

#	Behavioural units	Social context	Additional description	Corresponding activities	#	Behavioural units	Social context	Additional description	Corresponding activities
001	drinking	none	self-explanatory	Feeding	065	holding on another	Affiliative behaviour	self-explanatory	Social with gorillas
002	ingesting	none	self-explanatory	Feeding	066	intervening with	Affiliative behaviour	one individual supports one of the two individuals engaged in an agonistic interaction.	Social with gorillas
003	licking	none	self-explanatory	Feeding	067	resting in contact	Affiliative behaviour	two individuals resting together in physical contact, exclusive of other behaviours	Social with gorillas
004	pulling a branch or a stem towards on	none	self-explanatory	Foraging	068	resting in ventro-dorsal contact	Affiliative behaviour	self-explanatory	Social with gorillas
005	scratching a territoriality	none	self-explanatory	Foraging	069	resting in ventro-ventral contact	Affiliative behaviour	self-explanatory	Social with gorillas
006	digging soil	none	self-explanatory	Foraging	070	rolling towards another	Affiliative behaviour	self-explanatory	Social with gorillas
007	harvesting	none	self-explanatory	Foraging	071	running to another for protection	Affiliative behaviour	self-explanatory	Social with gorillas
008	investigating a dead branch or trunk	none	self-explanatory	Foraging	072	touching another	Affiliative behaviour	self-explanatory	Social with gorillas
009	moving a branch, a stone, a leave...	none	self-explanatory	Foraging	073	walk towards another	Affiliative behaviour	self-explanatory	Social with gorillas
010	opening a fruit	none	self-explanatory	Foraging	074	walking clutched at another hips	Affiliative behaviour	self-explanatory	Social with gorillas
011	peeling a fruit	none	self-explanatory	Foraging	075	walking with another clutched at its hips	Affiliative behaviour	self-explanatory	Social with gorillas
012	scratching soil, trunk or fruit skin	none	self-explanatory	Foraging	076	attempt at stealing (including food)	Agonistic behaviour	self-explanatory	Social with gorillas
013	smelling a food item	none	self-explanatory	Foraging	077	food-stealing	Agonistic behaviour	self-explanatory	Social with gorillas
014	smelling soil	none	self-explanatory	Foraging	078	aggression with contact	Aggression with physical contact	includes a combination of biting, dragging, hitting, shoving	Social with gorillas
015	tearing a leave up	none	self-explanatory	Foraging	079	biting	Aggression with physical contact	self-explanatory	Social with gorillas
016	thinning leaves out	none	self-explanatory	Foraging	080	dragging another	Aggression with physical contact	self-explanatory	Social with gorillas
017	uprooting or pulling a branch up	none	self-explanatory	Foraging	081	hitting another	Aggression with physical contact	self-explanatory	Social with gorillas
018	brachiation	none	self-explanatory	Locomotion	082	shoving	Aggression with physical contact	self-explanatory	Social with gorillas
019	climb a tree or liana	none	self-explanatory	Locomotion	083	aggression without contact	Aggression without physical contact	includes a combination of chasing, lunging, open-mouthed threat face...	Social with gorillas
020	climb down	none	self-explanatory	Locomotion	084	chasing	Aggression without physical contact	self-explanatory	Social with gorillas
021	clung to a trunk	none	self-explanatory	Locomotion	085	lunging	Aggression without physical contact	self-explanatory	Social with gorillas
022	hanging from a branch or liana	none	self-explanatory	Locomotion	086	open-mouthed threat face and threatening movements towards another	Aggression without physical contact	self-explanatory	Social with gorillas
023	nesting	none	self-explanatory	Locomotion	087	pig-grunting vocalization	Aggression without physical contact	self-explanatory	Social with gorillas
024	pounding the ground or a trunk for playing	none	self-explanatory	Locomotion	088	running at another	Aggression without physical contact	self-explanatory	Social with gorillas
025	run	none	self-explanatory	Locomotion	089	chest-beating directional or non-directional	Communication - Display	to be distinguished from play behavior by the aggressive context and lack of play face an excited performance including chest beating, hooting, smashing/dragging plants, pounding the ground, cvmhilir, fearinn	Social with gorillas
026	self-playing	none	self-explanatory	Locomotion	090	displaying	Communication - Display		Social with gorillas
027	self-playing and rolling	none	self-explanatory	Locomotion	091	hooting	Communication - Display	self-explanatory	Social with gorillas
028	self-playing and turning round on itself	none	self-explanatory	Locomotion	092	pounding the ground	Communication - Display	self-explanatory	Social with gorillas
029	self-playing eyes closed	none	self-explanatory	Locomotion	093	smashing/dragging plants	Communication - Display	self-explanatory	Social with gorillas
030	self-playing hung from a branch or liana	none	self-explanatory	Locomotion	094	strut stance	Communication - Display	self-explanatory	Social with gorillas
031	sliding down	none	self-explanatory	Locomotion	095	symbolic feeding	Communication - Display	self-explanatory	Social with gorillas
032	smashing/dragging plants for playing	none	self-explanatory	Locomotion	096	anticipating food vocalization	Communication - Vocalization	a vibration vocalization performed by individuals immediately before meals, distinguished from belch vocalization by the context	Social with gorillas
033	swinging from a branch or liana	none	self-explanatory	Locomotion	097	appeasement vocalization	Communication - Vocalization	a whiny vocalization given in response to agonistic behaviour	Social with gorillas
034	walking	none	self-explanatory	Locomotion	098	belch vocalization	Communication - Vocalization	an expression of contentment a vocalization performed by one individual that another is about to interact with. This vocalization was especially performed by one individual (Tiya) against the male Oudiki that intended to play with her, but often results in a high-pitched, high volume scream most often used in tense or aggressive situations	Social with gorillas
035	playing with a tool (stick, leave, sand...)	none	Locomotion or Resting according to the energy used in the play	Locomotion/Resting	099	moaning against another	Communication - Vocalization	one individual climbs on top of another individual, dorsally or ventrally, distinguished from play during social playing, one or more individuals start escalating aggressiveness. It could result in aggression.	Social with gorillas
036	quadrupedal standing for monitoring	none	self-explanatory	Resting	100	scream vocalization	Communication - Vocalization	self-explanatory	Social with gorillas
037	bipedal standing	none	self-explanatory	Resting	101	stress hooting	Communication - Vocalization	self-explanatory	Social with gorillas
038	bipedal standing for monitoring	none	self-explanatory	Resting	102	mounting	Dominance behaviour	self-explanatory	Social with gorillas
039	lying	none	self-explanatory	Resting	103	aggressive play	Play behaviour	self-explanatory	Social with gorillas
040	lying near another	none	self-explanatory	Resting	104	invite to play with contact (dragging, pushing...)	Play behaviour	self-explanatory	Social with gorillas
041	monitoring while lying	none	self-explanatory	Resting	105	invite to play without contact (play displaying, initiating play chasing, ...)	Play behaviour	self-explanatory	Social with gorillas
042	monitoring while seated	none	self-explanatory	Resting	106	mock-biting with another	Play behaviour	self-explanatory	Social with gorillas
043	playing gently in bipedal standing	none	self-explanatory	Resting	107	play boxing	Play behaviour	self-explanatory	Social with gorillas
044	playing gently while in quadrupedal standing	none	self-explanatory	Resting	108	play chasing	Play behaviour	self-explanatory	Social with gorillas
045	playing gently while lying	none	self-explanatory	Resting	109	play chest-beating	Play behaviour	self-explanatory	Social with gorillas
046	playing gently while seated	none	self-explanatory	Resting	110	play wrestling	Play behaviour	self-explanatory	Social with gorillas
047	quadrupedal standing near another	none	self-explanatory	Resting	111	playing and laughing with another	Play behaviour	self-explanatory	Social with gorillas
048	quadrupedal standing	none	self-explanatory	Resting	112	playing while hanging on a branch or liana	Play behaviour	self-explanatory	Social with gorillas
049	resting near another	none	self-explanatory	Resting	113	playing with another	Play behaviour	self-explanatory	Social with gorillas
050	resting seated	none	self-explanatory	Resting	114	pretending to be blind	Play behaviour	one individual close his eyes and moves blind to another. This often follows an exciting play	Social with gorillas
051	seated on a nest	none	self-explanatory	Resting	115	avoiding another	Submissive behaviour	self-explanatory	Social with gorillas
052	self-grooming	none	self-explanatory	Resting	116	fleeing another	Submissive behaviour	self-explanatory	Social with gorillas
053	sleeping lying	none	self-explanatory	Resting	117	cowering down	Submissive behaviour	one individual adopt this submission posture to be protected from aggression or rough play	Social with gorillas
054	sleeping seated	none	self-explanatory	Resting	118	smelling another	Undetermined type	self-explanatory	Social with gorillas
055	climbing a tree towards another	Affiliative behaviour	self-explanatory	Social with gorillas	119	climbing on human to be transported	Affiliative behaviour	self-explanatory	Social with humans
056	climbing down a tree to another	Affiliative behaviour	self-explanatory	Social with gorillas	120	following human	Affiliative behaviour	self-explanatory	Social with humans
057	clutching at another	Affiliative behaviour	self-explanatory	Social with gorillas	121	hanging on human	Affiliative behaviour	self-explanatory	Social with humans
058	flowing in walking	Affiliative behaviour	self-explanatory	Social with gorillas	122	transported by human	Affiliative behaviour	self-explanatory	Social with humans
059	following another in brachiation	Affiliative behaviour	self-explanatory	Social with gorillas	123	mock-biting	Play behaviour	self-explanatory	Social with humans
060	following another in climbing down	Affiliative behaviour	self-explanatory	Social with gorillas	124	playing and laughing	Play behaviour	self-explanatory	Social with humans
061	following another in climbing up	Affiliative behaviour	self-explanatory	Social with gorillas	125	playing with human	Play behaviour	self-explanatory	Social with humans
062	following another in running	Affiliative behaviour	self-explanatory	Social with gorillas	126	playing with human eyes closed	Play behaviour	self-explanatory	Social with humans
063	grooming	Affiliative behaviour	self-explanatory	Social with gorillas	127	playing with human hung from a branch	Play behaviour	self-explanatory	Social with humans
064	hanging on another	Affiliative behaviour	self-explanatory	Social with gorillas					

Supplementary table 2. Ethogramm of the 127 different behavioural units considered within every 6 activity categories.