



SYNCHRONY

(2016-2021)

by Lorena Mal

“First Movement: Grave (Hibernación y Torpor/Hibernation and Torpor)”

“Second Movement: Larghetto a Largo (Sueño/Sleep)

“Third Movement: Adagio (Calma/Calm)”

“Fourth Movement: Andante a PrestoActivo/Active)”

“Fifth Movement: Prestissimo (Límite/Limit)”

“Zero Movement: Largo a Larghetto (Sueño/Sleep)”

Performers

Lauren Aloia
Ian Miller
Daniel Rudin
Madeline Smith

Pianos by Steinway & Sons

Research in collaboration with Clint Penick, Lauren Nichols and Rob Dunn (Applied Ecology, North Carolina State University), including compositions in collaboration with Emilio Hinojosa Carrión and transcriptions by Vladimir Aranda.



COMMON
FREQUENCIES
COMUNES
FRECUENCIAS

BIOBAT ART SPACE

Synchrony explores various notions of ‘living’ time through the meeting between systems that measure it’s passing, where rhythm is both biological and musical, and tempo, pace or heartbeats are all counted as beats per minute. Combining archival objects, images, modified metronomes, scores and a series of events for 2 pianos and multiple interpreters playing simultaneously different temporalities, the project takes the standard metronome as main subject to inquire, and departs from the coincidence between the human heartbeat and it’s limits - both from 40 beats per minute (Grave, or an adult human sleeping) to 208 bpm (Prestissimo, or an adult human before collapse)- to propose another sense of pace beyond a dominant history of human “law” (metronome, metron “measure” and nomos “regulating, law”), based on the heartbeat data of all living organisms found publicly to date on scientific literature, as polyrhythmic relations to experience different bodies across states of sleep, hibernation, calm and activity.

Disrupting the limits of the metronome and staging tensions of the human capacity of interpretation and perception, *Synchrony* formulates their own sense of ‘movement’, ‘chords’, and ‘scales’ within a new range to move around that goes from 1 bpm to 1511 bpm (from a clam in calm, *mesodesma mactroides*, to a shrew in stress, *suncus murinus*), among other 356 species in-between, setting unexpected encounters and silence intervals, turning the act of listening into an intersubjective process of reciprocity, even involuntary.

Synchrony is presented in the framework of the *Common Frequencies* Exhibition, organized and curated by Elisa Gutiérrez Eriksen and with works by Tania Candiani, Lorenal Mal, Gilberto Esparza, Marcela Armas, and Interspecifics, and on view from May 1st to October 16th, 2021, at BioBAT Art Space, Brooklyn, NY.

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“FISRT MOVEMENT: GRAVE (HIBERNACIÓN Y TORPOR / HIBERNATION AND TORPOR)

Scientific Name	English Name	BPM
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	25
<i>Otospermophilus beecheyi</i>	Ground squirrel	7
<i>Otospermophilus beecheyi</i>	Ground squirrel	10
<i>Marmota monax</i>	Woodchuck	10
<i>Marmota monax</i>	Woodchuck	12
<i>Hystrix cristata</i>	Hedgehog europeo	5
<i>Ursus arctos arctos</i>	Black bear	8
<i>Ursus arctos arctos</i>	Black bear	17
<i>Ursus arctos arctos</i>	Black bear	18
<i>Ursus arctos arctos</i>	Black bear	26
<i>Ursus arctos horribilis</i>	Grizzly	12

“SECOND MOVEMENT: LARGHETTO A LARGO (SUEÑO / SLEEP)”

Scientific Name	English Name	BPM
<i>Vulpes sp</i>	Fox	76.7
<i>Vulpes sp</i>	Fox	78.7
<i>Canis lupus familiaris</i>	Common dog	74
<i>Canis lupus</i>	Gray wolf	40

“THIRD MOVEMENT: ADAGIO (CALMA / CALM)”

Scientific Name	English Name	BPM
<i>Siphonaptera</i>	Flea	180
<i>Cimex lectularius</i>	Bedbug	20 - 110
<i>Lepidoptera</i>	Butterfly	50 - 60
<i>Anisoptera</i>	Dragonflies	110
<i>Hylotropes bajulus</i>	Moth	20 - 30
<i>Caelifera</i>	Grasshopper	60 - 120
<i>Pycnogonida</i>	Sea spider	6
<i>Mesodesma mactroides</i>	Clam	1
<i>Mytilus galloprovincialis</i>	Mussel	6

Scientific Name	English Name	BPM
<i>Caridea</i>	Shrimp	200 - 300
<i>Palinurus elephas</i>	Lobster	30 - 60
<i>Carcinus maenas</i>	Crab	50 - 70
<i>Salamandra salamandra</i>	Salamander	40
<i>Trochilinae</i>	Hummingbird	250
<i>Rattus norvegicus</i>	Rat	380 - 410
<i>Asteroidea</i>	Starfish	6
<i>Passer domesticus</i>	Sparrow	300 - 350
<i>Pelophylax perezii</i>	Frog	40 - 100
<i>Serpentes</i>	Snake	10 - 60
<i>Suncus murinus</i>	Shrew	800 - 900
<i>Corynorhinus townsendii</i>	Bat	950 - 1000
<i>Columba livia</i>	Paloma	180 - 250
<i>Iguanidae</i>	Iguana	30 - 100
<i>Mustela putorius furo</i>	Ferret	200 - 250
<i>Erinaceinae</i>	Sea urchin	200
<i>Thunnus</i>	Tuna	100
<i>Oryctolagus cuniculus</i>	Rabbit	180 - 210
<i>Nothura maculosa</i>	Partridge	300 - 330
<i>Melopsittacus undulatus</i>	Parrot	340 - 600
<i>Gallus gallus domesticus</i>	Chicken	90 - 150
<i>Anas platyrhynchos domesticus</i>	Duck	180 - 340
<i>Anser anser</i>	Goose	140 - 160
<i>Falco peregrinus</i>	Falcon	260
<i>Accipitridae</i>	Eagle	340 - 360
<i>Grus grus</i>	Swan	90
<i>Felis silvestris catus</i>	Cat	110
<i>Erethizon dorsatum</i>	Porcupine	60
<i>Strigidae</i>	Owl	210 - 230
<i>Ornithorhynchus anatinus</i>	Platypus	120 - 150
<i>Pelecanus onocrotalus</i>	Pelican	70 - 90
<i>Testudines</i>	Turtle	10 - 30
<i>Apteryx australis</i>	Kiwi	70 - 240
<i>Phascolarctos cinereus</i>	Koala	110 - 120
<i>Octopus vulgaris</i>	Octopus	10 - 30
<i>Vulpini</i>	Fox	120 - 130
<i>Pan troglodytes</i>	Chimpanzee	110 - 120
<i>Canis latrans</i>	Coyote	100 - 110
<i>Canis lupus familiaris</i>	Dog	70 - 100

Scientific Name	English Name	BPM
<i>Canis lupus</i>	Wolf	70
<i>Ovis orientalis aries</i>	Sheep	60 - 70
<i>Capra aegagrus hircus</i>	Goat	70 - 90
<i>Spheniscidae</i>	Penguin	80
<i>Homo sapiens</i>	Human	70 - 100
<i>Sus scrofa domestica</i>	Pig	70 - 100
<i>Equus africanus-ferus</i>	Mule	30 - 70
<i>Lacertilia (suborden)</i>	Lizard	10 - 50
<i>Cervus elaphus</i>	Deer	80 - 90
<i>Antilope cervicapra</i>	Antelope	80
<i>Macropus giganteus</i>	Cangaroo	100 -150
<i>Panthera leo</i>	Lion	40
<i>Panthera tigris</i>	Tiger	60 - 70
<i>Rhea americana (especie)</i>	Ostrich	100 - 150
<i>Lama glama</i>	Llama	50 - 80
<i>Phoca vitulina</i>	Foca	90 - 100
<i>Equus ferus caballus</i>	Horse	30 - 40
<i>Camelus bactrianus</i>	Camel	30
<i>Odobenus rosmarus</i>	Walrus	70
<i>Gorilla</i>	Gorilla	80
<i>Tursiops truncatus</i>	Dolphin	150
<i>Bos primigenius taurus</i>	Cow	70 - 80
<i>Bos primigenius taurus</i>	Bull	60 - 70
<i>Bos primigenius taurus</i>	Ox	40 - 60
<i>Ursus arctos arctos</i>	Bear	70
<i>Otaria flavescens</i>	Sea Wolf	100 - 120
<i>Bos primigenius indicus</i>	Cebuino	60 - 70
<i>Bison bison</i>	Buffalo	40 - 60
<i>Selachimorph</i>	Shark	20 - 40
<i>Loxodonta africana</i>	Elephant	20 - 30
<i>Balaena mysticetus</i>	Whale	20 - 40

“FOURTH MOVEMENT: ANDANTE A PRESTO
(ACTIVO / ACTIVE)”

Scientific Name	English Name	BPM
<i>iguana iguana</i>	green iguanas	5
<i>dermochelys coriacea</i>	sea turtles	16.5 - 18.3
<i>pagophilus groenlandicus</i>	harp seals	2.06

Scientific Name	English Name	BPM
<i>Balaena mysticetus</i>	Bowhead whales	6 - 12
<i>Halichoerus grypus</i>	Grey seals	10
<i>Pagophilus groenlandicus</i>	Harp seals	150
<i>Mirounga angustirostris</i>	Northern elephant seals	12 - 20
<i>Ctenosaura pectinata</i>	Mexican Spiny-tailed iguana	30 - 32
<i>Homo sapiens sapiens</i>	Humans	120
<i>Dromaius novaehollandiae</i>	Emus	37 - 53
<i>Aythya fuligula</i>	Tufted ducks	120 - 130
<i>Thunnus thynnus</i>	Atlantic bluefin tuna	120- 130
<i>Equus caballus</i>	Horses	210
<i>Rattus rattus</i>	Black rats	480
<i>Corynorhinus townsendii</i>	Townsend's big-eared bats	700 -1300

“FIFTH MOVEMENT: PRESTISSIMO
(LIMITE / LIMIT)”

Scientific Name	English Name	BPM
<i>Dromaius novaehollandiae</i>	Emus	45
<i>Lithobates catesbeianus</i>	Bullfrogs	83
<i>Homarus americanus</i>	American lobsters	90
<i>Eurypelma californicum</i>	Tarantulas	90
<i>Lithobates pipiens</i>	Northern leopard frogs	144
<i>Hylotrupes bajulus</i>	Moths	180
<i>Cervidae</i>	Running deers	180
<i>Homo sapiens</i>	Adult humans	200
<i>Thunnus albacares</i>	Yellowfin tuna	205
<i>Anserini</i>	Geese	512
<i>Macroscelidea</i>	Elephant shrews	977 - 1109
<i>Macroscelidea</i>	Asian house shrews	1320 - 1511

“ZERO MOVEMENT: LARGO A LARGHETTO
(SUEÑO/SLEEP)”

Scientific Name	English Name	BPM
<i>Terrapene Carolina</i>	Common box turtle	19.4
<i>Corynorhinus townsendii</i>	Townsend’s big-eared bat	1000
<i>Iguana iguana</i>	Green iguana	28.5
<i>Iguana iguana</i>	Green iguana	39
<i>Iguana iguana</i>	Green iguana	41.8
<i>Ctenosaura pectinata</i>	Mexican spiny-tailed iguana	53
<i>Canis lupus</i>	Gray wolf	40