

Evaluation of the Data

Upon examining the Primary Diagnostics, it is obvious that many of them could be applied to each of the animals listed. The key to determining the actual usage is “What are the primary usages” not “What is the animal capable of doing”. Obviously, most land animals walk, but unless that is the only thing the animal does it is not a high priority primary diagnostic. Most of these animals use their front paws for digging/tearing/ripping which also carries the highest priority in that Diagnostic group. So at that point those animals could be classified in the same Association (which is similar to the Order level of popular classification). The only one that does not belong is the sloth, which at this point should be in a different Association.

After examining the Secondary Diagnostics, the same result is given. So clearly the sloth belongs to a different Association than the others. It is not until the Tertiary Diagnostic that another separation becomes apparent. At this point the armadillo and armadillos should be in the same Association, while the anteaters and pangolin belong in another. This is contrary to the present universal classification scheme which places the armadillo in Tubulidentata, the pangolin in Pholidota, and the other three in Xenarthra. McKenna and Bell place armadillos in Cingulata, and then put anteaters and sloths in Pilosa. It is clear anteaters and sloths should not be in the same Association (or Order). The other two affiliations (armadillos and armadillos, anteaters and pangolins) show the variation in perspective between the two classification schemes.

| Division Level Diagnostics | | | | | | | | |
|------------------------------------|------------------|-----------------------|-----------------|-----------------------|------------------|-----------------|-----------------|-----------------------|
| Species → | | Giant Anteater | Tamandua | Silky Anteater | Armadillo | Aardvark | Pangolin | Two-toed Sloth |
| Priority | Trait | | | | | | | |
| Primary (Dental Patterning) | | | | | | | | |
| 7 | Premolars | | | | X | X | | |
| 8 | Molars | | | | X | X | | X |
| 9 | No Teeth | X | X | X | | | X | |

| | | | | | | | | |
|--|---------------------|----|----|-----|----|-----|----|-----|
| 10 | Diastema | | | | X | X | | X |
| 11 | Lacks Enamel | | | | X | X | | X |
| 26 | Rudimentary | | | | X | X | | X |
| Secondary (Stance Of The Manus/Hindfoot Assemblage Including The Phalanges) | | | | | | | | |
| 27 | Unguligrade | | | | | | | |
| 28 | Digitigrade | X/ | X/ | X/X | X/ | X/X | X/ | X/X |
| 29 | Plantigrade | /X | /X | | /X | | /X | |

Evaluation of the Data

As with the previous classification level, the primary diagnostic group shows various groupings (i.e. anteaters and pangolins, etc.). It is of note that the silky anteater would now be separated from the other anteaters and pangolin, just as the armadillo and aardvark would be separated, due to the fact there is a difference in how the front and rear appendages appear when standing.

A problematic animal to diagnose by this grading type has been the sloth. According to present scientific sources, the genera *Choloepus* or the two-toed sloth, there is a pair of teeth that are like canines but not termed as such. These teeth are not found in the three-toed varieties or the extinct ground sloths. The three-toed varieties also lack a diastema. So the three-toed and ground sloths would each be in their own separate Divisions, just as the two-toed sloth would. Whether those teeth should be classified as canines will not be addressed in this paper.

One of the most problematic areas to diagnose with sloths has been their stance. Some consider them digitigrade because extinct varieties walked on the digits of their front feet. Present day tree sloths typically lack the muscle strength to accomplish such an act and tend to walk on the sides of their hands/feet, when on the ground. Normally, they are in trees and hanging upside down (which would be their normal stance). Therefore, since they hang by their digits, they would be considered digitigrade.

At this level, the anteaters and pangolins would remain in the same Division, excluding the silky anteater which belongs in its own. The armadillo and aardvark would be in separate Divisions as well as two-toed and three-toed sloths. It is of note that the three-toed sloth has not been included in the table, but lacks the “canine-like” teeth found in the two-toed variety, thereby changing its dental patterning.

Genesis/Kind Level Diagnostics

| Species → | | Giant Anteater | Tamandua | Silky Anteater | Armadillo | Aardvark | Pangolin | Two-toed Sloth |
|---|----------------------------|----------------|----------|----------------|-----------|----------|----------------|----------------|
| Priority | Trait | | | | | | | |
| Primary (External Appendage Type) | | | | | | | | |
| 7 | Manus Hoof | | | | | X | | |
| 8 | Pes Hoof | | | | | X | | |
| 17 | Digging Paw Manus | X | X | X | X | | X | |
| 18 | Digging Paw Pes | | | | X | | | |
| 24 | Clawed Columnar Pes | | | | | | X ¹ | |
| 37 | No Webbing on Manus | X | X | X | X | X | X | X |
| 38 | No Webbing on Pes | X | X | X | X | X | X | X |
| 43 | Clawed Manus | X | X | X | X | | X | X |
| 44 | Clawed Pes | X | X | X | X | | X ¹ | X |
| 59 | Monocarpal Manus | X | X | X | X | X | X | X |
| 60 | Monotarsal Pes | X | X | X | X | X | X | X |
| Secondary (External Tail Type) | | | | | | | | |
| 92 | Mane Tail | X | | | | | | |
| 104 | Armored Tail | | | | X | | | |
| 107 | Plated Tail | | | | | | X | |
| 108 | Prehensile Tail | | X | X | | | X | |
| 113 | Flexible Tail | | X | X | | X | X | |
| 115 | Tapered Tail | | X | X | X | X | X | |
| 117 | Stub Tail | | | | | | | X |
| Tertiary (External Snout Type) | | | | | | | | |
| 145 | Box Snout | | | | | | | X |
| 147 | Taper Snout | | | | X | | X | |
| 149 | Tubular Snout | X | X | X | | | X | |
| 150 | Apex Snout | | | | | X | | |

Rather than continue on through the enormous list of all diagnostics, the point was clearly made by the tertiary group, and therefore the evaluation was terminated.

¹ One species exhibits a columnar pes, all the others appear to have a clawed pes.

Evaluation of the Data

Taking into account the previous separations at each level of classification, it becomes apparent that at this level they now all belong to their own Genesis/Kind.

Revelations On The Origins of Humans

One of the most controversial and often problematic areas of classification involve human origins. Where did people come from and what affinities do we have with the rest of the animal classifications? That brings us to how the DBC defines humans. Since present classification scenarios say that humans are primates, various primates will be compared to see how we all fit together. Obviously we are all placental mammals so everything through the Allocation level is presumed.

| Association Level Diagnostics | | | | | | | | |
|--|--|--------|---------|------------|---------|----------------|---------------|----------|
| Species → | | Humans | Gorilla | Chimpanzee | Macaque | Colobus Monkey | Spider Monkey | Marmoset |
| Priority | Trait | | | | | | | |
| Primary Diagnostics (Usage of feet and hand elements) | | | | | | | | |
| 1 | Front foot/hand is used for Complex Articulations | X | | | | | | |
| 2 | Hind foot is used for Complex Articulations | | | | | | | |
| 5 | Front foot/hand is used for Digging/Tearing/Ripping | | | | | | | |
| 6 | Hind foot is used for Digging/Tearing/Ripping | | | | | | | |
| 7 | Front foot/hand is used for Grasping/Catching | X | X | X | X | X | X | X |
| 8 | Hind foot is used for Grasping/Catching | | X | X | X | X | X | X |
| 9 | Front foot/hand is used for Climbing | X | X | X | X | X | X | X |

| | | | | | | | | |
|--|---|---|---|---|---|---|---|---|
| 10 | Hind foot is used for Climbing | | X | X | X | X | X | X |
| 11 | Front foot/hand is used for Perching/Holding | | | | | | | |
| 12 | Hind foot is used for Perching/Holding | | | X | X | X | X | X |
| 13 | Front foot/hand is used for Swimming | | | | | | | |
| 14 | Hind foot is used for Swimming | | | | | | | |
| 15 | Front foot/hand is used for Paddling | | | | | | | |
| 16 | Hind foot is used for Paddling | | | | | | | |
| 17 | Hind foot is used for Wading | | | | | | | |
| 18 | Front foot/hand is used for Running | | | | | | | |
| 19 | Hind foot is used for Running | | | | | | | |
| 20 | Hind foot is used for Hopping | | | | | | | |
| 21 | Front foot/hand is used for Hopping | | | | | | | |
| 22 | Front foot/hand is used for Walking | | X | X | X | X | X | X |
| 23 | Hind foot is used for Walking | X | X | X | X | X | X | X |
| 26 | Front foot/hand is used for Wading | | | | | | | |
| Secondary Diagnostics (Food oriented usage of mouth/beak/tongue elements) | | | | | | | | |
| 27 | Catching/Grasping | | | | | | | |
| 29 | Gnawing | X | X | X | X | X | X | X |
| 30 | Tearing | | | X | | | | X |
| 32 | Grazing | X | X | X | X | X | X | |
| 33 | Cracking | X | X | X | X | X | X | X |
| 37 | Grinding | X | X | X | X | X | X | X |
| Tertiary (General Dental Composition Based On Usage) | | | | | | | | |
| 38 | Incisors | X | X | X | X | X | X | X |
| 39 | Premolars | X | X | X | X | X | X | X |
| 40 | Molars | X | X | X | X | X | X | X |
| 41 | Canines | X | X | X | X | X | X | X |
| Define 1 (Jaw Form) | | | | | | | | |
| 44 | Solid | X | X | X | X | X | X | X |
| 45 | Fractured | | | | | | | |

Evaluation of the Data

It is interesting to see that under this type of comparison, humans and primates actually have key points in which they differ. Obviously the highest primary for humans is “Complex Articulations”, where the primates have their highest primary as “Grasping/Catching”. If we look at the primary diagnostic group as a whole, most of the diagnostics can be accomplished by humans. The key is that these things are not typically how they are used. So rather than check almost all of them, only the ones of significance have been noted. Our feet are also quite different from primates. All of them have the ability to grasp objects (in the sense of wrapping around). It is well known that some people are nimble with their feet and can actually use them to accomplish “Complex Articulations”. Those cases tend to be rare and rather unique. The human foot is mainly designed to balance and carry the body and that is it. Although some people can walk on their hands, that is also not a primary usage of those appendages. With primates it is common place. Primates can perch on branches, and often do so when being arboreal. Humans lack the ability to wrap their feet far enough around the branch to permit perching. Proceeding down to the secondary diagnostic group, the only real variation is that some primates rip or tear chunks from their food when humans usually gnaw it (in civilized society we typically cut it up).

After evaluating these differences, it becomes clear that humans belong in a different Association (similar to Order) than primates. Since one of the key elements of variation is the pes, the name of the Association could be termed “Anthropodiformes”. The others could be referred to as “Primatiformes.” Obviously this may cause some concern among certain scientists. That is unavoidable. Even if the primary diagnostics were changed to biological variations, the fact our pes is dramatically different than the pes of other primates should be of note. From a philosophical perspective one might say that the steps that form our paths are truly different.

| Division Diagnostics | | | | | | | | |
|---|-------------|--------|---------|------------|---------|----------------|---------------|----------|
| Species→ | | Humans | Gorilla | Chimpanzee | Macaque | Colobus Monkey | Spider Monkey | Marmoset |
| Priority | Trait | | | | | | | |
| Primary (Dental Patterning) | | | | | | | | |
| 4 | Bi-Incisors | X | X | X | X | X | X | X |
| 7 | Premolars | X | X | X | X | X | X | X |
| 8 | Molars | X | X | X | X | X | X | X |
| 13 | Canines | X | X | X | X | X | X | X |
| Secondary (Stance Of The Manus/Hindfoot Assemblage) | | | | | | | | |

| Including The Phalanges) | | | | | | | | |
|--------------------------|--------------------|----|----|----|----|----|----|----|
| 28 | Digitigrade | | X/ | X/ | X/ | X/ | X/ | X/ |
| 29 | Plantigrade | /X | /X | /X | /X | /X | /X | /X |

Evaluation of the Data

After being separated from the Primatiformes, the Anthropodiformes maintain only one distinct characteristic from primates at the Division level. Human hands are not digitigrade since they are not utilized to maintain their stance. They do share a plantigrade stance (based on feet) with the primates though.

| Genesis/Kind Level Diagnostics | | | | | | | | |
|---|-----------------------------------|--------|---------|------------|---------|----------------|---------------|----------|
| Species → | | Humans | Gorilla | Chimpanzee | Macaque | Colobus Monkey | Spider Monkey | Marmoset |
| Priority | Trait | | | | | | | |
| Primary (External Appendage Type) | | | | | | | | |
| 10 | Pure Bipedal Pes | X | | | | | | |
| 11 | Grasping Palmate Paw Manus | X | X | X | X | X | X | |
| 12 | Grasping Palmate Paw Pes | | X | X | X | X | X | |
| 13 | Grasping Paw Manus | | | | | | | X |
| 14 | Grasping Paw Pes | | | | | | | X |
| 37 | No Webbing on Manus | X | X | X | X | X | X | X |
| 38 | No Webbing on Pes | X | X | X | X | X | X | X |
| 43 | Clawed Manus | | | | | | | X |

| | | | | | | | | |
|---------------------------------------|----------------------------|---|---|---|---|---|---|---|
| 44 | Clawed Pes | | | | | | | X |
| 51 | Opposable-toe Manus | X | X | X | X | X | X | |
| 53 | Opposable-toe Pes | | X | X | X | X | X | |
| Secondary (External Tail Type) | | | | | | | | |
| 73 | Straight Tail | | | | X | | X | X |
| 74 | Mane Tail | | | | | X | | |
| 90 | Prehensile Tail | | | | | | X | |
| 95 | Flexible Tail | | | | X | X | X | X |
| 98 | Spiral Tail | | | | X | | | |
| 99 | Stub Tail | | | | X | | | |
| 112 | No Tail | X | X | X | X | | | |
| Tertiary (External Snout Type) | | | | | | | | |
| 127 | Box Snout | | | | | | | X |
| 129 | Taper Snout | | | | X | X | X | |
| 139 | Proboscis Snout | X | | | | | | |
| 144 | Over-bite Snout | X | | | X | X | | X |
| 145 | Under-bite Snout | | X | X | X | | X | |

Rather than continue on through the enormous list of all diagnostics, the point was clearly made by the tertiary group, and therefore the evaluation was terminated.

Evaluation of the Data

The fact that humans have a purely bipedal pes, that lacks an opposable-toe, is more clearly defined at this classification level. Some of the primates exhibit noticeable diagnostic differences as well. Most notable are the marmosets which have paws that are not truly palmate and have claws instead of nails on their fingers. Although they may use their toes as an opposable digit, they do not appear to be truly opposable in the same sense as other primates. Monkeys have all kinds of tails, while humans and apes do not. There are some species of macaque that are also considered tailless. It is of special note that only New World monkeys have prehensile tails, such as the spider monkey. The Tertiary Diagnostic Group shows more variations. One of the more notable diagnostics is that humans have a proboscis snout, although there are monkeys that share this trait.

Once again humans are shown to be different than other primates. Since they were separate in classification at a higher level, it is not necessary to detail the differences any more than they already have been. It is of note that the gorilla and chimpanzee belong in the same Genesis/Kind, but the remaining Primatiformes each appear to have their own niche. So they would all belong to different Genesis/Kinds.

These “Revelations” have shown that by simply creating a new methodology, or altering a present one, can greatly affect the results we obtain from the data. What we once considered to be written in stone may need to be observed in a different perspective. Only once all the possibilities are examined can a “most true” or “most valid” determination be made.

