Musical Athletes: Bodywork for Bassists

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A Body Work Approach to Performance

- Our small muscle feats match Olympic athletes:
 - Track & Field, Marathon Running, Synchronized
 Swimming, Ice Skating, Curling, Gymnastics
- Self-Acceptance, Self-Care: Do not harm your body
 - You are your instrument, so take care of yourself
- 10% Rule for incremental progress without injury
 - change 1 variable at a time by at most 10% daily
- A little bit each day goes a long way towards a goal
- Physical fitness = musical freedom + longevity
- 3:1 or 5:2 ratio of work days to rest days (48 hours)
- 2:1 ratio of work time to recovery time in practice

Bodywork Targets Anatomical Systems

- 1. Skeletal: solid and fixed weight bearing structures
 - Bones, ligaments, joints with passages for nerves & tendons
- **2. Respiratory**: we drink H_2O_2 , inhale O_2 & exhale CO_2
 - Nose, mouth, trachea, lungs, alveoli, diaphragm
- **3. Circulatory**: delivers oxygen & nutrients for energy
 - Heart, blood vessels, blood flow, red blood cells, plasma
- **4. Muscular**: tensile & mobile fibers that contract to work
 - Antagonistic pairs of muscles, tendons, fascia, vocal cords
- **5. Nervous**: electrical & chemical signals in & out of brain
 - Neurons, spinal cord, nerves, adrenaline, epinephrine
 - The Musical 5 Senses: skin, ears, eyes, inner ear, inner voice
- **6. Lymphatic**: drains toxic waste, byproducts of muscles
 - Lymph nodes & vessels, white blood cells, immune system

Order of Operations

- 1. Begin: Mind Clearing, Meditation, & Mental Practice
- 2. Warm-up: Exercises, Movement, "Tune your body"
 - First body alone away from bass: cardiovascular exercise
 - Then start gradually with bass: mid range, slowly, softly
- 3. Workout: Technique Training and/or Repertoire
 - practice, lesson, rehearsal, recording, or performance
- 4. Cool-Down: Stretching and Release of Static Loading
 - Start by decreasing intensity with bass: simpler rep
 - Then move to key stretches/movements immediately
 - Resume stretching later on in the day after all playing
- 5. End: Final Relaxation & Positive Visualization

Meditation Techniques

- Body Scan: experience current sensations of tension, fatigue or pain in your body while sitting or lying flat
- **3D Breathing**: used by vocalists, wind, & brass players to expand the volume of air inhaled and exhaled
 - Abdominal, thoracic, and lateral breathing in all directions
- Proprioception & Kinesthesia: sensation of movement, effort, range of motion, & position of joints & muscles
- Visualization: mental process of imagining movements in great sensory detail without actually moving

Martial Arts: Tai Chi & Qigong [Ch'i Kung]

- Ancient Chinese self-combat & moving meditation
- Always slow & continuous motions; like long tones
- "Sit back, relax, & put your weight in your heels"
- Expands peripheral vision and cultivates soft gaze
- Trains muscular memory with varied repetitions
- Spinal Alignment: nose, sternum, and core in line Exercise: Perception and awareness of arm weight:
 - Single arm circles with closed hand & torso rotation
 - Next guide another person's arm holding with 2 hands
 - Observe how much the arm weighs at each angle

Nerve Flossing: A Once Daily Task

- Neuroplasticity resets after holding a static position or doing a repetitive activity for 20 minutes
- Take a 10 minute break, switch positions, and change content or repertoire if training for endurance
- Referred nerve pain in hands originates in other areas due to inflamed tendons in wrist, forearm, elbow, neck
- Smooth, fluid motions designed to painlessly mobilize and then release nerves from congestion and tension For Ulnar, Medial, & Radial Nerves in Arms & Hands: Pouring Out Tea Cups – Owl Eyes – Ask "Why?"

Swivel Head & Turn Arms – Namaste – Wrist Release

Joseph Pilates (1883-1967)

- A series of core exercises on mat, chair, or reformer
- For strength & stability in back, abs, shoulders, hips
- Reciprocal Inhibition: muscle pairs contract and release in opposition; one relaxes while other works <u>Vocabulary of Opposing Movements</u>

Flexion vs. Extension Pronation vs. Supination Protraction vs. Retraction Elevation vs. Depression Spinal Rotation: Cervical, Thoracic, Lumbar, Pelvic zone Selected Pilates Mat Exercises:

Chin Tuck – Front, back, & side planks – Twist – Saw Swan – Soldier Arms – Shoulder Bridge – Snow Angels

Weight Training & Resistance Bands

- Open chest by strengthening weak back muscles
- Pectoralis major/minor vs. rhomboids/trapezius
- Exercises for scapular stabilization: 1-3 lb. weights
- 3 sessions per week, 1 set each, 10 reps per set
- Cushion forehead and/or hips with pillow or cloth
 - Letter A: progressive resisted extension (prone)
 - Letter T: scapular stabilization (prone)
 - Letter W: scapular retraction (prone)
- Bands: letters A-T-Y in front & behind body
- Choose resistance: high for strength, low for stretch

Yoga/Stretching: Union of Mind & Body

- Muscles tighten automatically but need to be actively lengthened and invited to relax after use
- Sequences of poses to align and balance muscles
- Strengthens bones and releases joints as well
- Redistributes blood flow and lymphatic drainage
 <u>Yoga Asanas</u> (Poses) Adapted for Bassists
 Sun Salutation Fingertip plank on wall then floor
 6 forearm & neck stretches Shoulder stand Triceps
 Chest Opening Standing balances Inversions
 Fish Pose Locust Pose Seated & Prone Twists

Therapeutic Massage & Myofascial Release

- Foam Roller; Tennis Balls; Rolling Pin; Massager
- Massage Therapist or self-massage works too:
 - Thumbs, hands, forearms, wrists, shoulders, chest, neck
 - Ice massage or ice bath for forearms/hands afterwards
- Create spontaneous shoulder massage circles

Guided Relaxation

- Regular practice eases mind-body connection
- Lie down, sit comfortably, or rest in an inversion
- Observe the changes since the start of this practice

Recommended Resources

- Try many bodywork practices; find the best for you
- Daily cardiovascular exercise: jog, swim, hike, walk...
- Apply concepts & skills to musicality & technique:
 - Scales and arpeggios = Vinyasa Yoga Flow cycles
 - Hand expansion exercises = dancers' leg flexibility
 - Multiple stops = weight training for left hand only
 - Adding Compound Bow Strokes = Swimming Drills
 - String crossings = Tai Chi moves in space-time
- Reduce overuse/misuse by avoiding static positions:
 - Biking, computer use, racquet sports, manual labor

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