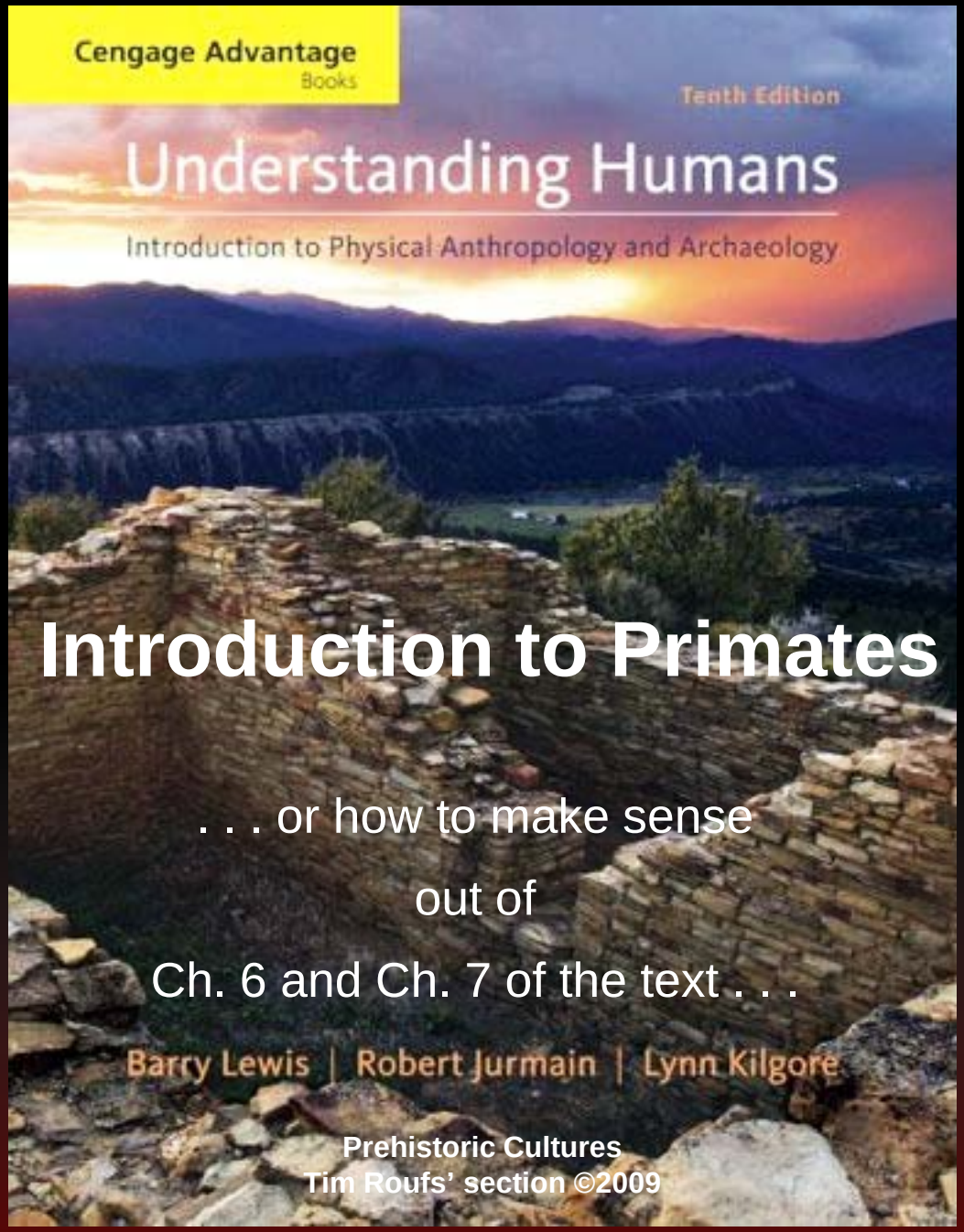


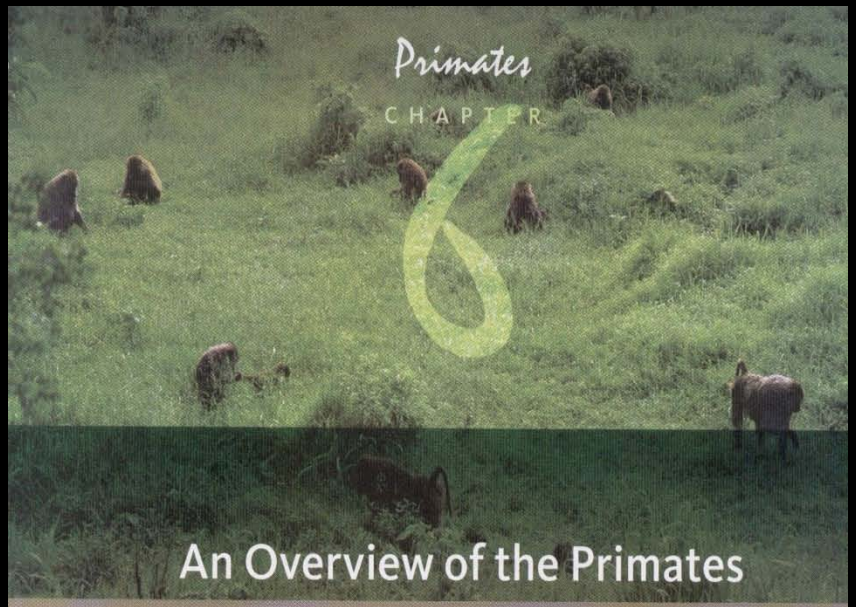
Introduction to Primates

. . . or how to make sense

out of

Ch. 6 and Ch. 7 of the text . . .

Prehistoric Cultures
Tim Roufs' section ©2009



Primates

CHAPTER 6

An Overview of the Primates

OUTLINE

Introduction
Primate Characteristics
Primate Adaptations
Evolutionary Factors
Geographical Distribution and Habitats
Diet and Teeth
Locomotion
Primate Classification
A Survey of the Living Primates
Lemurs and Lorises
Tarsiers
Anthropoids (Monkeys, Apes, and Humans)
Hominoids (Apes and Humans)
Humans
Endangered Primates
The Bushmeat Crisis
Mountain Gorillas at Great Risk

Primates--Contemporary

Prehistoric and Contemporary Primates (class handout .pdf)

Understanding Humans, 10th Ed. diagram p. 129

to top of page / A-Z index

prosimians ("Pre-Monkeys")		lemurs lorises tarsiers	
monkeys	New World monkeys (*Platyrrhini*)	all New World monkeys	
	Old World monkeys	all Old World monkeys	
apes	"lesser apes" (*Hylobatidae*)	gibbons and siamangs	
	great apes (*Pongidae*)	orangutans	
		gorillas	Western Lowland Cross River Mountain Eastern Lowland
		chimpanzees	common chimps bonobos ("Pygmy Chimps")
humans	(*Hominidae*)	*Homo*	

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Kingdom = *Animalia* >> Phylum = *Chordata* >> Subphylum = *Vertebrata* >> Class = *Mammalia* >> Order = Primates

131-144
102-112
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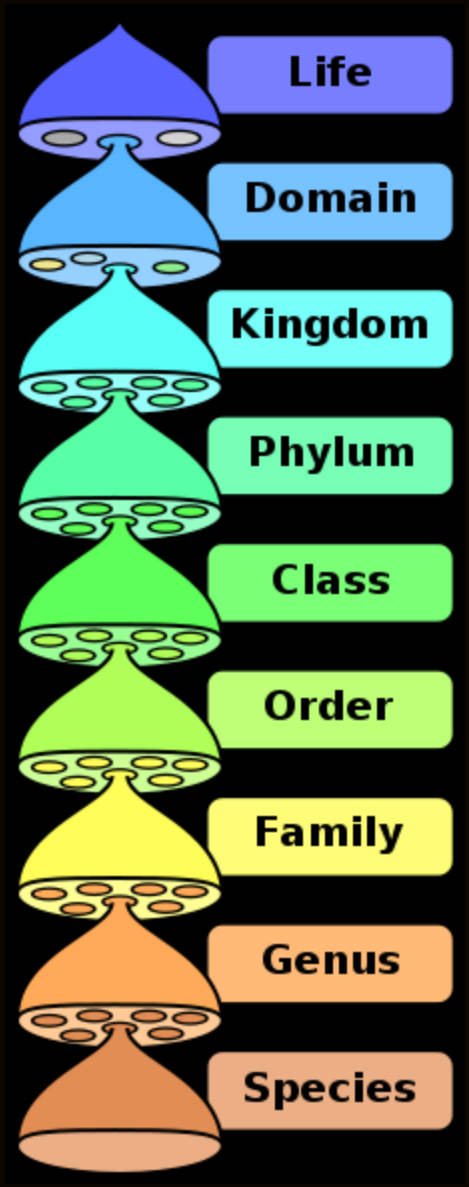
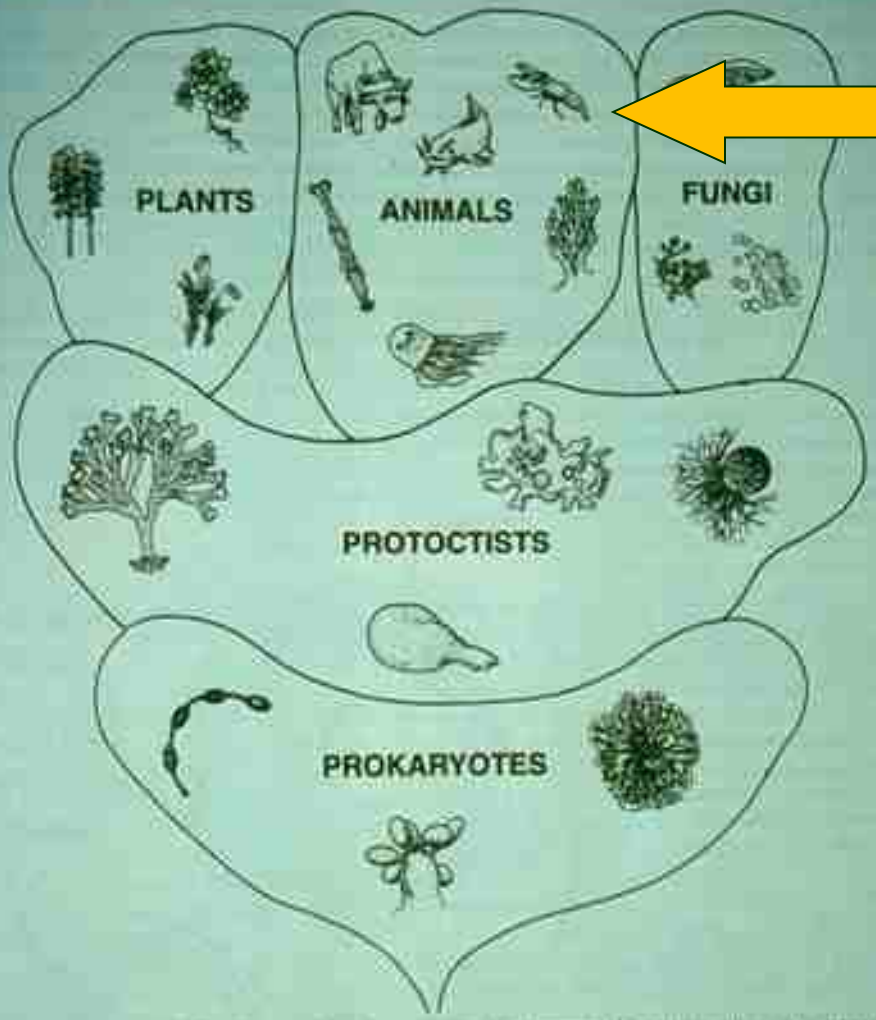
I. PARTIAL TAXONOMIC CLASSIFICATION OF PREHISTORIC AND CONTEMPORARY PRIMATES

	Suborder	Inraorder	Superfamily	Family	["Colloquial terms"]	Genus	Species	Common Name
131-133 202-204	*Prosimii* (*Strepsirhini*)							[tree shrew = insectivore]
		Lemuriformes						lemur
		Lorisiformes *Tarsiiformes*						loris and bush baby tarsier
133-134 202-204	*Anthropoidea* (*Haplorhini*)	*Platyrrhini* 133-134	*Ceboidea*	*Atelidae* *Cebidae* [*Callitrichidae*]		**Parapithecus* (basal anthropoid) **Apidium* (basal anthropoid)		**New World Monkey**
		Catarrhini 134-138	*Cercopithecoidea* 134-138	*Cercopithecidae*		*Macaca* *Papio* **Propliopithecus* (basal catarrhine) **Aegyptopithecus* (basal catarrhine)		**Old World Monkey** macaque baboon guenons . . .


Life
Domain
Kingdom
Phylum
Class
Order
Family
Genus
Species

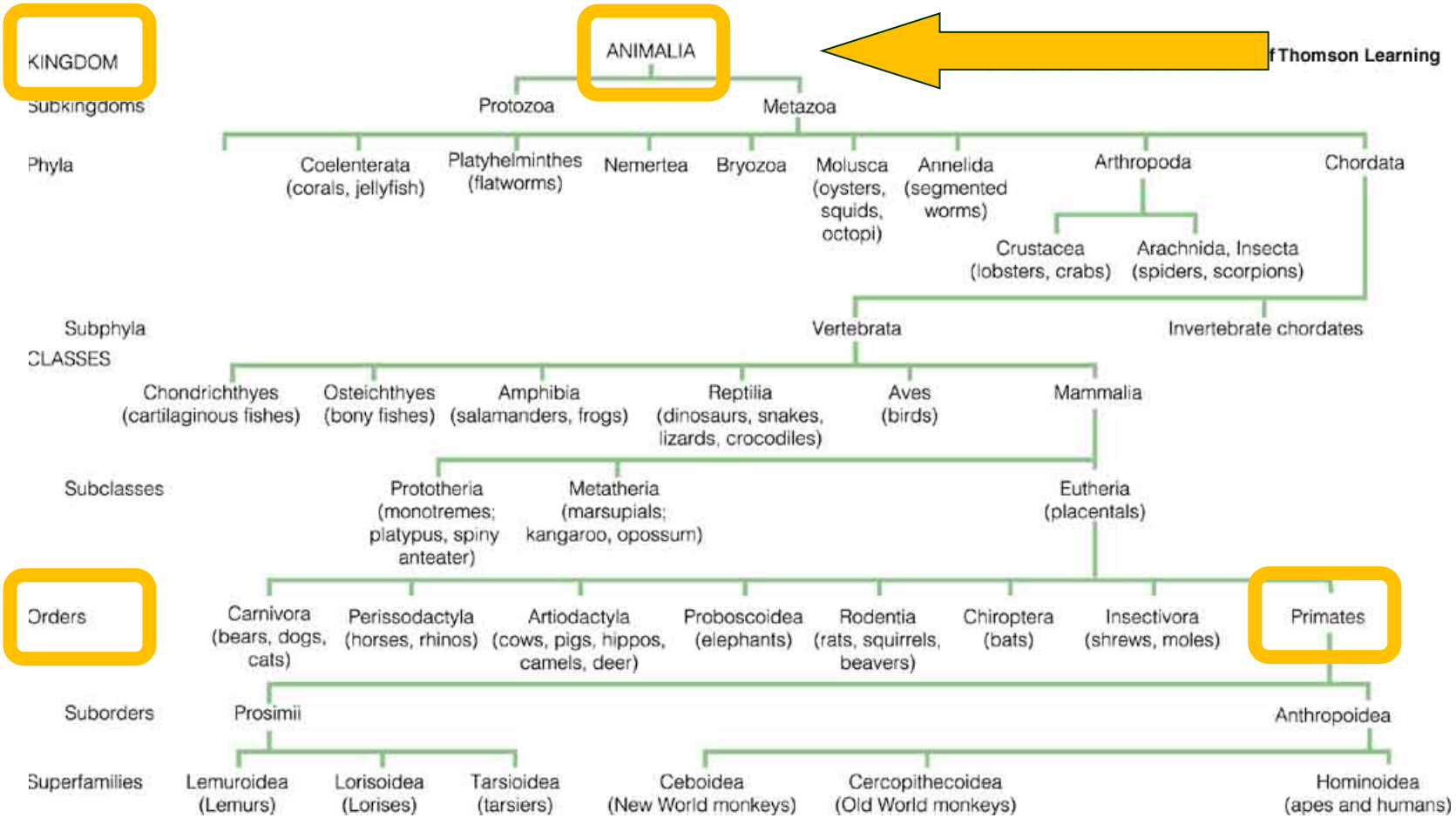
Wikipedia



The "five kingdoms" of life (discussed on the next page). Because of the extraordinary diversity of living things, and of the enormous amount of change that has accumulated in the various lineages over evolutionary time, it has proven very difficult to arrive at a satisfactory classification of the major groups of living organisms. The diagram above, based broadly on the "five kingdoms" arrangement first proposed by R.H. Whittaker in 1959 and more recently modified by Lynn Margulis and colleagues, attempts to show how these five major groups fit together in terms of relationships and function. The vertical axis is not strictly one of time, but rather one of increasing complexity—which does, however, indirectly reflect the passage of time. As noted in the main text, the protoctists are a "wastebasket" group, whose interrelationships are unresolved; however, the kingdom Protoctista does fill a useful function in bridging the gap between the bacteria and the three other eukaryote kingdoms (plants, animals and fungi), among which relationships are also currently unclear. *Illustration by Diana Sellers*

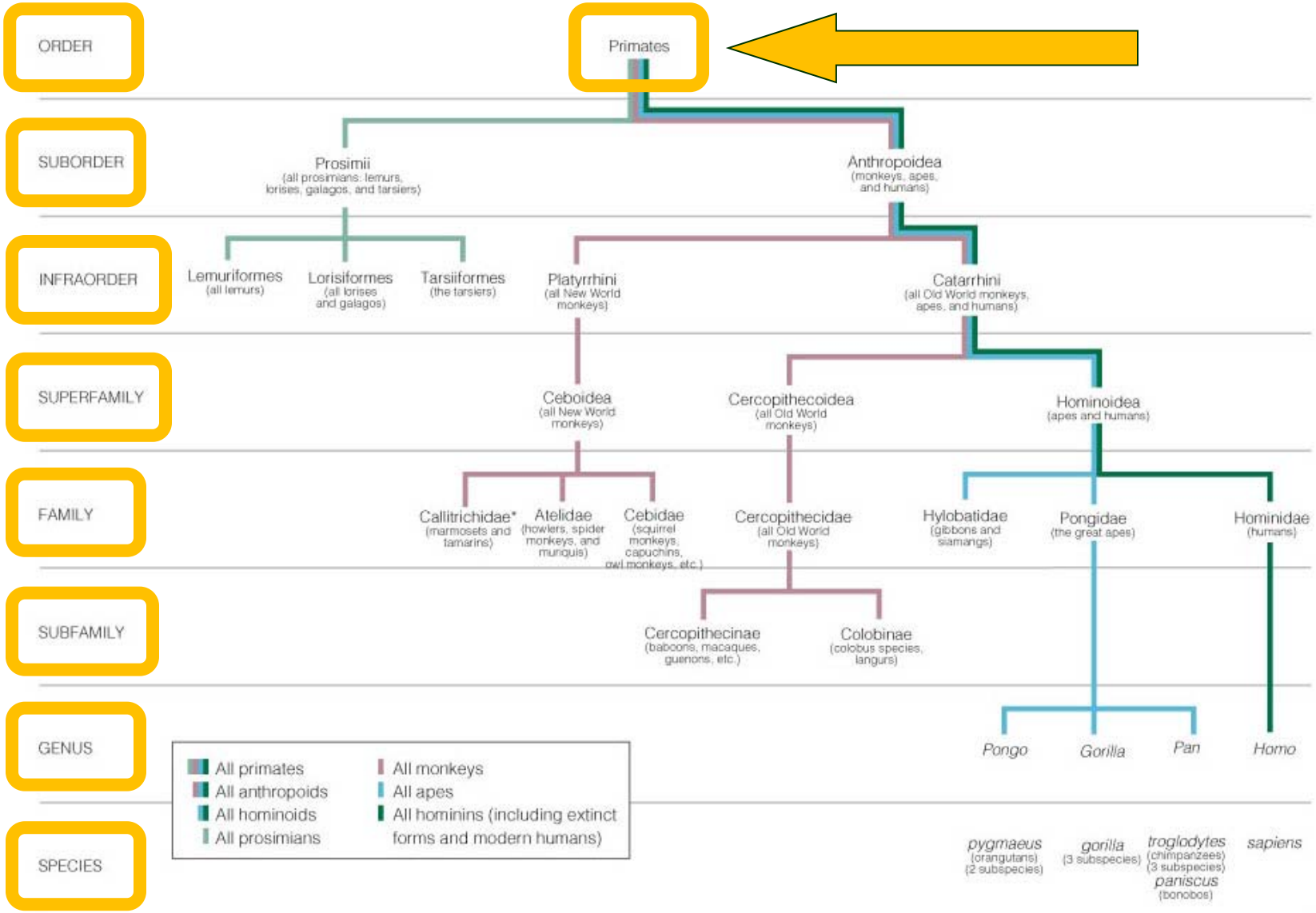
Linnaeus[5] (1735) 2 kingdoms	Haeckel[6] (1866) 3 kingdoms	Chatton[7] (1925) 2 groups	Copeland[8] (1938) 4 kingdoms	Whittaker[2] (1969) 5 kingdoms	Woese [9][10] (1977,1990) 3 domains
Animalia	Animalia	Eukaryote	Animalia	Animalia	Eukarya
Vegetabilia	Plantae		Plantae	Plantae	
			Protoctista	Fungi	
				Protista	
(not treated)	Protista	Prokaryote	Monera	Monera	Archaea
					Bacteria

Wikipedia



Classification chart (after Linnaeus)

Understanding Humans, 10th ed., p. 101



*Fleagle (1999) and others have recently eliminated the family Callitrichidae and included marmosets and tamarins in the family Cebidae.

Primate taxonomic classification

Understanding Humans, 10th ed., p. 129

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Kingdom = *Animalia* >> Phylum = *Chordata* >> Subphylum = *Vertebrata* >> Class = *Mammalia* >> Order = Primates

I. PARTIAL TAXONOMIC CLASSIFICATION OF PREHISTORIC AND CONTEMPORARY PRIMATES

	Suborder	Inraorder	Superfamily	Family	["Colloquial terms"]	Genus	Species	Common Name
131-144 102-112 106-10								
131-133 202-204	*Prosimii* (*Strepsirhini*)							[tree shrew = insectivore]
		Lemuriformes						lemur
		Lorisiformes						loris and bush baby
		Tarsiiformes						tarsier
133-134 202-204	*Anthropoidea* (*Haplorhini*)	*Platyrrhini* 133-134	*Ceboidea*	*Atelidae* *Cebidae* [*Callitrichidae*]		**Parapithecus* (basal anthropoid) **Apidium* (basal anthropoid)		**New World Monkey**
		Catarrhini 134-138	*Cercopithecoidea* 134-138	*Cercopithecidae*		*Macaca* *Papio* **Propliopithecus* (basal catarrhine) **Aegyptopithecus* (basal catarrhine)		**Old World Monkey** macaque baboon quenons . . .

Kingdom = *Animalia* >> Phylum = *Chordata* >> Subphylum = *Vertebrata* >> Class = *Mammalia* >> Order = Primates

pre-monkeys

	Suborder	Infraorder	Superfamily	Family		Genus	Species	Common Name
	Prosimii (*Strepsirhini*)							[tree shrew = insectivore]
		Lemuriformes						lemur
		Lorisiformes						loris and bush baby
		Tarsiiformes						tarsier
202-204	*Anthropoidea* (*Haplorhini*)	*Platyrrhini* 133-134	*Ceboidea*	*Atelidae*		*Pithecia* (basal anthropoid)		New World Monkey
				Cebidae [*Callitrichidae*]		*Apicium* (basal anthropoid)		
		Catarrhini 134-136	*Cercopithecoidea* 134-136	*Cercopithecidae*		*Macaca*		Old World Monkey
						Papio		
						Propliopithecus (basal cercopithecine)		macaque
						Aegypiopithecus (basal cercopithecine)		baboon
								guenons . . .
				Colobidae		*Colobus*		colobus monkey
						Presbytis		langur
			Hominoidea 138-143 204-207	*Hylobatidae*		*Hylobates*		gibbon
								siamangs
				Proconsulidae		*Proconsul*		
				Oreopithecidae		*Oreopithecus*		
				Pliopithecidae		*Pliopithecus*		
				Hominidae	*Pongines* ("The Great Apes")	*Pongo*		orangutan
						Dryopithecus	*dryopithecus*	
						Sivapithecus	*ramapithecus*	
						Gigantopithecus	*kenyapithecus*	
							ouranopithecus	
							pygmaeus	
							abelli	
					Gorillines	*Gorilla*	*gorilla* [*gorilla*]	Western Lowland
							gorilla [*diehli*]	Cross River
							beringei [*beringei*]	Mountain
							beringei [*graueri*]	Eastern Lowland
					Panines	*Pan*	*troglodytes*	chimpanzee
							?	chimpanzee
							paniscus	bonobo ("pygmy chimpanzee")
			216 209-211 217-224		*Hominins* (non-extinct bipedal relatives of humans)	*Ardipithecus*	*ramidus*	Ardi
						Australopithecus[1]	*anamensis*	
							afarensis	Lucy / First Family
			216-222				*africanus*	southern ape
							garhi	Zinj
					207-208		*aethiopicus*	
						*[aka *Paranthropus*][1]	*boisei*	
							robustus	
							platyops	
						Kenyanthropus		
			223-227 Ch. 10 Ch. 11-12		*Hominins* (modern humans)	*Homo*[1]	*rudolfensis*	ER-1470
							habilis	human
							erectus	Java / Peking "Man"
					207-208		*sapiens*	Mary / John

Compare:

FIGURE 6-9 Primate taxonomic classification, p. 129

Kingdom = *Animalia* >> Phylum = *Chordata* >> Subphylum = *Vertebrata* >> Class = *Mammalia* >> Order = Primates

I. PARTIAL TAXONOMIC CLASSIFICATION OF PREHISTORIC AND CONTEMPORARY PRIMATES

pre-monkeys

prosimians[1]

	Suborder	Infraorder	Superfamily	Family	[Colloquialisms]	Genus		
131-136 202-204	*Prosimii* *(Strepsirhini)*							
		Lemuriformes						
		Lorisiformes						
		Tarsiiformes						
202-204	*Anthropoidea* *(Haplorhini)*	*Platyrrhini* 130-134	*Ceboidea*	*Atelidae*		*Pithecia* (basal anthropoid)		New World Monkey
				Cebidae *[Callitrichidae]*		**Apidium* (basal anthropoid)		
		Catarrhini 134-138	*Cercopithecoidea* 134-138	*Cercopithecidae*		*Macaca* *Papio* **Propliopithecus* (basal cercopithec) **Aegyptopithecus* (basal cercopithec)		Old World Monkey macaque baboon guenons . . .
				Colobidae		*Colobus* *Presbytis*		colobus monkey langur
			Hominoidea 138-143 204-207	*Hylobatidae*		*Hylobates*		gibbon siamangs
				**Proconsulidae*		**Proconsul*		
				**Oreopithecidae*		**Oreopithecus*		
				**Pliopithecidae*		**Pliopithecus*		
				Hominidae	*Pongines* ("The Great Apes")	*Pongo* **Dryopithecus* **Sivapithecus* **Gigantopithecus*	**dryopithecus* **ramapithecus* **kenyapithecus* **ouranopithecus* *pygmaeus* *abelii*	orangutan
					Gorillines	*Gorilla*	*gorilla [gorilla]* *gorilla [diehli]* *beringei [beringei]* *beringei [graueri]*	Western Lowland Cross River Mountain Eastern Lowland
					Panines	*Pan*	*troglodytes* ? *paniscus*	chimpanzee chimpanzee bonobo ("pygmy chimpanzee")
			216 209-211 217-224 216-222		*Hominins* (now-extinct bipedal relatives of humans) 207-208	**Ardipithecus* **Australopithecus*[1] **[aka Paranthropus]*[1] **Kenyanthropus*	**ramidus* **anamensis* **afarensis* **africanus* **garhi* **aethiopicus* **boisei* **robustus* **platyops*	Ardi Lucy / First Family southern ape Zinj
			223-227 Ch. 10 Ch. 11-12		*Hominins* (modern humans) 207-208	*Homo*[1]	**rudolfensis* **habilis* **erectus* *sapiens*	ER-1470 human Java / Peking "Man" Mary / John

Compare:

FIGURE 6-9 Primate taxonomic classification, p. 129

Kingdom = *Animalia* >> Phylum = *Chordata* >> Subphylum = *Vertebrata* >> Class = *Mammalia* >> Order = Primates

I. PARTIAL TAXONOMIC CLASSIFICATION OF PREHISTORIC AND CONTEMPOR

Suborder	Infraorder	Superfamily	Family	["Colloquialisms"]	Genus		
Prosimii (*Strepsirhini*)							
	Lemuriformes						
	Lorisiformes						
	Tarsiiformes						
(*Haplorhini*)			Cebidae [Callitrichidae]		(basal anthropoid) *Apidium (basal anthropoid)		
	Catarrhini	*Cercopithecoidea*	*Cercopithecidae*		*Macaca* *Papio* *Piopilopithecus* (basal cercopithecine) *Aegypiopithecus (basal cercopithecine)		Old World Monkey macaque baboon guenons . . .
					Colobus *Presbytis*		colobus monkey langur
		Hominoidea	*Hylobatidae*		*Hylobates*		gibbon siamang
			Proconsulidae		*Proconsul*		
			Oreopithecidae		*Oreopithecus*		
			Pliopithecidae		*Pliopithecus*		
			Hominidae	*Pongines* ("The Great Apes")	*Pongo* *Dryopithecus* *Sivapithecus* *Gigantopithecus*	*dryopithecus* *ramapithecus* *Keryapithecus* *ouranopithecus* *pygmaeus* *abelli*	orangutan
				Gorillines	*Gorilla*	*gorilla* [*gorilla*] *gorilla* [*diehli*] *beringei* [*beringei*] *beringei* [*graueri*]	Western Lowland Cross River Mountain Eastern Lowland
				Panines	*Pan*	*troglodytes* ? *paniscus*	chimpanzee chimpanzee bonobo ("pygmy chimpanzee")
		216 208-211 217-224 216-222		*Hominins* (now-extinct bipedal relatives of humans) 207-208	*Ardipithecus* *Australopithecus*[1] *[aka *Paranthropus*][1] *Kenyanthropus*	*ramidus* *anamensis* *afarensis* *africanus* *garhi* *aethiopicus* *boisei* *robustus* *platyops*	Ardi Lucy / First Family southern ape Zinj
		223-227 Ch. 10 Ch. 11-12		*Hominins* (modern humans) 207-208	*Homo*[1]	*rudolfensis* *habilis* *erectus* *sapiens*	ER-1470 human Java / Peking "Man" Mary / John

prosimians

monkeys

Compare:

FIGURE 6-9 Primate taxonomic classification, p. 129

Kingdom = *Animalia* >> Phylum = *Chordata* >> Subphylum = *Vertebrata* >> Class = *Mammalia* >> Order = Primates

I. PARTIAL TAXONOMIC CLASSIFICATION OF PREHISTORIC AND CONTEMPOR

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106-109

	Suborder	Infraorder	Superfamily	Family	[Colloquial name]	Genus		
131-133 202-204	*Prosimii* *(Strepsirhini)*							
		Lemuriformes						
		Lorisiformes *Tarsiiformes*						
133-134 202-204	*Anthropoidea* *(Haplorhini)*	*Platyrrhini* 133-134	*Ceboidea*	*Atelidae* *Cebidae* *[Callitrichidae]*		**Parapithecus* (basal anthropoid) **Apidium* (basal anthropoid)		
		Catarrhini 134-138	*Cercopithecoidea* 134-138	*Cercopithecidae*		*Macaca* *Papio* **Propliopithecus* (basal cercopithec) **Aegyptopithecus* (basal cercopithec)		
				Colobidae		*Colobus* *Presbytis*		
			Hominoidea 138-143 204-207	*Hylobatidae*		*Hylobates*		
				**Proconsulidae*		**Proconsul*		
				**Oreopithecidae*		**Oreopithecus*		
				**Pilopithecidae*		**Pilopithecus*		
				Hominidae	*Ponginae* ("The Great Apes")	*Pongo* **Dryopithecus* **Sivapithecus* **Gigantopithecus*	**dryopithecus* **ramapithecus* **Kenyapithecus* **ouranopithecus*	
							pygmaeus *abelii*	
					Gorillines	*Gorilla*	*gorilla [gorilla]* *gorilla [diehli]* *beringei [beringei]* *beringei [graueri]*	Western Lowland Cross River Mountain Eastern Lowland
					Pan		*troglodytes* ? *paniscus*	chimpanzee chimpanzee bonobo ("pygmy chimpanzee")
			216 209-211 217-224		*Hominins*	**Ardipithecus* **Australopithecus*[1]	**ramidus* **anamensis* **afarensis* **africanus* **garhi* **aethiopicus* **boisei* **robustus* **platyops*	Ardi Lucy / First Family southern ape Zinj
			219-222			**[aka Paranthropus]*[1] **Kenyanthropus*		
			223-227 Ch. 10 Ch. 11-12		*Hominins* (modern humans)	*Homo*[1]	**rudolfensis* **habilis* **erectus* *sapiens*	ER-1470 human Java / Peking "Man" Mary / John

Compare:

FIGURE 6-9 Primate taxonomic classification, p. 129

prosimians

monkeys

apes

Kingdom = *Animalia* >> Phylum = *Chordata* >> Subphylum = *Vertebrata* >> Class = *Mammalia* >> Order = Primates

I. PARTIAL TAXONOMIC CLASSIFICATION OF PREHISTORIC AND CONTEMPOR

131-144
102-112
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Suborder	Infraorder	Superfamily	Family	[Colloquial name]	Genus
131-133 202-204 *Prosimii (Strepsirhini)*					
	Lemuriformes				
	Lorisiformes *Tarsiiformes*				
133-134 202-204 *Anthropoidea (Haplorhini)*	*Platyrrhini* 133-134	*Ceboidea*	*Atelidae* *Cebidae* *[Callitrichidae]*		**Parapithecus* (basal anthropoid) **Apidium* (basal anthropoid)
	Catarrhini 134-138	*Cercopithecoidea* 134-138	*Cercopithecidae*		*Macaca* *Papio* **Propliopithecus* (basal cercopithecine) **Aegyptopithecus* (basal cercopithecine)
			Colobidae		*Colobus* *Presbytis*
		Hominoidea 138-143 204-207	*Hylobatidae*		*Hylobates*
			**Proconsulidae*		**Proconsul*
			**Oreopithecidae*		**Oreopithecus*
			**Pliopithecidae*		**Pliopithecus*
			Hominidae	*Pongines* ("The Great Apes")	*Pongo* **Dryopithecus* **Sivapithecus* **Gigantopithecus*
				Gorillines	*Gorilla*
				Panines	*Pan*
		216 209-211 217-224 216-222		*Hominins* (now-extinct bipedal relatives of humans) 207-208	**Ardipithecus* **Australopithecus*[1] **[aka Paranthropus]*[1] **Kenyanthropus*
		223-227 Ch. 10 Ch. 11-12		*Hominins*	*Homo*

prosimians

monkeys

apes

humans

**rudolfensis*	ER-1470
**habilis*	human
**erectus*	Java / Peking "Man"
sapiens	Mary / John

FIGURE 6-9 Primate taxonomic classification, p. 129

Kingdom = *Animalia* >> Phylum = *Chordata* >> Subphylum = *Vertebrata* >> Class = *Mammalia* >> Order = Primates

131-144
102-112
106-109

I. PARTIAL TAXONOMIC CLASSIFICATION OF PREHISTORIC AND CONTEMPOR

	Suborder	Infraorder	Superfamily	Family	["Colloquial name"]	Genus
131-133 202-204	*Prosimii* *(Strepsirhini)*					
		Lemuriformes				
		Lorisiformes *Tarsiiformes*				
133-134 202-204	*Anthropoidea* *(Haplorhini)*	*Platyrrhini* 133-134	*Ceboidea*	*Atelidae* *Cebidae* *[Callitrichidae]*		**Parapithecus* (basal anthropoid) **Apidium* (basal anthropoid)
		Catarrhini 134-138	*Cercopithecoidea* 134-138	*Cercopithecidae*		*Macaca* *Papio* **Propliopithecus* (basal cercopithecine) **Aegyptopithecus* (basal cercopithecine)
				Colobidae		*Colobus* *Presbytis*
			Hominoidea 138-143 204-207	*Hylobatidae*		*Hylobates*
				**Proconsulidae*		**Proconsul*
				**Oreopithecidae*		**Oreopithecus*
				**Pliopithecidae*		**Pliopithecus*
				Hominidae	*Pongines* ("The Great Apes")	*Pongo* **Dryopithecus* **Sivapithecus* **Gigantopithecus*
					Gorillines	*Gorilla*
					Panines	*Pan*
			216 209-211 217-224 216-222		*Hominins* (new-extinct bipedal relatives of humans) 207-208	**Ardipithecus* **Australopithecus*[1] **[aka Paranthropus]*[1] **Kenyanthropus*
			223-227 Ch. 10 Chs. 11-12		*Hominins* (modern humans) 207-208	*Homo*[1]

prosimians

monkeys

apes

humans

Compare:

FIGURE 6-9 Primate taxonomic classification, p. 129

Kingdom = *Animalia* >> Phylum = *Chordata* >> Subphylum = *Vertebrata* >> Class = *Mammalia* >> Order = Primates

I. PARTIAL TAXONOMIC CLASSIFICATION OF PREHISTORIC AND CONTEMPORARY PRIMATES

Suborder	Infraorder	Superfamily	Family	[Colloquialisms]	Genus	Species	Common Name
Prosimii (*Strepsirhini*)							[tree shrew = insectivore]
	Lemuriformes						lemur
	Lorisiformes						loris and bush baby
	Tarsiiformes						tarsier
(*Haplorhini*)			*Cebidae* [*Callitrichidae*]		(based on Hershkovitz) **Apidium* (based on Hershkovitz)		
	Catarrhini	*Cercopithecoidea*	*Cercopithecidae*		*Macaca* *Papio* **Piopithecus* (based on Hershkovitz) **Aegyptopithecus* (based on Hershkovitz)		Old World Monkey
			Colobidae		*Colobus* *Presbytis*		macaque baboon guenons . . . colobus monkey langur
		Hominoidea	*Hylobatidae*		*Hylobates*		gibbon siamang
			**Proconsulidae*		**Proconsul*		
			**Oreopithecidae*		**Oreopithecus*		
			**Pliopithecidae*		**Pliopithecus*		
			Hominidae	*Ponginae* ("The Great Apes")	*Pongo* **Dryopithecus* **Sivapithecus* **Gigantopithecus*	**dryopithecus* **ramapithecus* **Kenyapithecus* **ouranopithecus* *pygmaeus* *abelii*	orangutan
				Gorillines	*Gorilla*	*gorilla* [*gorilla*] *gorilla* [*diehli*] *beringei* [*beringei*] *beringei* [*graueri*]	Western Lowland Cross River Mountain Eastern Lowland
				Pan	*Pan*	*troglodytes* ? *paniscus*	chimpanzee chimpanzee bonobo ("Pygmy chimpanzee")
				Hominins	**Ardipithecus* **Australopithecus*[1]	**ramidus* **anamensis* **afarensis* **africanus* **garhi* **aethiopicus* **boisei* **robustus* **platyops*	Ardi Lucy / First Family southern ape Zinj
					**[aka Paranthropus]*[1]		
					**Kenyanthropus*		
				Hominins	*Homo*	**rudolfensis* **habilis* **erectus* *sapiens*	ER-1470 human Java / Peking "Man" Mary / John

FIGURE 6-9 Primate taxonomic classification, p. 129

pre-monkeys

monkeys

apes

humans

Prehistoric Cultures -- University of Minnesota Duluth - Mozilla Firefox

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Primates -- Contemporary

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General Information

Contemporary Primates Chart

Prehistoric Primates

Prehistoric and Contemporary Primates (class handout .pdf)

Find: contemp Next Previous Highlight all Match case

start Inbox for troufs@... Prehistoric Culture... Welcome to Faceb... Mulberry (Connect... Adobe Dreamweav... Adobe Photoshop ... pc-12A.2009.10.12 10:52 AM

http://www.d.umn.edu/cla/faculty/troufs/anth1602/pcprim.html#title

Primates are tropical and temperate climate creatures

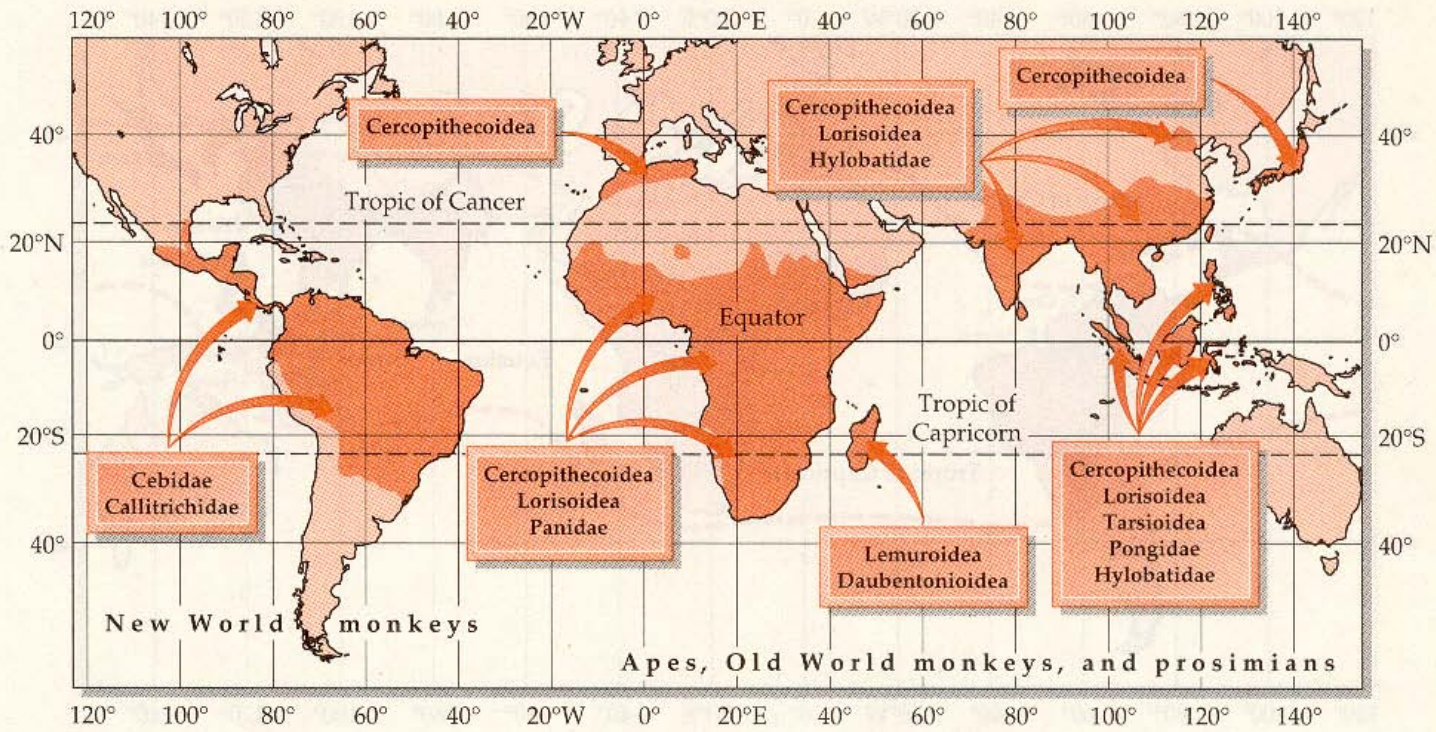

FIGURE 4–2 Worldwide distribution of nonhuman primates by superfamilies and families. Dark areas show the approximate ranges of nonhuman primates. (Adapted from J. Napier and P. Napier, 1967, *A Handbook of Living Primates*, London, Academic Press.)

Distribution of Nonhuman Primates

Humankind Emerging, 7th ed., p. 93

Primates (prehistoric) -- Tim Roufs -- University of Minnesota Duluth - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Primates (prehistoric) -- Tim Roufs -...

Times to Remember

Google™ Custom Search Search

to top of page / A-Z index

Primates -- Prehistoric

General Information

Prehistoric Chart

Primates -- Contemporary

Prehistoric and Contemporary Primates (class handout .pdf)

The Primates -- Dennis O'Neil (tutorial)

Dinosaurs

Early Primate Evolution -- Dennis O'Neil (tutorial)

to top of page / A-Z index

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http://www.d.umn.edu/cla/faculty/troufs/anth1602/pcprimpr.html

Times to Remember

bottom of chart

other timelines

Dates	Major Events / Groups	Alternate Name
A.D. 1859	**End of the "Prescientific Period" in Prehistoric Cultures Studies**	
	/\	
X	**End of Prehistory** **(writing begins)** dates vary regionally	
	/\ 3,300 B.C. "Ötzi" The Iceman	

Find: contemp Next Previous Highlight all Match case

"Times to Remember" WebPage

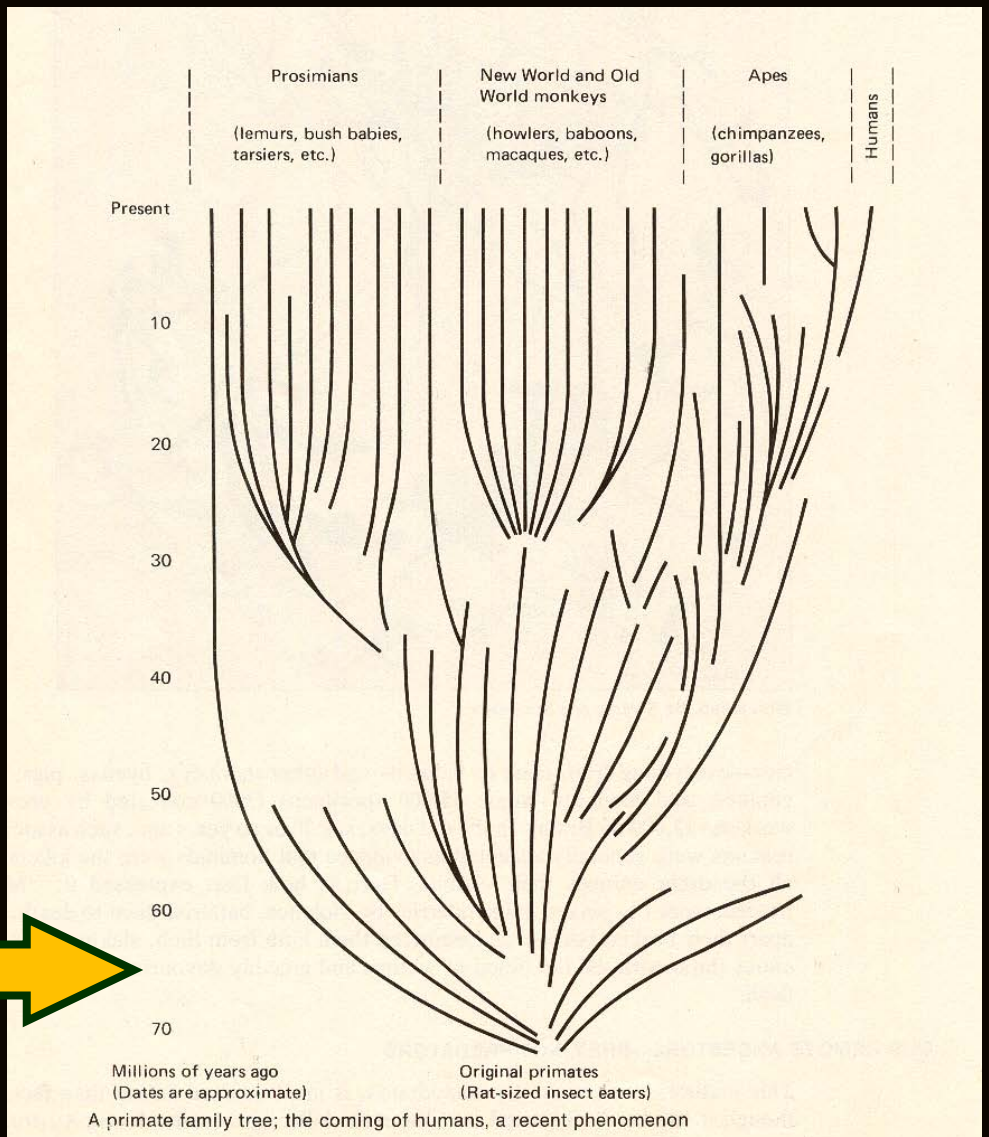
c. 17 mya...	***Sivapithecus*** (***Ramapithecus / Kenyapithecus / Ouranopithecus***) ***Dryopithecus*** **Proconsul**
c. 33 mya...	**"Dental Apes"** (***Aegyptopithecus, Apidium...***)
c. 65 mya...	**Primates**
c. 13.7 bya . . .	creation of the universe

* *c.* = *circa* = about

B.C. = "before Christ," or "before common era"
ybp = "years before present"
mya = million years ago
bya = billion years ago

Find: contemp Next Previous Highlight all Match case

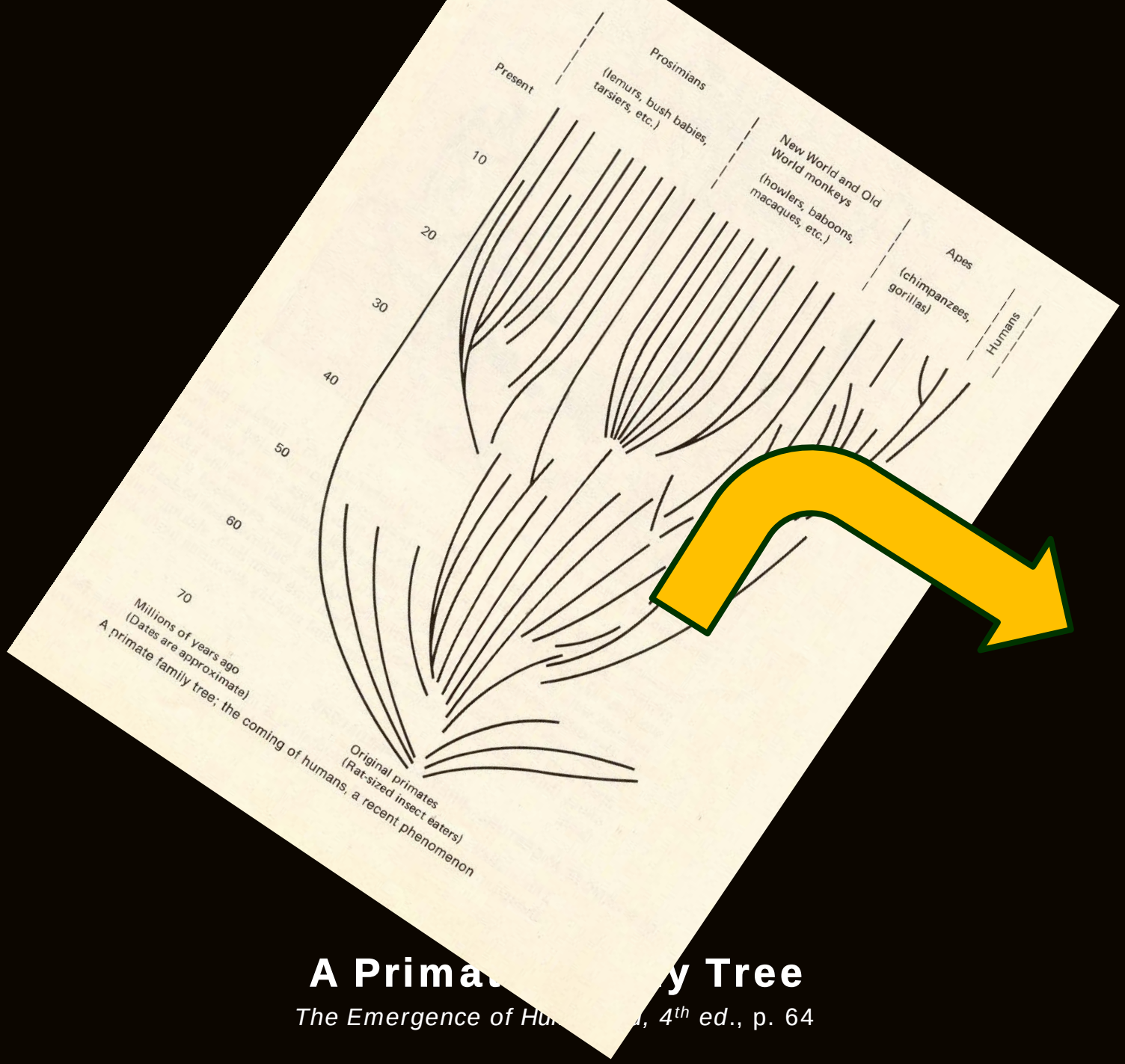
"Times to Remember" WebPage



A primate family tree; the coming of humans, a recent phenomenon

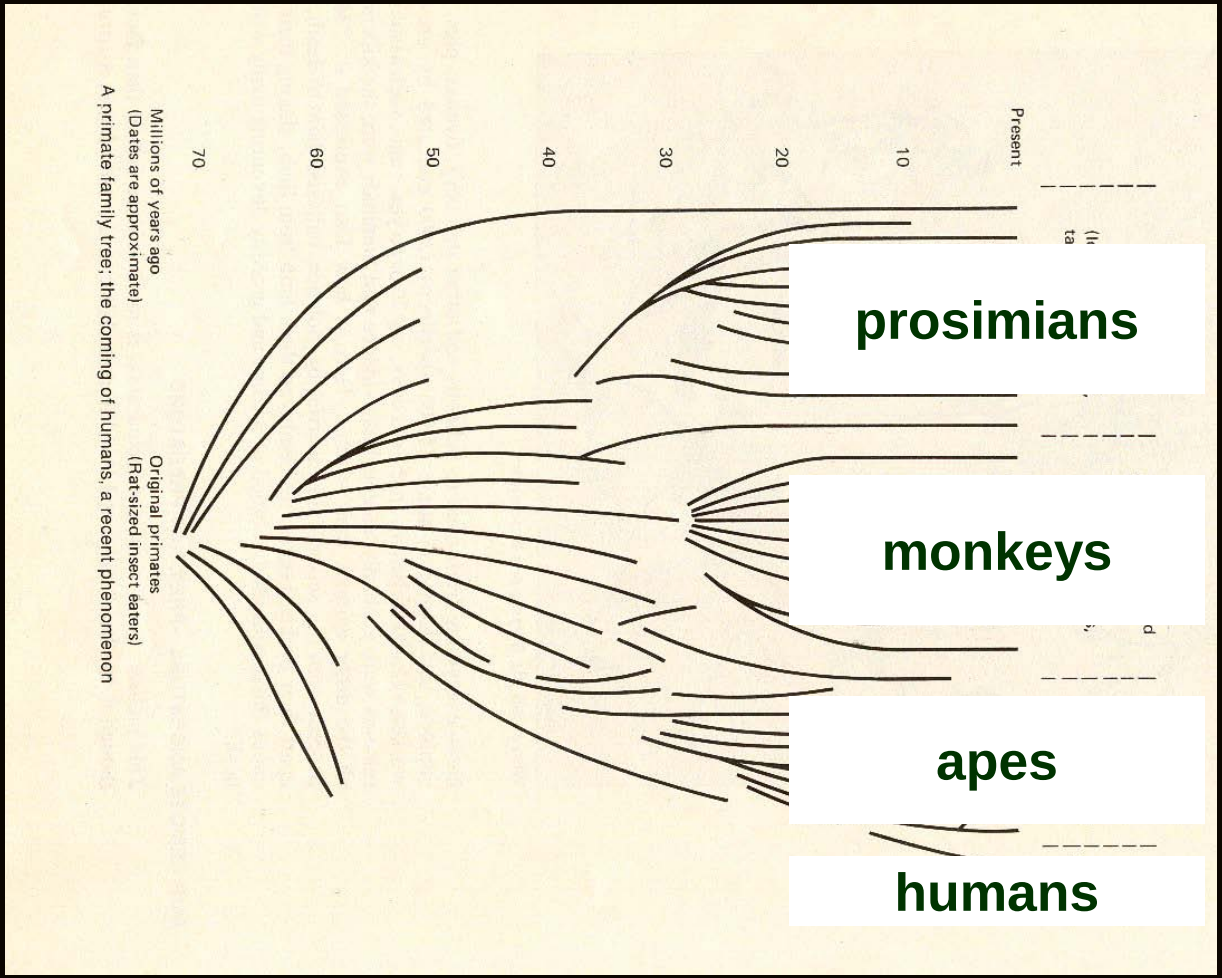
A Primate Family Tree

The Emergence of Humankind, 4th ed., p. 64



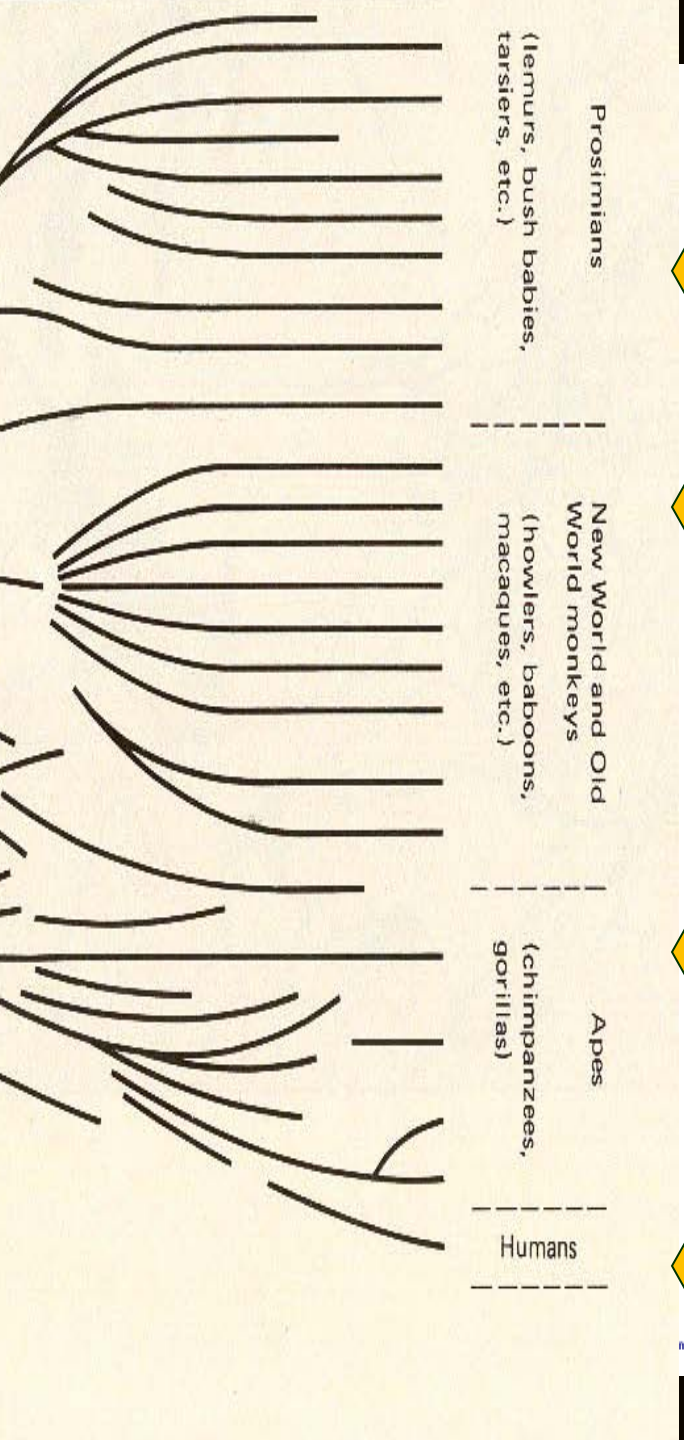
A Primat y Tree

The Emergence of Hu d, 4th ed., p. 64



A Primate Family Tree

The Emergence of Humankind, 4th ed., p. 64



Kingdom = *Animalia* >> Phylum = *Chordata* >> Subphylum = *Vertebrata* >> Class = *Mammalia* >> Order = Primates

I. PARTIAL TAXONOMIC CLASSIFICATION OF PREHISTORIC AND CONTEMPORARY PRIMATES

Suborder	Infraorder	Superfamily	Family	Common Name
Prosimii				[tree shrew = insectivore]
				lemur
	Lorisiformes			loris and bush baby
	Tarsiiformes			tarsier
Anthropoidea (Haplorhini)	*Platyrrhini*	*Ceboidea*	*Atelidae*	New World Monkey
			Cebidae	
			[*Callitrichidae*]	
	Catarrhini	*Cercopithecoidea*	*Cercopithecidae*	Old World Monkey
				macaque
				baboon
				guenons . . .
				colobus monkey
				langur
		Hominoidea	*Hylobatidae*	gibbon
				siamangs
			**Proconsulidae*	
			**Oreopithecidae*	
			**Pliopithecidae*	
			Hominidae	orangutan
				Western Lowland
				Cross River
				Mountain
				Eastern Lowland
				chimpanzee
				chimpanzee
				bonobo
				("pygmy chimpanzee")
				Ardi
				Lucy / First Family
				southern ape
				Zinj
				ER-1470
				human
				Java / Peking "Man"
				Mary / John

prosimians

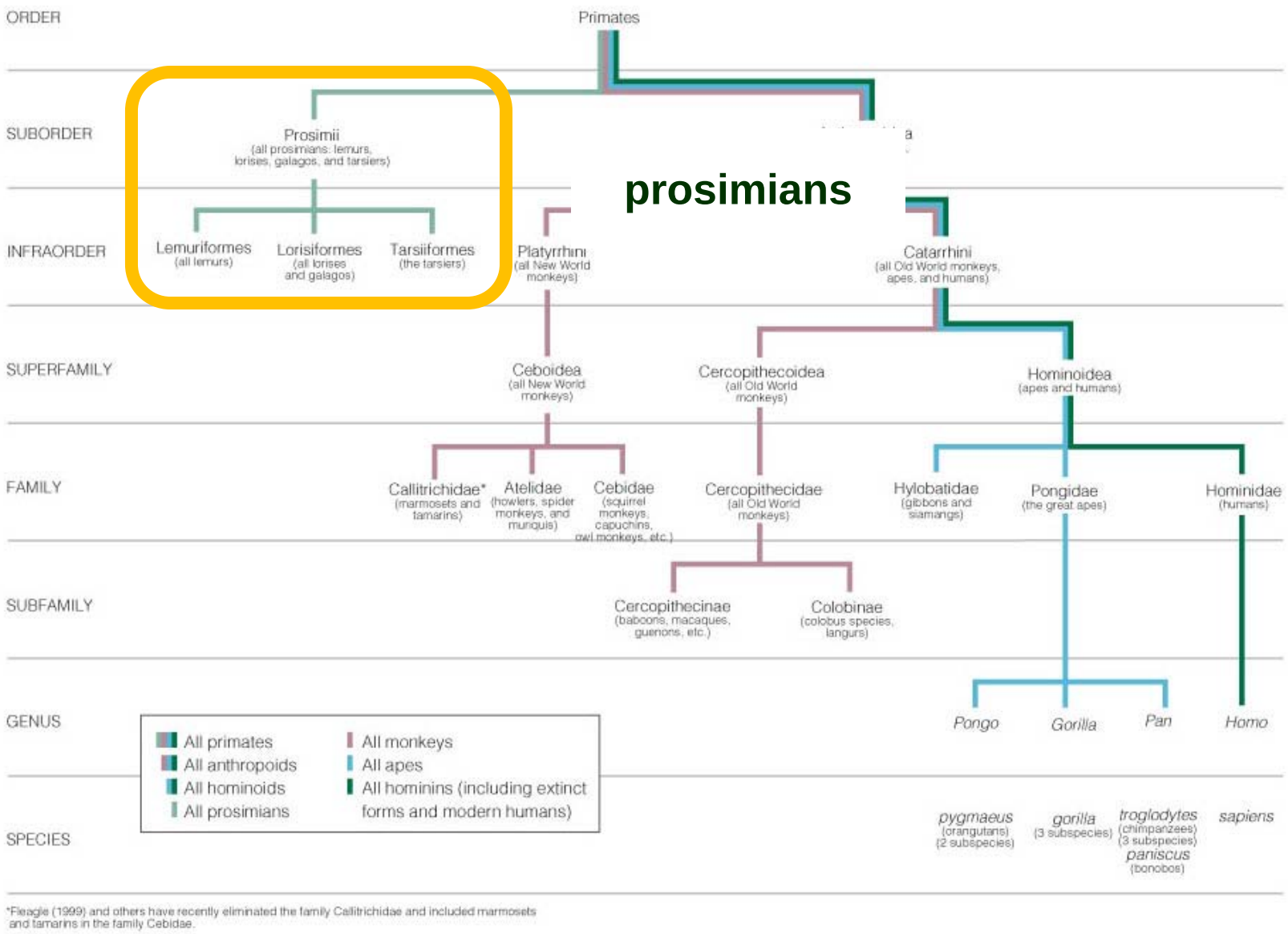
monkeys

apes

humans

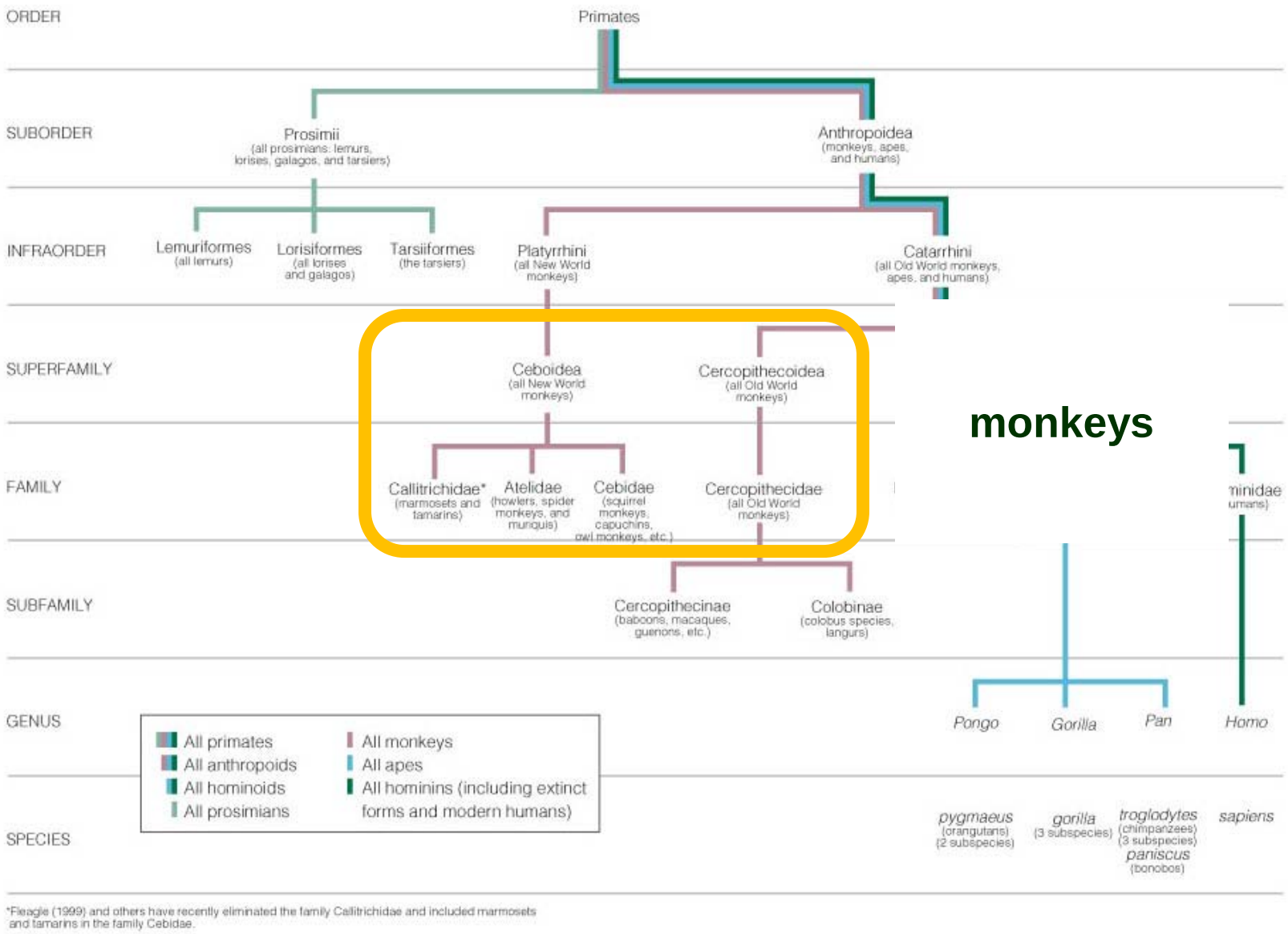
npare:

FIGURE 6-9 Primate taxonomic classification p. 129



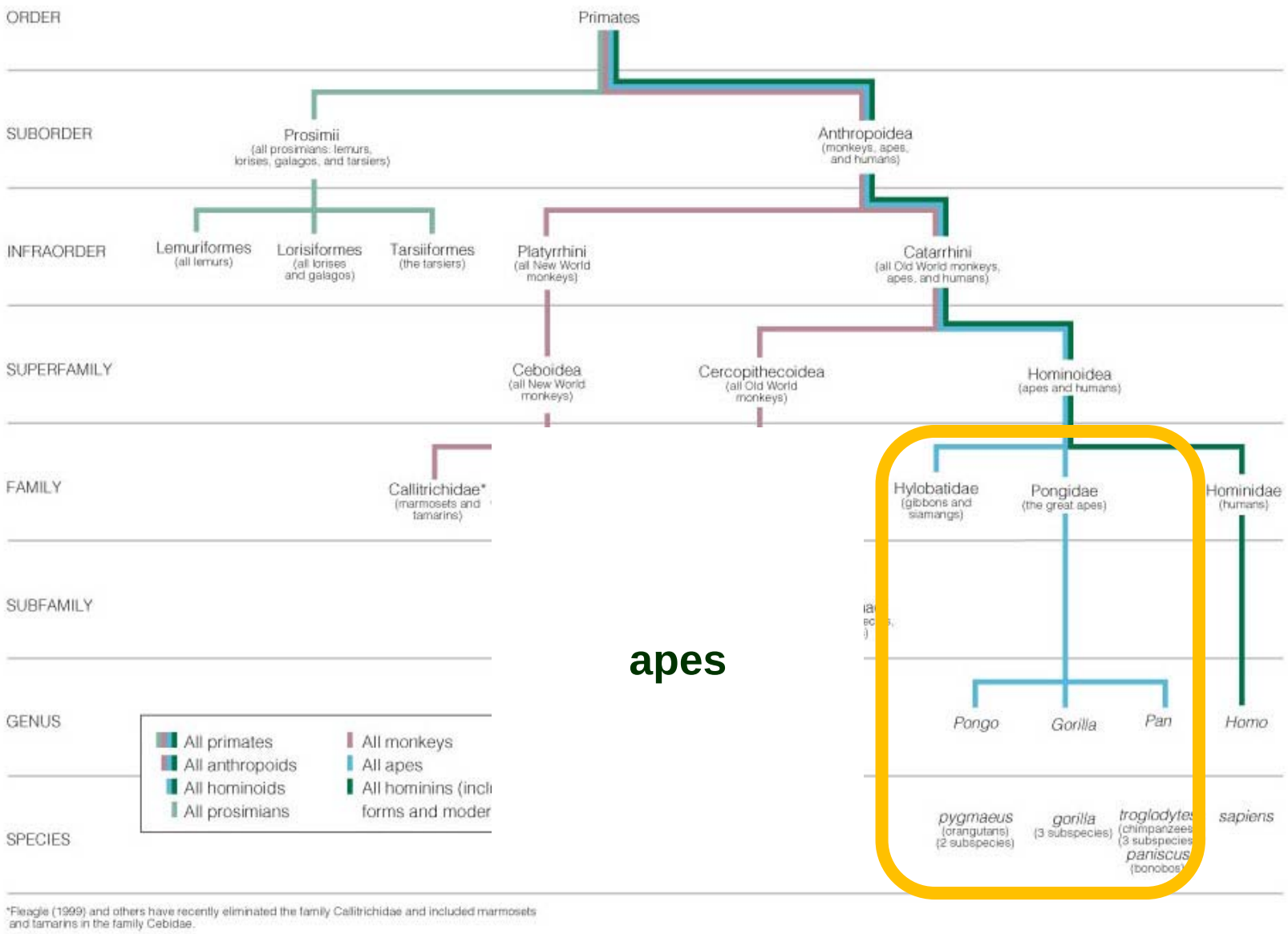
Primate taxonomic classification

Understanding Humans, 10th ed., p. 129



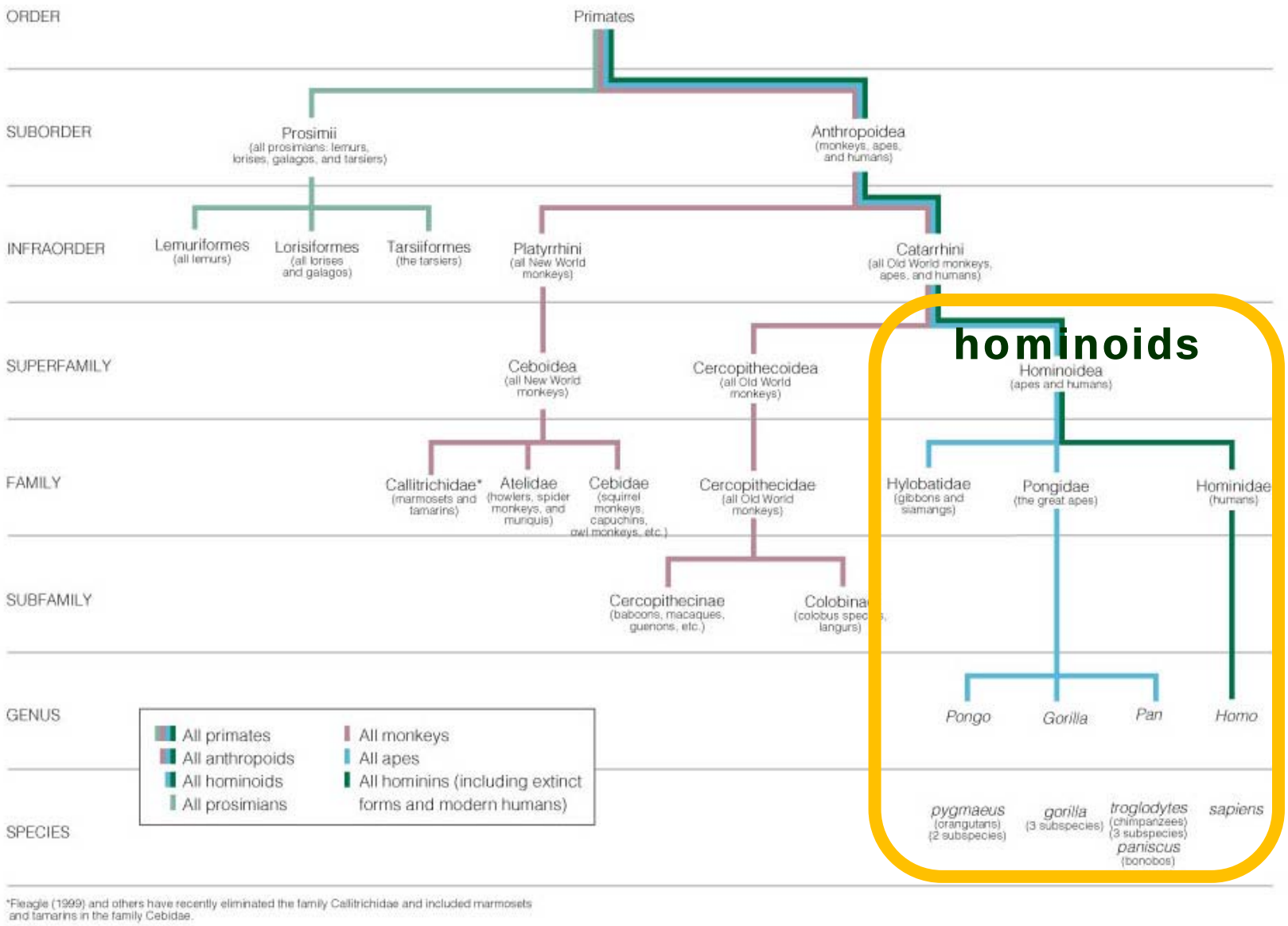
Primate taxonomic classification

Understanding Humans, 10th ed., p. 129



Primate taxonomic classification

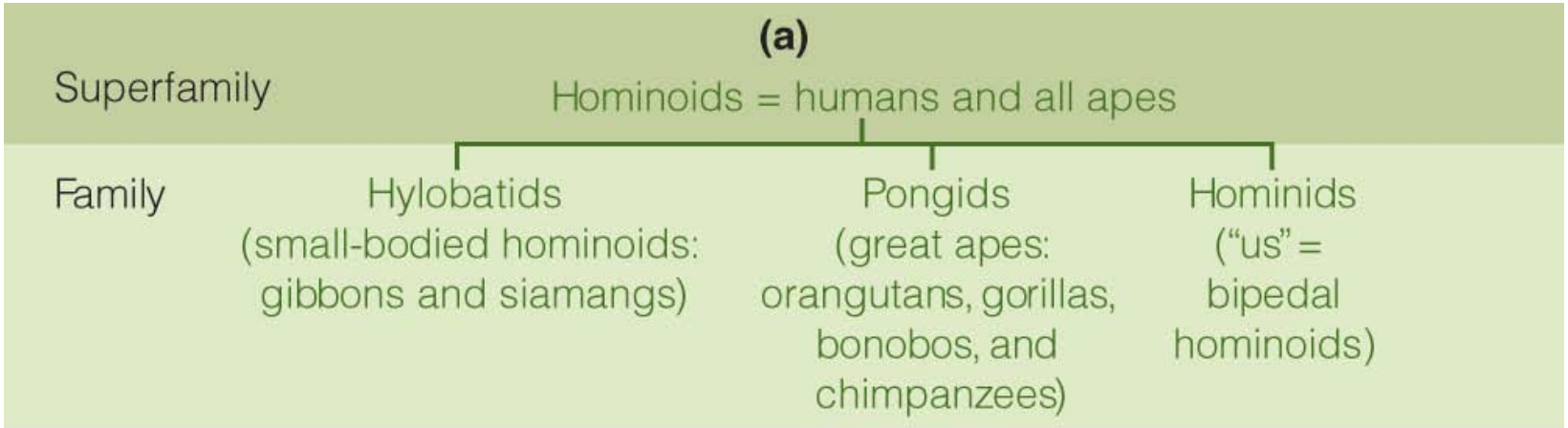
Understanding Humans, 10th ed., p. 129



*Fleagle (1999) and others have recently eliminated the family Callitrichidae and included marmosets and tamarins in the family Cebidae.

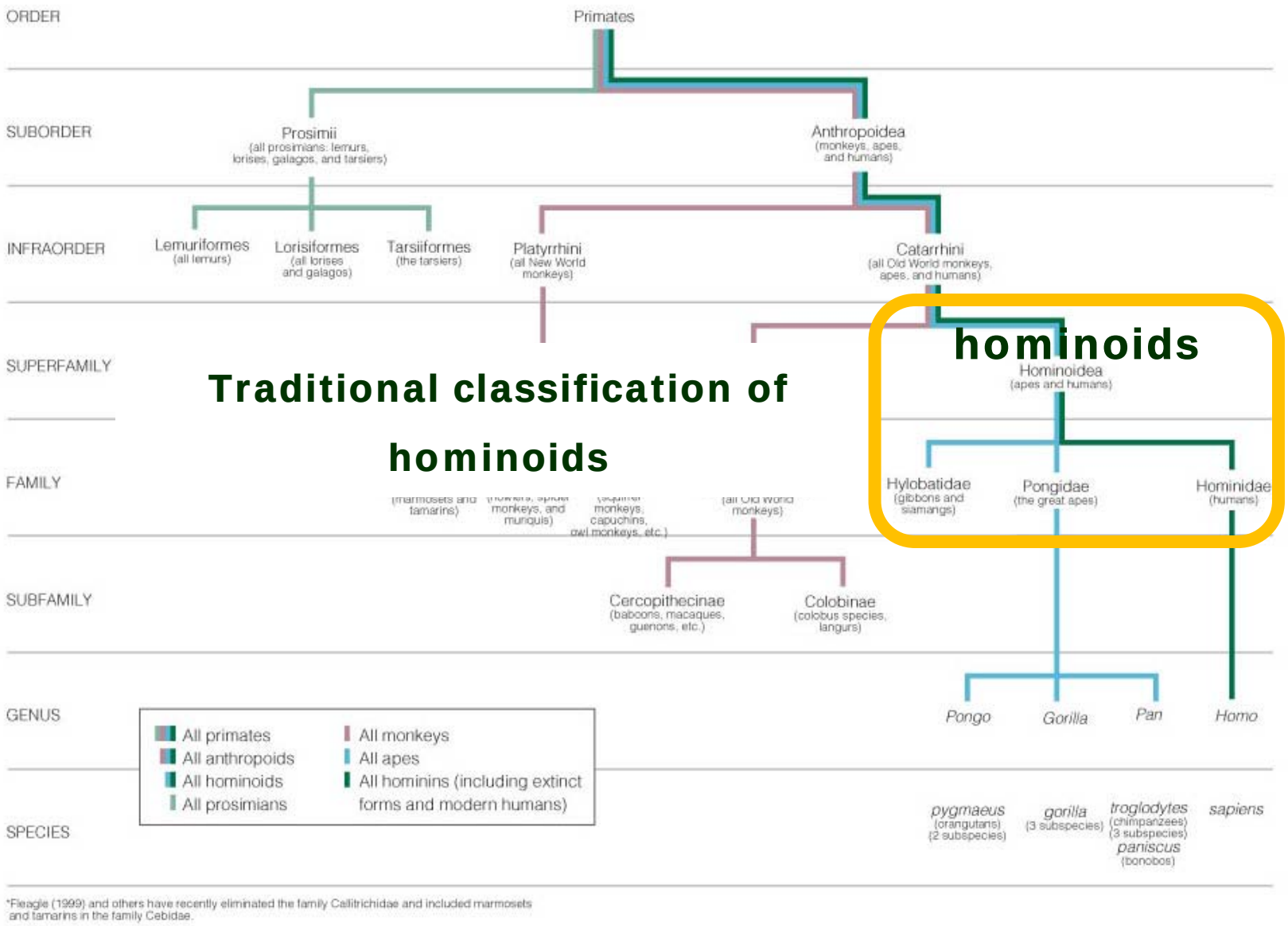
Primate taxonomic classification

Understanding Humans, 10th ed., p. 129



Traditional classification of hominoids

Understanding Humans, 10th ed., p. 209

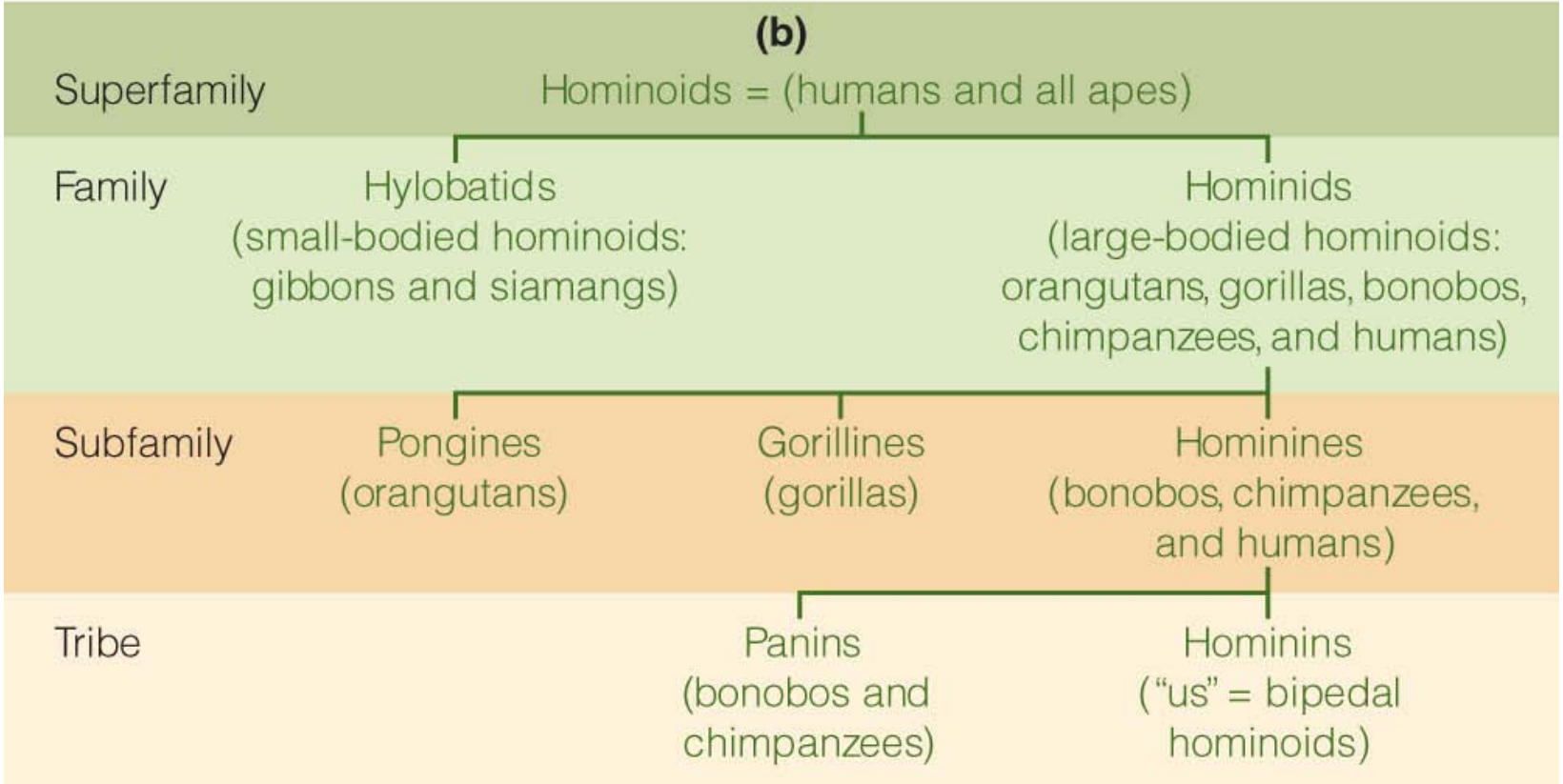


*Fleagle (1999) and others have recently eliminated the family Callitrichidae and included marmosets and tamarins in the family Cebidae.

Primate taxonomic classification

Understanding Humans, 10th ed., p. 129

Revised classification of hominoids



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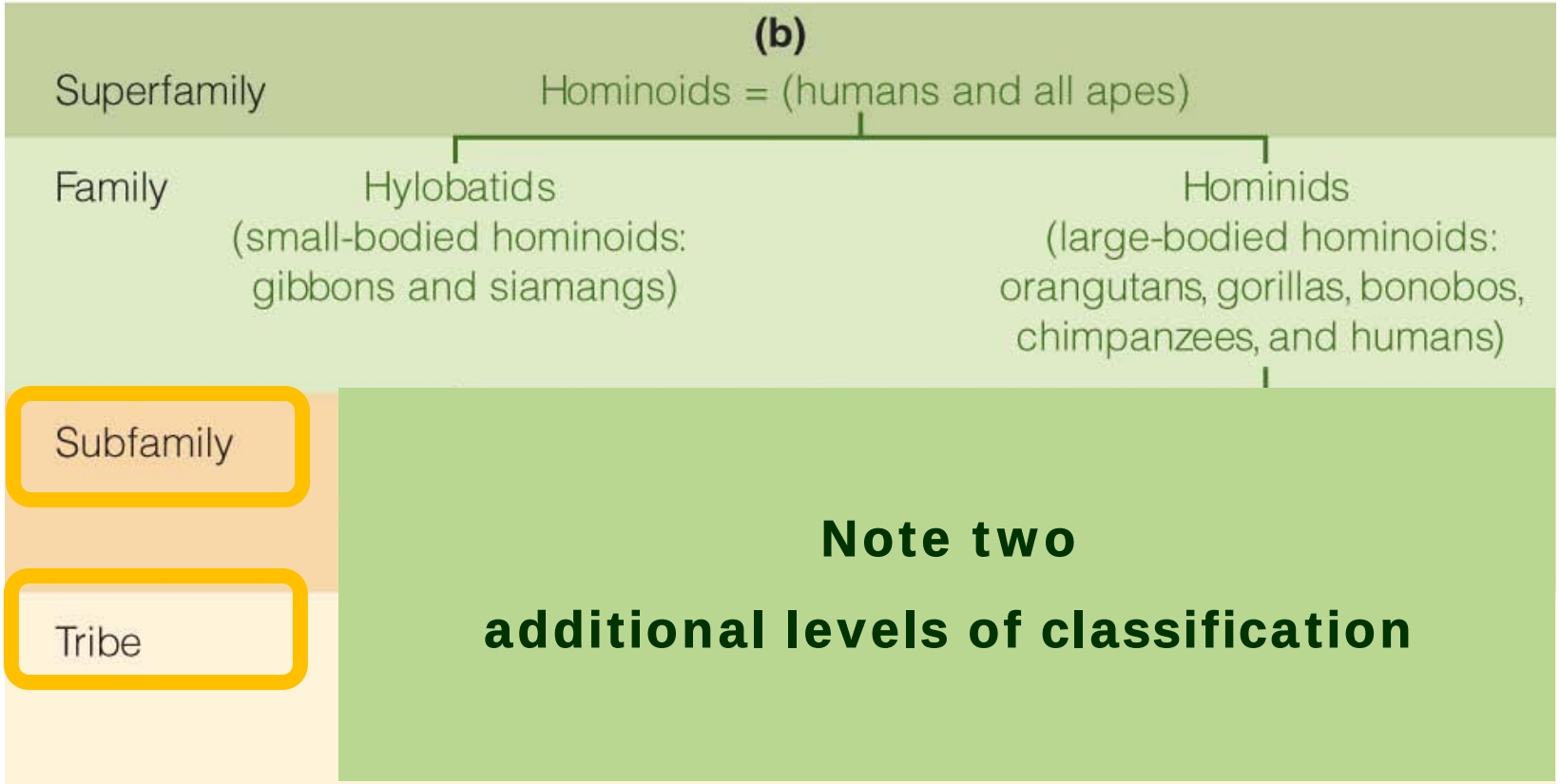
Revised classification of hominoids



Note two additional levels of classification

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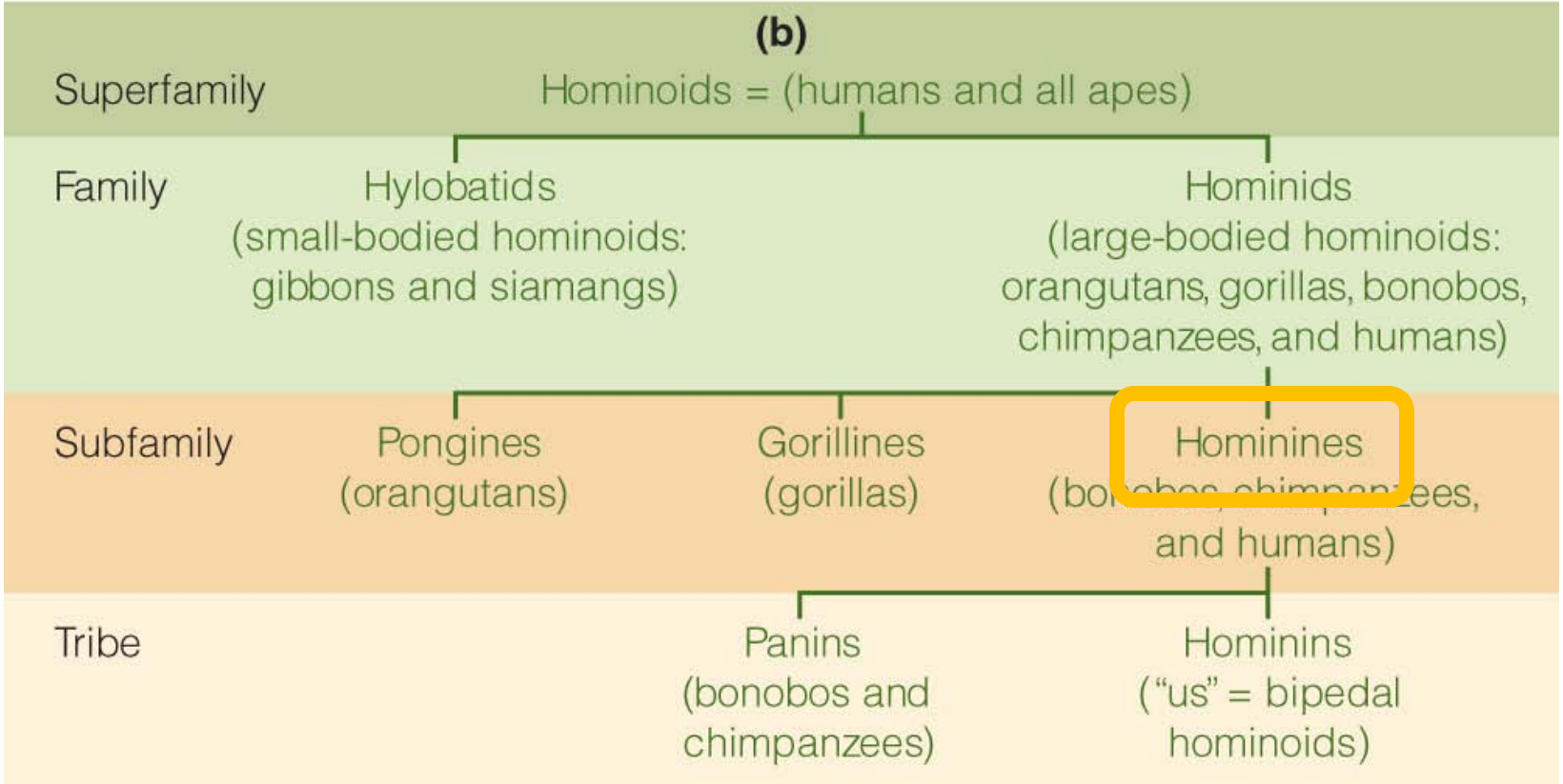
Revised classification of hominoids



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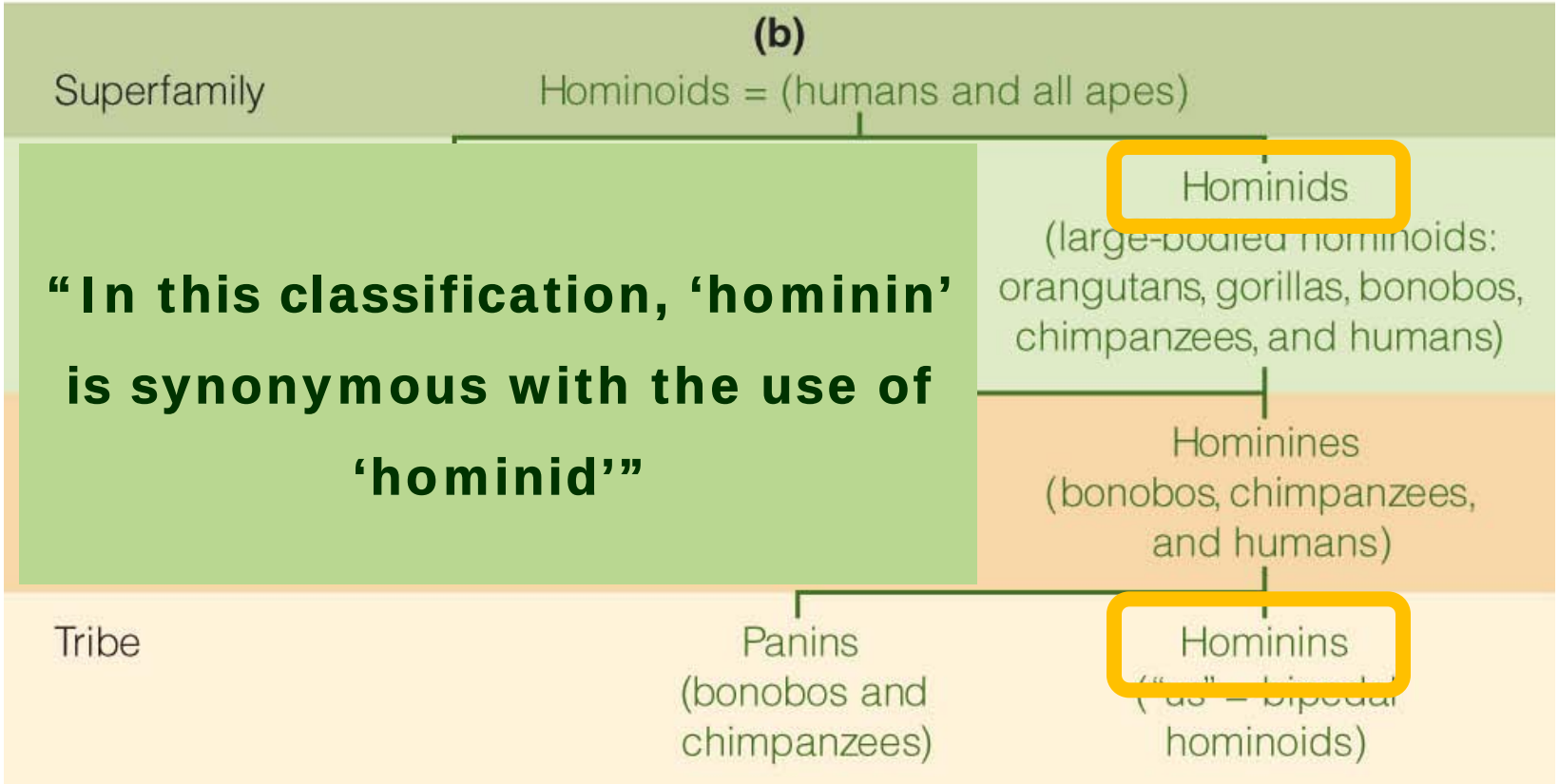
Revised classification of hominoids



"In this classification, 'hominin' is synonymous with the use of 'hominid'"

Understanding Humans, 10th ed., p. 209

one more thing

to pay attention to, concerning

early primates . . .

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Pangaea

From Wikipedia, the free encyclopedia
(Redirected from Pangea)

For other uses, see Pangaea (disambiguation).

This article includes a list of references or external links, but **its sources remain unclear because it has insufficient inline citations**. Please help to improve this article by introducing more precise citations where appropriate.
(January 2009)

Pangaea, **Pangæa**, or **Pangea** (pronounced /pænˈdʒiːə/[1], from Ancient Greek πᾶν *pan* "entire", and Γαῖα *Gaia* "Earth", Latinized as *Gæa*) was the supercontinent that existed during the Paleozoic and Mesozoic eras about 250 million years ago, before the component continents were separated into their current configuration.[2]

The name was first used by the German originator of the continental drift theory, Alfred Wegener, in the 1920 edition of his book *The Origin of Continents and Oceans (Die Entstehung der Kontinente und Ozeane)*, in which a postulated supercontinent Pangaea played a key role.

The single enormous ocean which surrounded Pangaea is known as Panthalassa.

Contents [hide]

Wikipedia

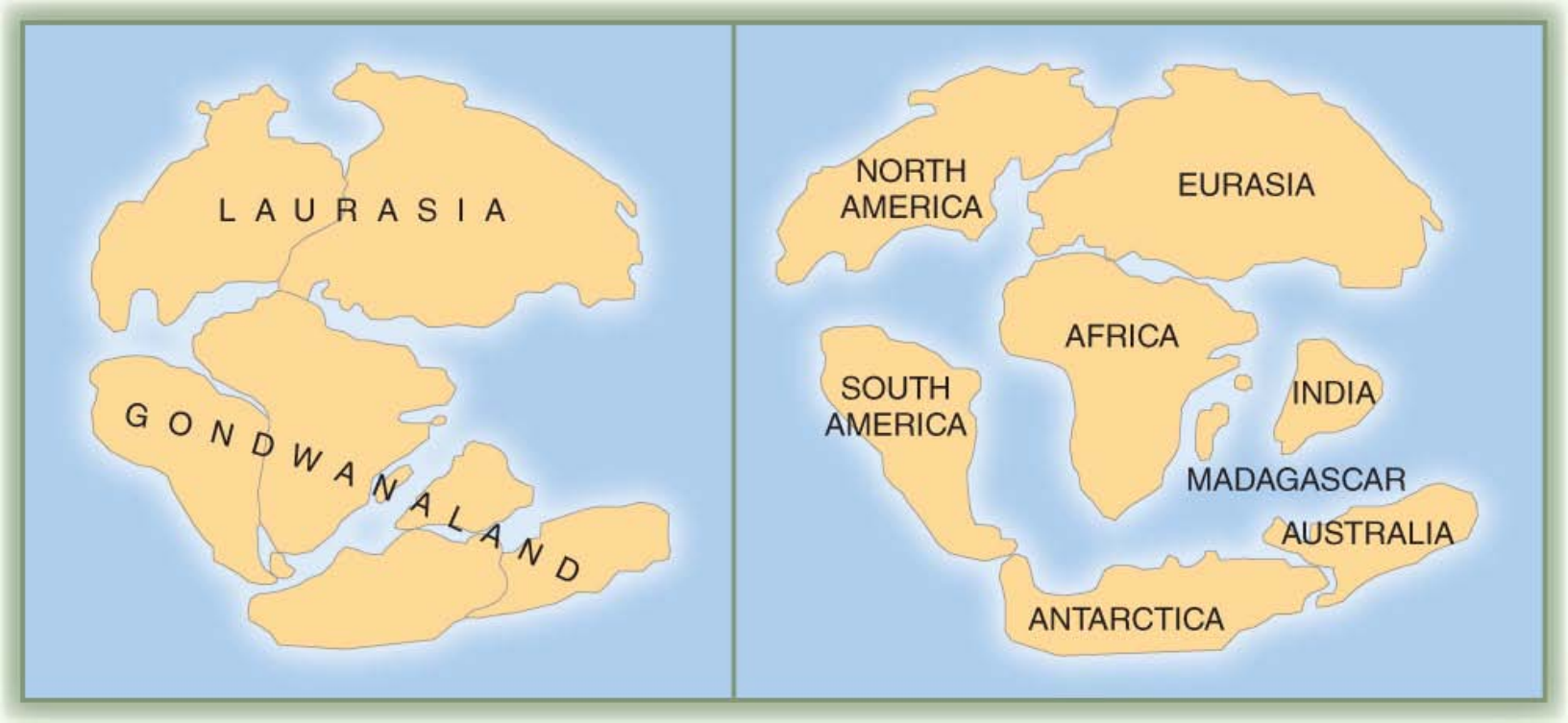
Pangea

the original “supercontinent” . . .

Wikipedia

Eurasia
North America
Pangea
Africa
South America
India
Antarctica
Australia

Wikipedia



Continental drift

Mesozoic (*ca*. 125 m.y.a.) Cenozoic (*ca*. 65 m.y.a.)

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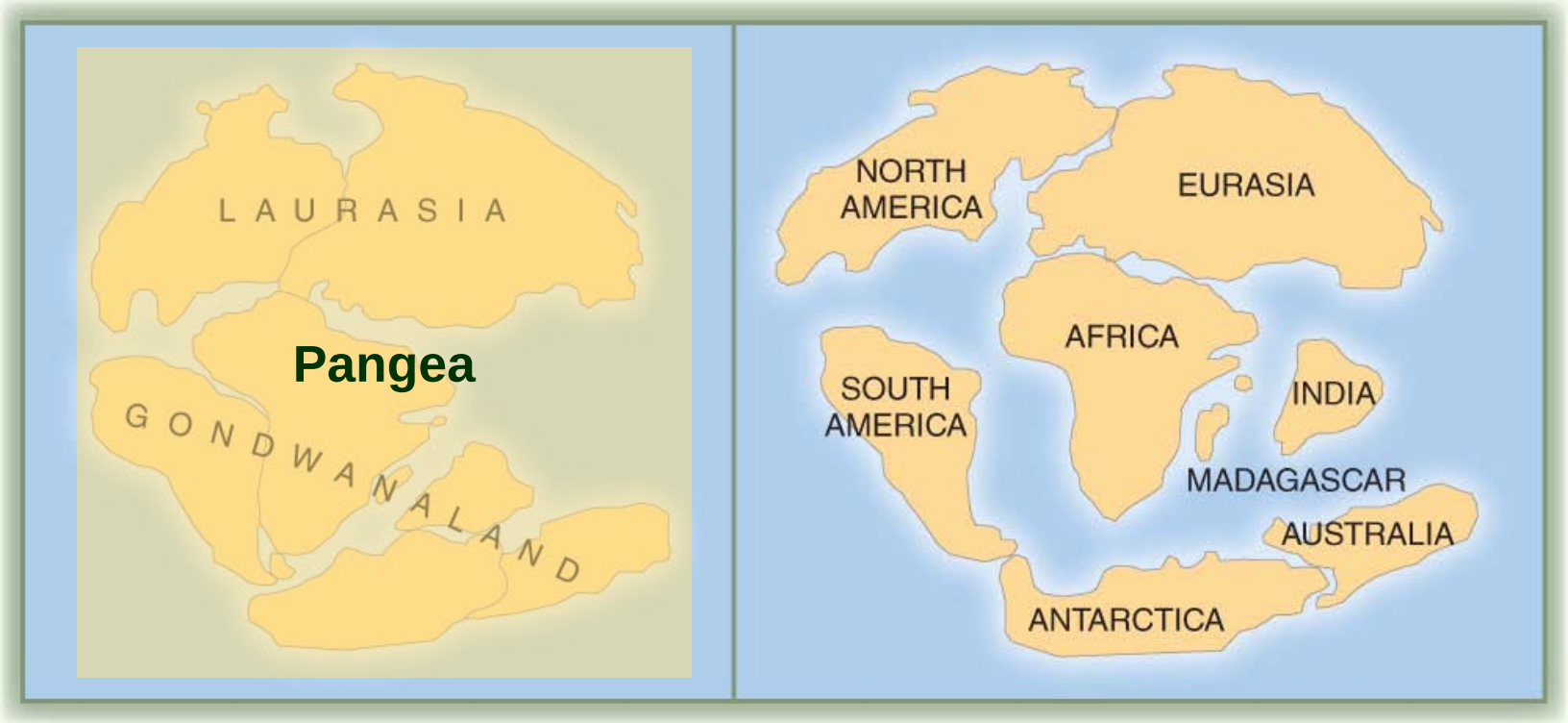

Continental drift

Mesozoic (*ca*. 125 m.y.a.) **Cenozoic (*ca*. 65 m.y.a.)**

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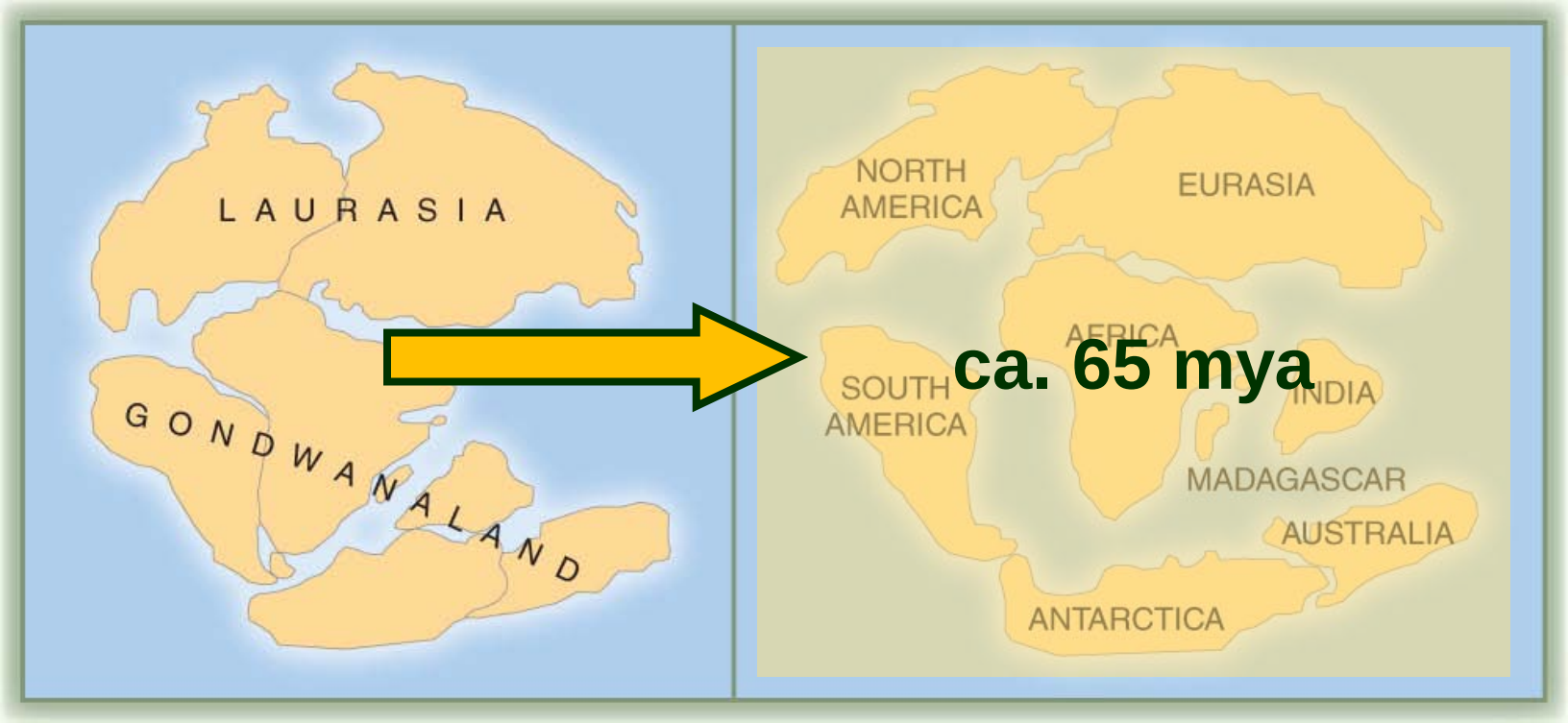


Continental drift

Mesozoic (*ca*. 125 m.y.a.) Cenozoic (*ca*. 65 m.y.a.)

Understanding Humans, 10th ed., p. 111

Pangea Split

|

Pangea Split
|
“Island Effect”

Pangea Split

|

“Island Effect”

|

Pangea Split

|

“Island Effect”

|

New Adaptations

Pangea Split

|

“Island Effect”

|

New Adaptations

|

New Orders of Creation

tree life

|

physical modifications

|

earliest primates = prosimians

(pre-monkeys)

improved grasping hand

improved opposability

more elaborate brains

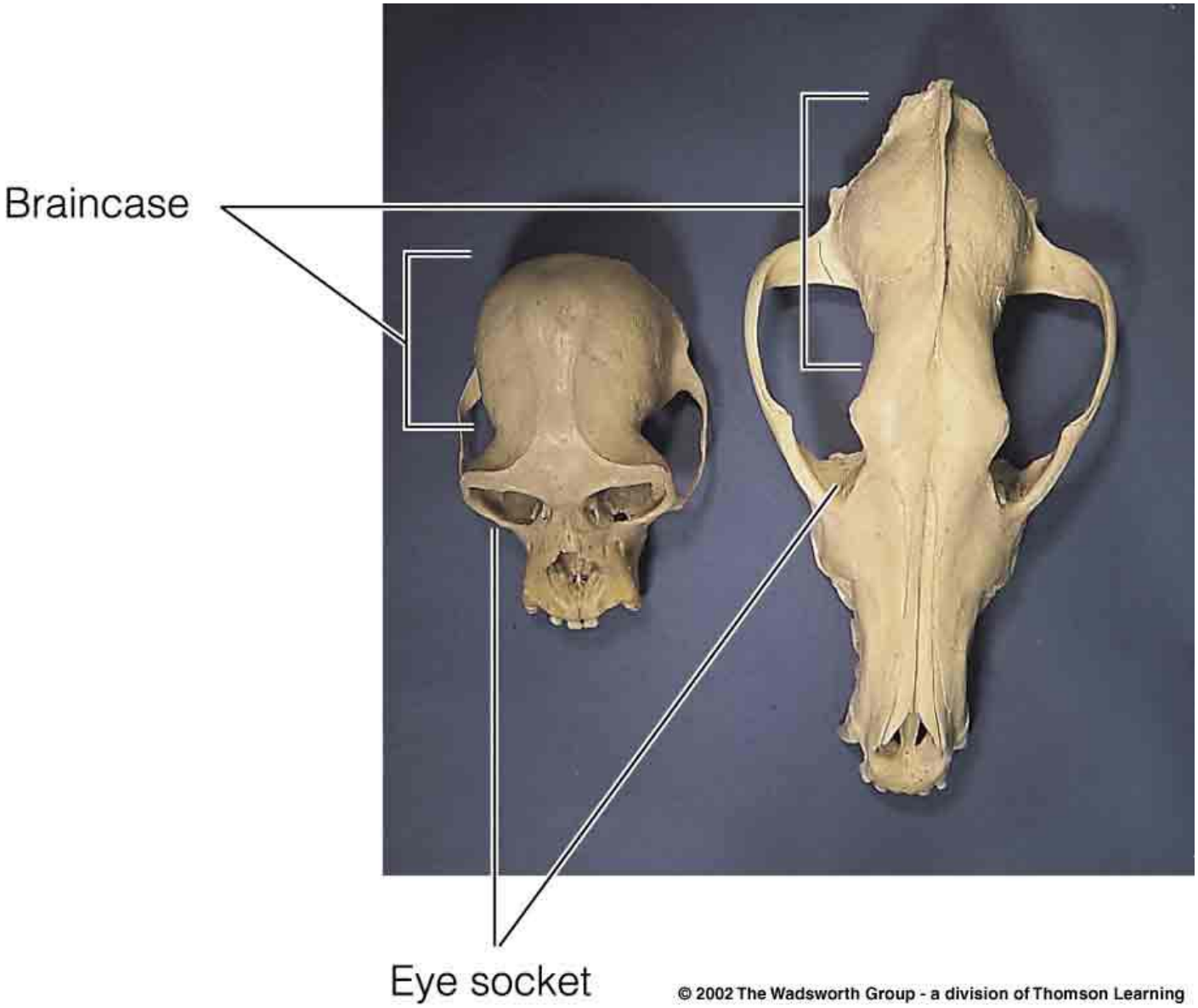
smelling becomes secondary

color vision

larger eyes

eyes moved forward

|



Gibbon **Red Wolf**

Understanding Humans, 10th ed., p. 122

All of this required increased coordination of senses

monkeys use food more efficiently than apes

monkeys use food more efficiently than apes

|

need for apes to encounter wider and more varied environments

monkeys use food more efficiently than apes

|

need for apes to encounter wider and more varied environments

|

greater variety of environments

microenvironments

microenvironments

microenvironments

The African Savannah

Illustration by Jay H. Matternes

http://www.amnh.org/exhibitions/atapuerca/africa/branches.php

multiplicity of alternatives

multiplicity of alternatives

|

need for deliberation

multiplicity of alternatives

|

need for deliberation

|

requires more time

multiplicity of alternatives

|

need for deliberation

|

requires more time

|

causes delay

multiplicity of alternatives

|

need for deliberation

|

requires more time

|

causes delay

|

therefore life becomes less automatic

and one depends to a greater extent on *learning* . . .

CULTURE

(learned behavior)

Detailed information on primates

is available on the class website at

www.d.umn.edu/cla/faculty/troufs/anth1602/

Introduction to Primates (slides 12A)

Prosimians -- "Pre-Monkeys" (slides 12B)

Monkeys (slides 12C)

Apes (slides 12D)

Anthropoids, Hominoids, and Hominids (slides 13A)

Early Apes: Oligocene Anthropoids (slides 13B)

Early Apes: Miocene Hominoids (slides 13C)

A Closer Look at the Great Apes (slides 14)

Bipedalism: Legs / Feet and Pelvis (slides 15A)

The Upper Body (slides 15B)

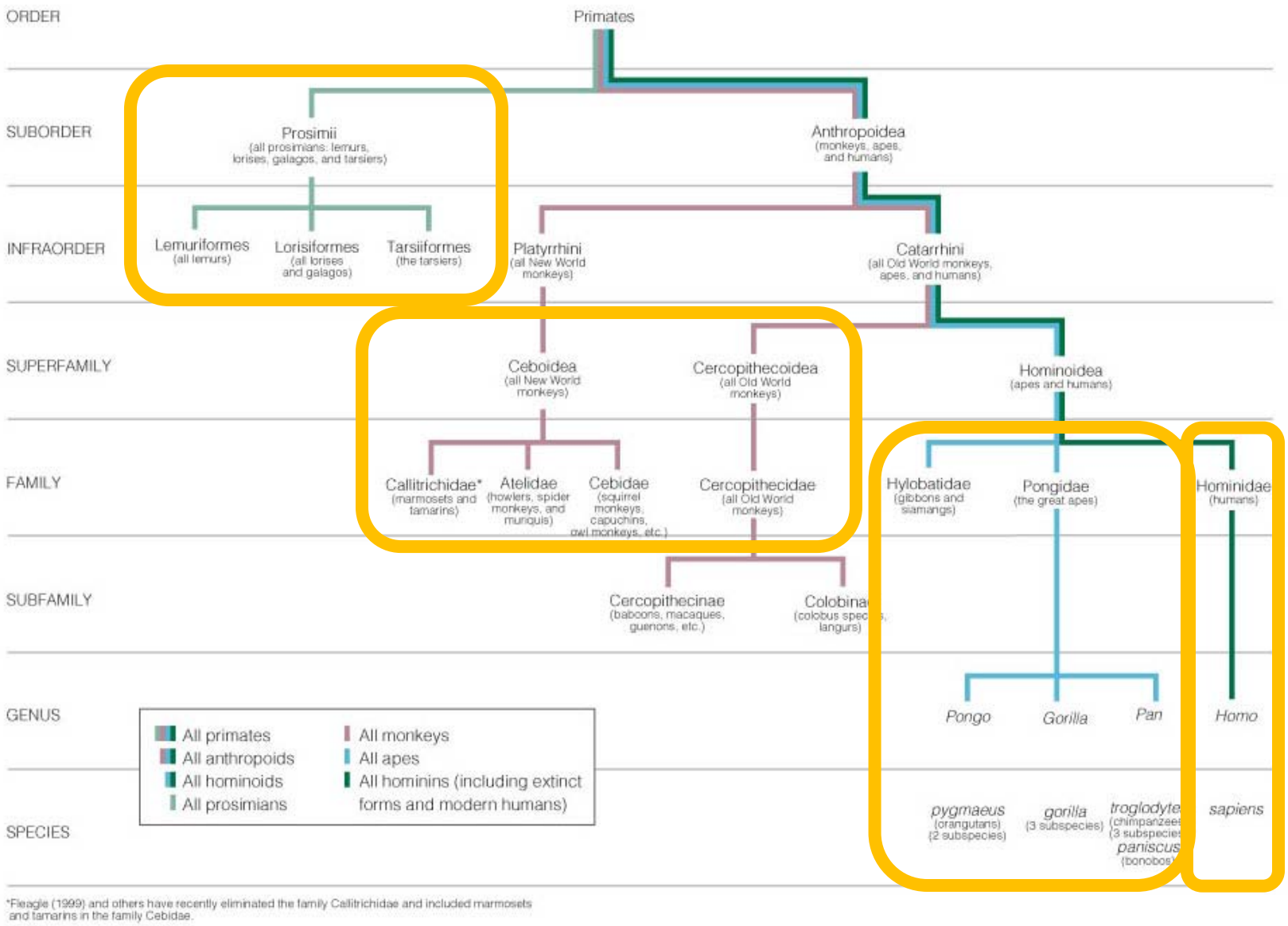
The Skull (slides 16A)

Brains (slides 16B)

Teeth / Jaw (slides 16C)

Other Changes (slides 16D)

Review (slides)



Primate taxonomic classification

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