From the Outside In - Waking up the Facial Muscles and Pharyngeal Spaces Holly Clemans and Ruth Kasckow 2023 ABME Conference, Charlotte, North Carolina

Mapping Facial Muscles & Pharyngeal Spaces - WHY?

- To explore structure, function & size, creating increased awareness & capacity for musical choices
- To access full range of human expressive emotion in our face, increase musical expression
- To fine tune timbre, dynamics & intonation
- To better understand embouchure formation

Fast Facts about Facial Muscles

Six Basic Facial Expressions: sad, angry, joy, fear, disgust, surprise

Waking Up the Facial Muscles: tapping, fascial releases & stretches

Lower Facial Muscles: orbicularis oris, zygomaticus major & minor, levator anguli oris, risorius, buccinator, platysma, depressor anguli oris, depressor labii inferiorus, mentalis

- a. Most muscles connect at the "central hub" modiolus
- b. Provide full range of emotional expression
- c. Wind players embouchure formation

Mid - Upper Facial Muscles: depressor septi nasalis, levator labii superioris, levator labii aleque nasali, procerus, corrugator

- a. Vocalists more prone to use these for expression than wind players
- b. All musicians may use these when "trying too hard"

Muscles within the Oral Cavity

masseter, lateral & medial pterygoids, digastric

Elevators & tensors of soft palate (levator veli palatini & tensor veli palatini muscles) affect resonance, register, timbre & dynamic changes

Extrinsic muscles of the tongue: styloglossus, hyoglossus, genioglossus, palatoglossus

Intrinsic muscles of the tongue: superior longitudinal, inferior longitudinal, transverse, vertical.

Pharyngeal Space

- a. Mapping the pharynx: nasopharynx, oropharynx, laryngopharynx
- b. Pharyngeal constrictor muscles
- c. Pharyngeal longitudinal muscles: salpingopharyngeus, palatopharyngeus, stylopharyngeal

Other activities for mapping structures of the vocal tract

- a. Exploring the coordination between AO balance, vocal tract & facial muscles and its effects on resonance and tone quality
- b. Semi Occluded Vocal Tract Activities (SOVT)
 - Blow bubbles w/ straw in H2O bottle, hum scales, arpeggios
 This narrows the vocal tract (lips, oral cavity, vocal folds) increases
 more efficient movt of vocal cords, and increases resonance

Resources:

- * https://www.kenhub.com/en/library/anatomy/the-facial-muscles
- * https://www.strawsforvoice.com
- * The Science Behind the Straw https://www.youtube.com/watch?v=BRJUwQW_3Gs
- * Malde, M. *Mapping the Structures of Resonance*. Journal of Singing; May/June 2009, Vol 65, Issue 5.p.521-529