

i say 'me' guided by a blind instinct

Ryan Carraher

A dissertation

submitted in partial fulfillment of the
requirements for the degree of

Doctor of Musical Arts

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Reading Committee:

Huck Hodge, Chair

Joël-François Durand

Jonathan Bernard

Program Authorized to Offer Degree:

School of Music

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Abstract

i say 'me' guided by a blind instinct

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i say 'me' guided by a blind instinct is a complex system of self-reflection that guides performers in making real-time decisions that result in indeterminate sonic and behavioral outcomes. Performers begin isolated from one another and their regular performative habits. Each performance area (e.g., breath pressure, bow pressure, lip tension) independently transitions between a minimum and maximum state over a specified number of breaths (e.g., a transition from loose lips to tight lips spanning five breaths). These transitory strands overlap in odd physical counterpoint, resulting in new performer-instrument relationships and unstable sounds. Performers reflect upon their experience of these states—their level of discomfort or performance of attention allocation—and make changes in response (i.e., change the duration or direction of a transitory strand.)

As the piece continues, performers progress from considering a single referent (themselves) to multiple referents (themselves and the actions of one or more co-players). What performers have the power to change, and the consequences of these changes become complicated by an emergent social network.

i say 'me' guided by a blind instinct

for mixed quartet

Ryan Carraher (2021)

Bass Clarinet Part

Conceptual Remarks

I like to think of the image of a plate spinner with their attention ceaselessly shifting from plate to plate. In any one moment, a specific plate may be unstable relative to the others. The perceived danger of the plate falling directs the performer's attention to this particular plate. Attention leads to assessment (reflection) which results in modification (preservation).

What follows is a complex system of self-reflection and social interaction. There is no "correct" way to interact with this system. If you cannot remember all of the rules that is okay, however there should be a sincere effort to do so (which will cultivate a quiet yet intense performance environment). Interacting with this system foregrounds the limitations that make us unique. "Failure" to master the system is not a failure in the traditional sense...it is a moment where latent aspects of an identity can be expressed and reflected upon. With that in mind, the material and how you respond to it should be considered with intimacy and curiosity rather than preconceived formal or sonic ideals.

Score/Materials

- Instrumentation: bass clarinet, horn, harp, viola
- Duration: Flexible (a stopwatch may be used to facilitate a desired duration; minimum 7')
- Staging: Ideally the performers would be arranged in a circle as close together as possible.
- There is no composite score, each performer reads from their own part.
- Due to the extreme quiet of the work, amplification may be warranted.

Notation

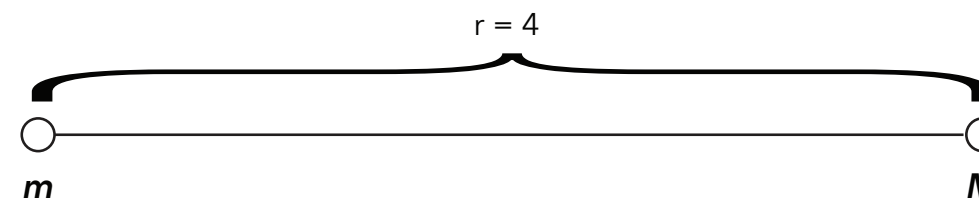
- The central parts of the "score" are three self-reflection prompts: Process A, Process B, and Process C
 - Process A is self-reflective (i.e., you do not need to consider any of your co-players) and exclusively uses the voice
 - Process B is self-reflective and uses the voice and instrument
 - Process C is part self-reflective but also allocates attention towards co-players
- Each of these processes stratify the performer into independent areas:
 - Process A identifies four areas: Oral cavity, tongue (tng.), larynx, and pitch
 - Process B identifies five areas: Lip tension, embouchure, oral cavity, growl, and fingering
 - Process C identifies seven areas: Lip tension, embouchure, oral cavity, growl, fingering, larynx, and breath/constriction ("Breath/Con.")
- Each area (with the exceptions of oral cavity, tng., and fingering) is defined by *continuous transition* between a minimum point (**m**) and a maximum point (**M**).
- **All areas are simultaneously active.** Once a transition is completed (e.g., **m** to **M**) the transition immediately resumes in the opposite direction (i.e., **M** to **m**).
- The transition's duration is measured in number of breaths and expressed as an integral or fractional coefficient applied to the variable 'b':
 - 'b' = a single breath unit
 - In Processes A and B, the performer alternates between in and out breaths both lasting as long as possible. Here, 'b' is defined as **either** one in **or** out breath...in Process C the performer is performing an out breath as long as possible but the in breath is now as fast as possible. 'b' is redefined as **only** one out breath. The in breath no longer has durational import.
 - Fractional coefficients (e.g., 3.5b) do occur. To perform these, the performers must take their current physical state into account, predict how much longer their current breath will last, and estimate when they have reached the indicated fractional point. This is more of a "taking-stock-of" one's current physical state, not an exact measurement.
 - Examples:
 - '2b' in Process A = one as long as possible in breath + one as long as possible out breath [or vice versa]
 - '2b' in Process C = two as long as possible out breaths
 - 3.5b in Process B = one as long as possible out breath, one as long as possible in breath, one as long as possible out breath, + half of an as long as possible in breath [the transition will be completed when the performer feels they have reached the halfway point of the fourth breath. At this point the transition starts over in the opposite direction. The performer does not retake the breath when a transition is completed. Breaths should always be finished.]
 - 3.5b in Process C = three as long as possible out breaths + half of another as long as possible out breath
- **There should be no attempt to assign an absolute value to an "as long as possible breath" or to make these values uniform.**
- The "strain" occurring at the end of an as long as possible breath (i.e., the unstable, shaking sound and discomfort) is desired.

Notation [cont.]

- The performers may begin a performance at either the **m** or **M** point of a respective area (this is the "initial state")
- The initial durational coefficient of each transition (i.e., the unique duration of a transition at the start of a performance) is expressed through the variable 'r.'
- During the **m** to **M** (or **M** to **m**) transitions, *every in-between state is inhabited*. Do not jump from one extreme to another (unless of course the duration or physical state necessitate this)
- Below the **m** and **M** points and 'r' values for the areas are presented:

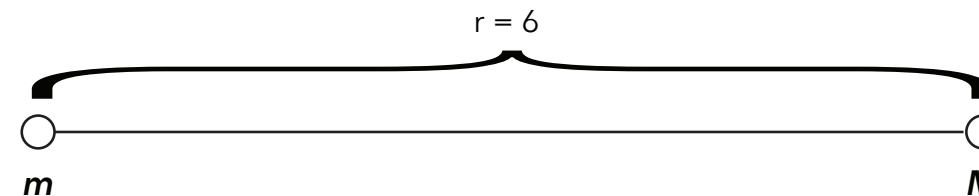
1) Lip Tension

- m** = lips are as loose as possible
- M** = lips are as tight as possible



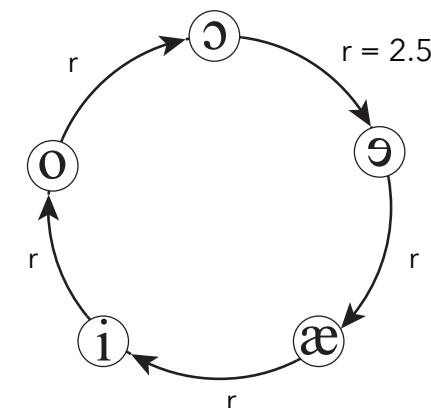
2) Embouchure Placement

- m** = very little mouthpiece is in contact with the lips
- M** = the entire mouthpiece is covered



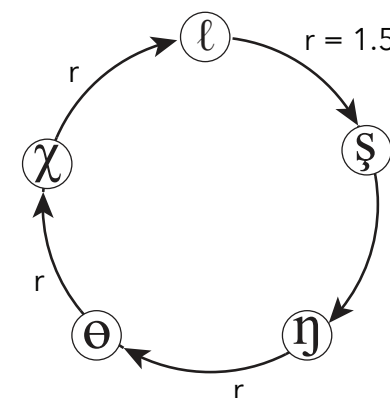
3) Oral Cavity

Oral cavity shape is represented by a cycle. There are 5 positions represented by IPA symbols. Begin progressing clockwise. Start from any point. The transition between any points in the cycle share the same 'r' value.



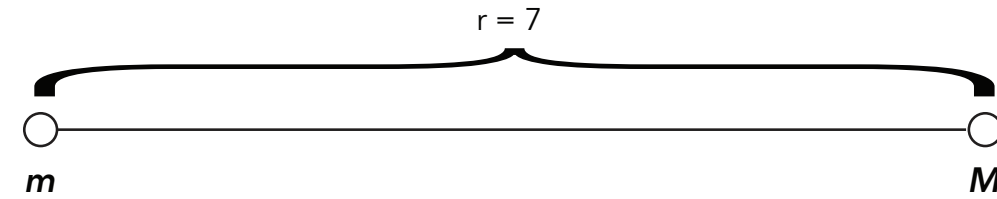
4) Tongue (tng.)

Tongue position is also represented by a cycle. There are 5 positions represented by IPA symbols. Begin progressing clockwise. Start from any point. The transition between any points in the cycle share the same 'r' value. The tongue position is superimposed upon the active oral cavity shape. Used in process A only!

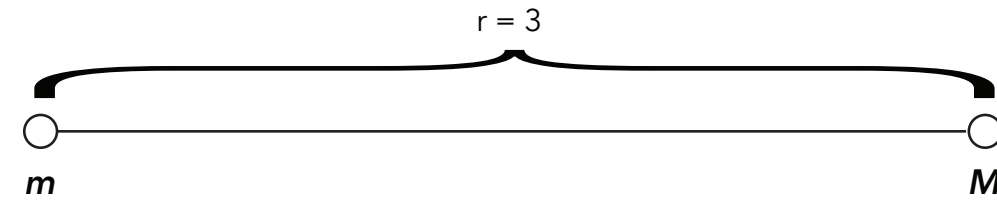


Notation [cont.]**5) Growl****m** = no growl**M** = continuous growl, back of throat, gargle

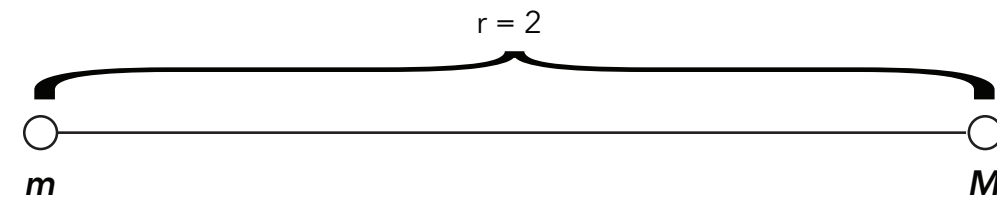
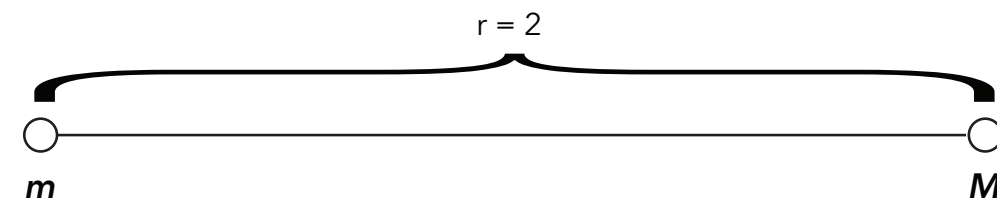
(N.B. every state in between should be inhabited. There will be points where intermittent growls occur as you build up energy in the throat. Can be combined with a tight larynx)

**6) Larynx****m** = loose/croaky**M** = tight/creaky

(N.B. every state in between should be inhabited. Both of these states are discontinuous, they will chop up the airstream. In the middle would be a continuous, as soft as possible airstream; see Dropbox folder for recordings)

**7) Pitch****m** = vocal pitch (which is always extremely high) is stable (i.e., the pitch doesn't change but the air stream supporting the pitch may not be correspondingly stable)**M** = the vocal pitch is a quarter-tone higher or lower than the original.

Only used in Process A!

**8) Breath/Con.****m** = barely expelling/intaking any air; discontinuous, faint air stream; the *effort* of "pppp"; little constriction needed**M** = pushing the air out with great effort; continuous air stream; the *effort* of "fff"; a lot of constriction needed**9) Fingering**

Fingering, like oral cavity and tng., is controlled by a cycle. The cycle and 'r' value can be found in the part.

Self-Reflection

The performers can alter the area transitions in two ways: changing the duration of the transition (i.e., altering the coefficient before 'b') or reversing the transition's direction (e.g., *m* to *M* vs. *M* to *m*). A process of self-reflection is used to identify an area to be changed and the nature of the applied change. Ideally this process should be memorized but the part provides a visual aid available during performance. **The reflection questions should be asked as simultaneously and often as possible.**

Step 1 - Identify "X"

- Isolate one of the active areas (these are the areas listed in the "extract Y" box on the right of the part) by asking yourself the provided reflection question:
 - "Which area is causing me the greatest amount of physical discomfort?" (Processes A and B)
 - "Which area have I allocated the LEAST* amount of attention to?" (Process C)
 - * ["Least" refers to what area has received the least amount of attention/modification since the start of the current performance]
- The area which best satisfies the question at the time of its asking is now designated "X".
- The answers do not need to occur immediately, the performer should take the necessary time to sincerely answer the questions. This process has no durational constraints.
- Do not stop performing the material when engaging in the process. Self-reflection and resultant alteration occurs concurrently with performance.

Step 2 - Extract "Y"

- "Y" is extracted from a repeating sequence of active areas. Performers must keep track of their location within the sequence.
- Below the Y-cycle (the list of areas in the right hand box) are choices relating to how many times you cycle through the sequence before moving on. You may choose any of these values. The numbers refer to the total amount of times the sequence is to be performed.
 - For example consider this repetition of Process A: the first time "Y" is extracted, "Y" = oral cavity. The second time "Y" is extracted, "Y" = tng. The fourth time "Y" is extracted "Y" = pitch... The fifth time "Y" is extracted "Y" = oral cavity...etc.
 - Once the cycle has been repeated the specified amount of times, the performer moves to a new Process (information in [light blue](#) facilitate movement between Processes)

Step 3 - Compare X:Y

- After identifying two areas, compare them by asking the available questions: "Which area is changing at a faster rate?" or "Which area is located closer to an endpoint?"
- If "X" and "Y" are the same area, simply move on [re-ask the "X" question...extract the next area in the "Y" sequence]

Step 4 - Modify

- The area to be changed and the manner in which it is changed depends on the performer's answers to the questions encountered in step #3. Example:
 - Q1: "Which area is changing at a faster rate?"
 - If the answer is "X"...modify the duration of area "Y" in the following manner [$Y_{dnew} = Y_{dcur} \pm 0.25 b$] [read as: the new duration of "Y" = the current duration of "Y" plus or minus 1/4 of a breath]
 - If the answer is "Y"...modify the duration of area "X" in the following manner [$X_{dnew} = X_{dcur} \pm 0.50 b$]
 - Changes in duration are expressed through an equation where the new (modified) durational coefficient [Y_{dnew}] is equal to the current coefficient [Y_{dcur}] plus/minus a specified fraction of a breath.
 - Example: $Y_{dcur} = 1.5 b$...add 0.25 of a breath... $Y_{dnew} = 1.75b$
 - The change made only applies to the identified area ("X" or "Y"). All other durational coefficients remain the same. This means that there is the potential for each area to have a unique duration. The prevailing coefficients and their respective parameters needs to be kept track of through mental bookkeeping.
 - ***** When interpreting which parameter is changing faster, the performer should NOT simply compare the current coefficients. The answer to the question should be a reflection upon ACTUAL observed performance. The coefficients only represent an INTENDED/THEORETICAL duration. The duration actually manifested may differ considerably.*****

Step 4 - Modify [cont.]

v

- Q2: "Which area is located closer to an endpoint?"

-If the answer is "X"...change the direction of "X" [e.g. if the performer was close to the endpoint **m**, reverse direction towards **M** without reaching **m**]

-If the answer is "Y"...change the direction of "Y"

-In the case of the oral cavity/tng./fingering areas, if you were moving clockwise through the cycle, now move counterclockwise through the cycle, and vice versa.

- After applying the modification, immediately return to step 1 and begin the process (steps 1-4) over again.
- If the performer forgets the current duration of an area revert to the initial duration coefficient ('r').
- Because all durations are expressed through breath measurements, the performer should pay close attention to the fluid nature of their breath's duration.
- **Modifications are applied to active transitions.** For example, consider embouchure as "X" and lip tension as "Y." If embouchure's current duration is 6b but through reflection you realize that, after 2 breaths, you are more than half way through the cycle (i.e., your actual transitional rate differs from the one intended), you answer area "X" for question 1 (as it is changing faster than lip tension). The modification is applied to 6b (e.g., it becomes 5.75b) and you recalibrate where you should be in your transition. As the reflection process was taking place, another breath was performed (for a total of 3), this means that you still have 2.75 breaths left before you reach the **m** or **M** point of the transition. Even though a complete cycle (6b) is not completed, the duration of the cycle has been changed.

Relationships Between Processes

- Process A's material is a very high vocal pitch which flickers in and out of sounding. See recording for example of this. You should attempt to find the greatest amount of breath pressure you can expel without causing a pitch to sound. When a pitch does result, immediately adjust breath pressure to achieve silence. Keep brushing up against this line.
- Information/dashed arrows in **light blue** instruct movement between Processes.
- You must begin in your initial state, and go through each Process in order at least once. After this, any time you are instructed to transition, you may freely decide which Process to move to.
- Information in **green** communicates shared material between Processes A and B ("freezing")
 - Areas which are not shared between Processes A and B becomes "frozen." For example, after completing the chosen amount of cycles of Process A you move on to Process B. Both Processes contain oral cavity as an active area thus it continues to be available for reflection and adjustment. The tongue, larynx, and pitch (referring to vocal pitch) are no longer active in Process B. **These areas maintain the state they are in at the time of the transition between Processes** (i.e., they "freeze" and are no longer available for reflection). If you decided to move back to Process A from Process B, a similar thing occurs (the embouchure, lip tension, growl, and fingering areas freeze). Any/all frozen areas are nullified if you enter Process C.
- The general dynamic of Process C remains "as soft as possible" but is approached differently than Process A and B through the inclusion of the "Breath/Con." area:
 - **The breath pressure area is directly linked to diaphragm constriction:** as breath pressure increases, constriction must increase in order to maintain silence. At any given time, the performers should attempt to subject themselves to the least amount of imposed constriction. Following the point where constriction has cancelled sound, gradually relax the imposed constriction. Search for the least amount of constriction needed to maintain silence in this moment. There will be a point where the constriction no longer subdues the breath and a sound is produced. The performer must immediately re-impose a degree of constriction to obtain active silence.
 - Processes A and B are about barely activating sound whereas Process C is about barely containing energy.
- **Process C contains a Referent cycle where your attention becomes split between your self-reflection and the observation of a co-player.**
 - You may choose to enter into the Referent cycle after any modification has been made (i.e., rather than return to steps 1 and 2 of self-reflection, enter into Referent cycle instead)
 - Work your way through the questions
 - A "conditional" is an event in a co-player's performance which necessitates a specific response. The conditional is performed everytime you perceive the indicated cue. They remain active until they are cancelled.
 - The instruction to "mimic" an area of a co-player means that the indicated area is removed from the self-reflection process and changes in this area are now linked to a co-player. Example:
 - You are instructed to link embouchure transition to a co-player.
 - Identify an attribute of your co-player's performance (e.g., the bow direction of the viola, etc.)
 - The **m** and **M** points of embouchure are now mapped to the bow direction of the viola.
 - This continues as you return to self-reflection but now embouchure is no longer part of the Y-Cycle.
 - This stipulation is nullified when you leave Process C (i.e., the linked area is no longer linked to a Referent and re-enters the self-reflection process)

Additional Comments

- How to end the piece: set a stopwatch or countdown clock and decide on a desired duration (at least 7'). Once the desired duration has elapsed, stop performing when you have completed a full Y-cycle.
- Link to Dropbox with reference recordings and "spark notes" video detailing this front matter: <https://www.dropbox.com/sh/wzwq0aclxqi9yci/AAB8YtudH-Zw8B1-OAeCyLOca?dl=0>
- For IPA symbol pronunciation chart/sound files: <https://www.internationalphoneticalphabet.org/ipa-sounds/ipa-chart-with-sounds/>
- All questions can be directed to ryan@ryancarraher.com

Bass Clarinet

Dynamic Environment

(i), A, B, and C should always be as soft as possible. Within this, sounds can be on the cusp of articulation (i.e., discontinuous) or continuous.

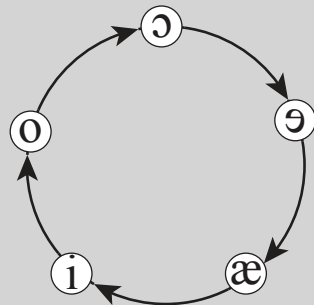
Blow just enough air so the events "flicker" in and out of perception. Whether or not the sound sustains depends on the larynx area.

The dynamic environment of conditionals can be found in the text of the conditional.

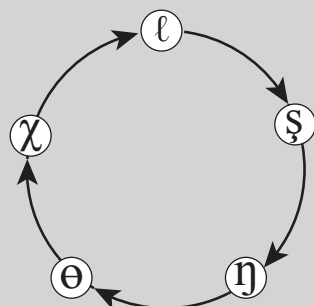
Breath

Alternate between IN and OUT breaths; remain in contact with instrument; always as long as possible; allow for moments of strain; 'b' = either one IN or OUT breath.

Oral Cavity Cycle Reference



Tongue Cycle Reference

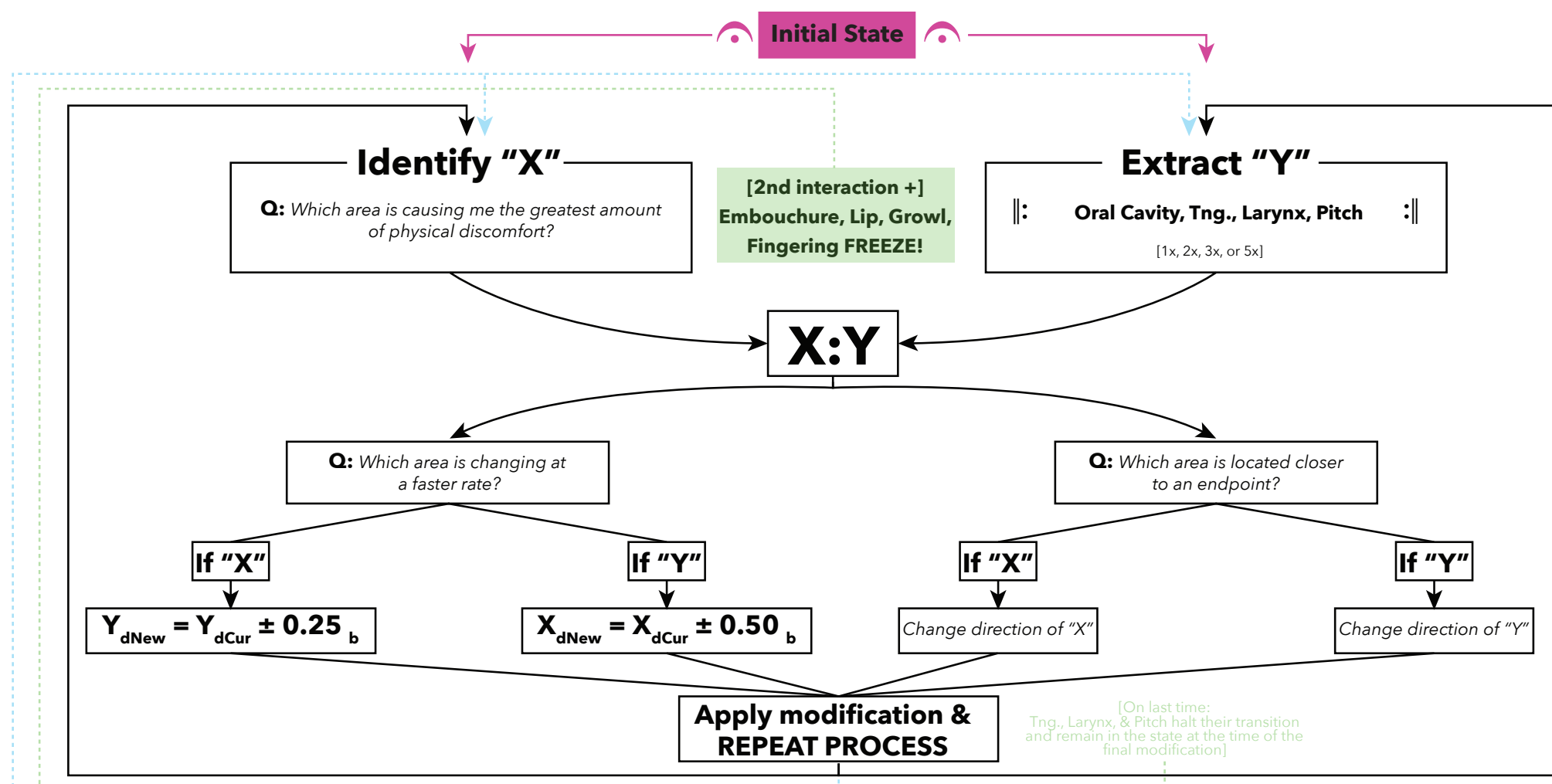


'r' Values

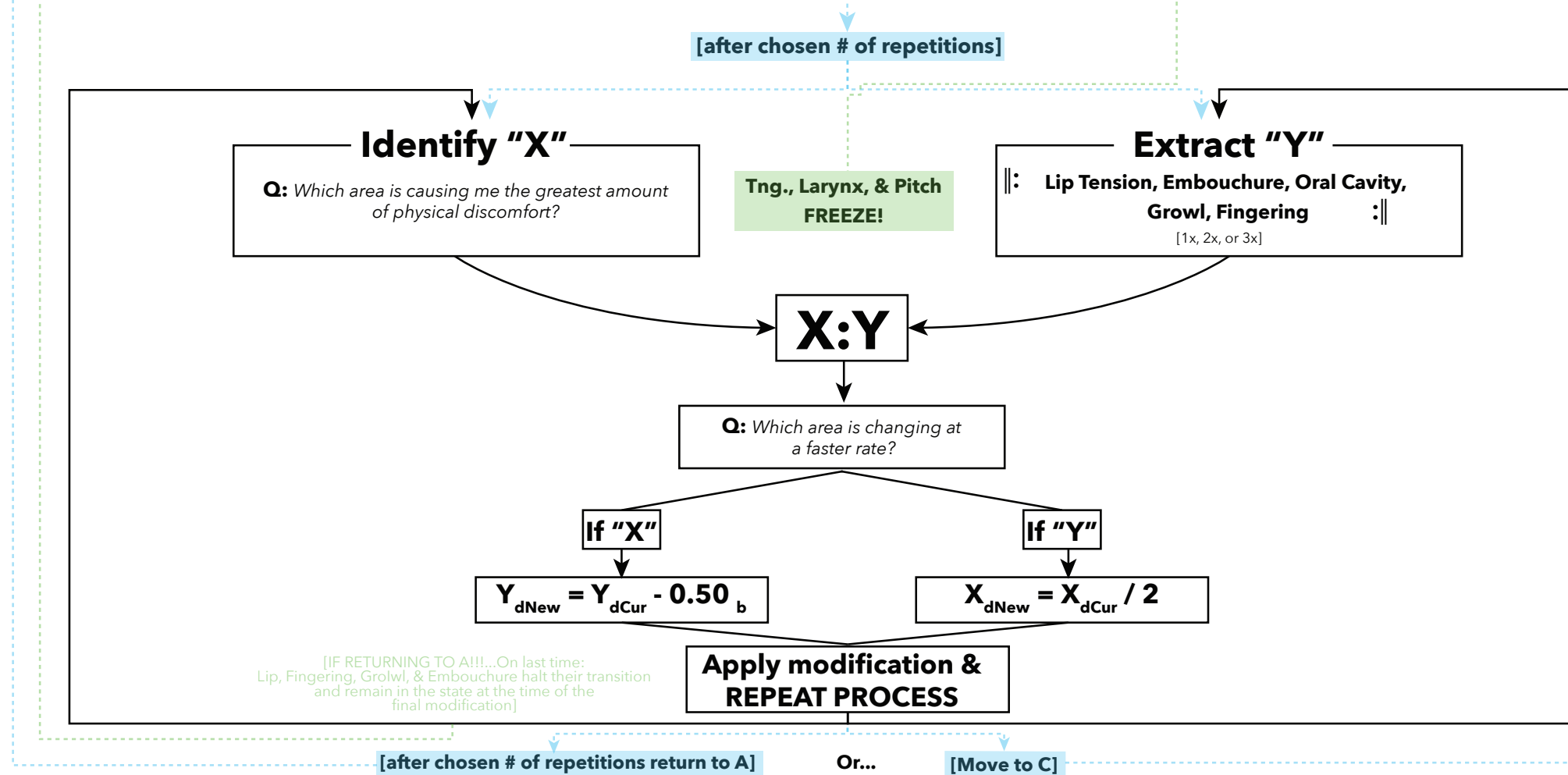
Embouchure: 6b Fingering: 3.5b
 Lip Tension: 4b Pitch: 2b
 Larynx: 3b Tongue: 1.5b
 Oral Cavity: 2.5b
 Growl: 7b

(i)

A
(voice only)



B
(voice + inst.)



Bass Clarinet

Dynamic Environment

(i), A, B, and C should always be as soft as possible. Within this, sounds can be on the cusp of articulation (i.e., discontinuous) or continuous.

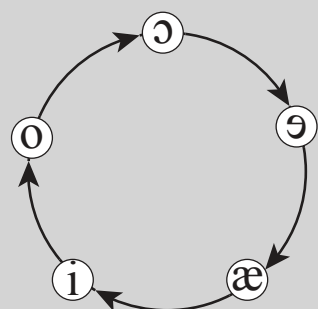
For C, breath pressure is tied with diaphragm resistance. As breath pressure increases, the amount of imposed resistance must increase.

The dynamic environment of conditionals can be found in the text of the conditional.

Breath

OUT breath is as long as possible; no strain;
IN breath as fast as possible;
'b' = one OUT breath

Oral Cavity Cycle Reference



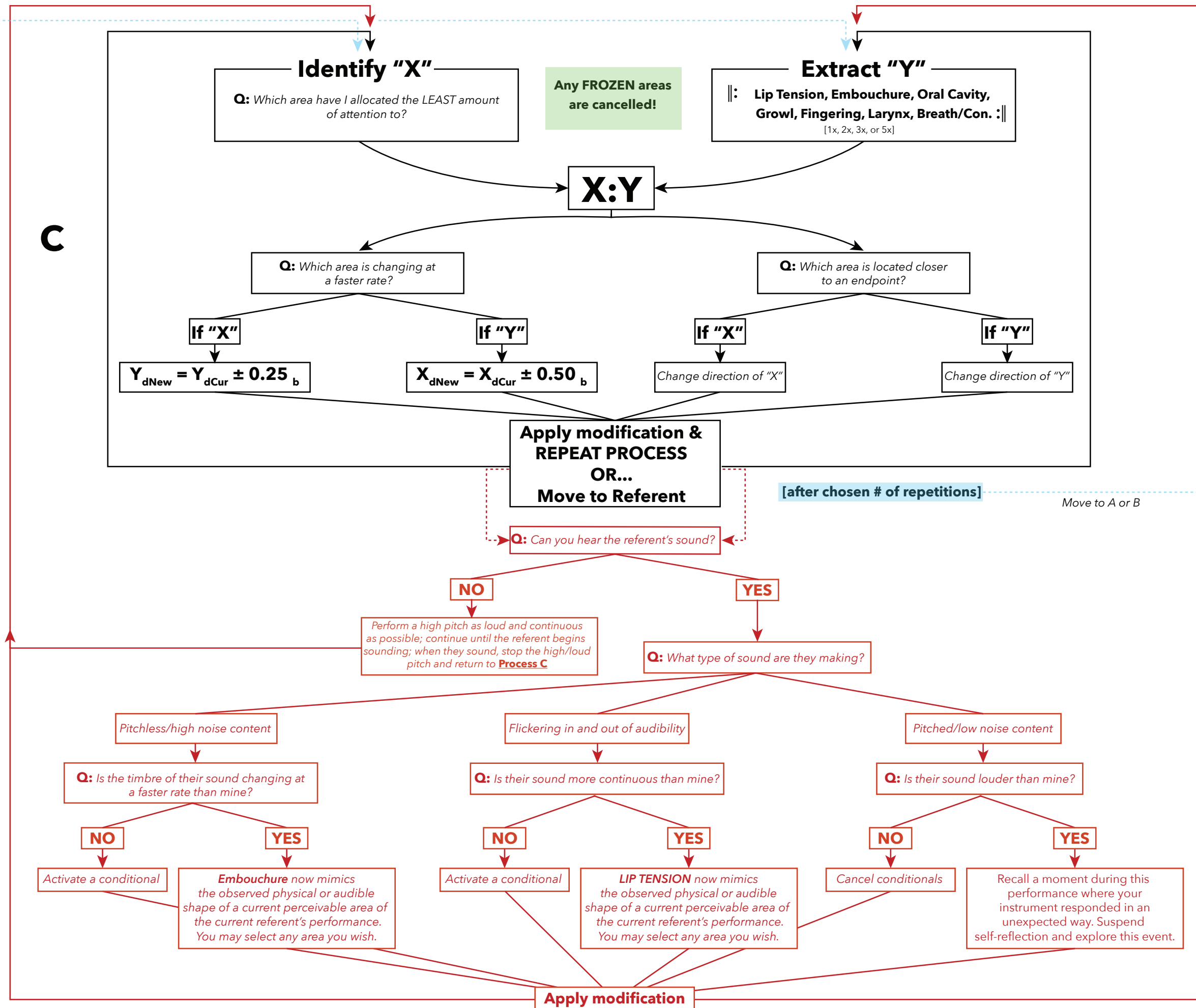
Referents

The first referent is the performer directly to your left, the second referent is the second performer from your left...; attempt to continue the self-reference while simultaneously allocating attention to the referent; **do not "exit" from your current physical state.**

'r' Values

Embouchure: 6b
Lip Tension: 4b
Larynx: 3b
Oral Cavity: 2.5b
Growl: 7b

Fingering: 3.5b
Pitch: 2b
Tongue: 1.5b
Breath/Con.: 2b

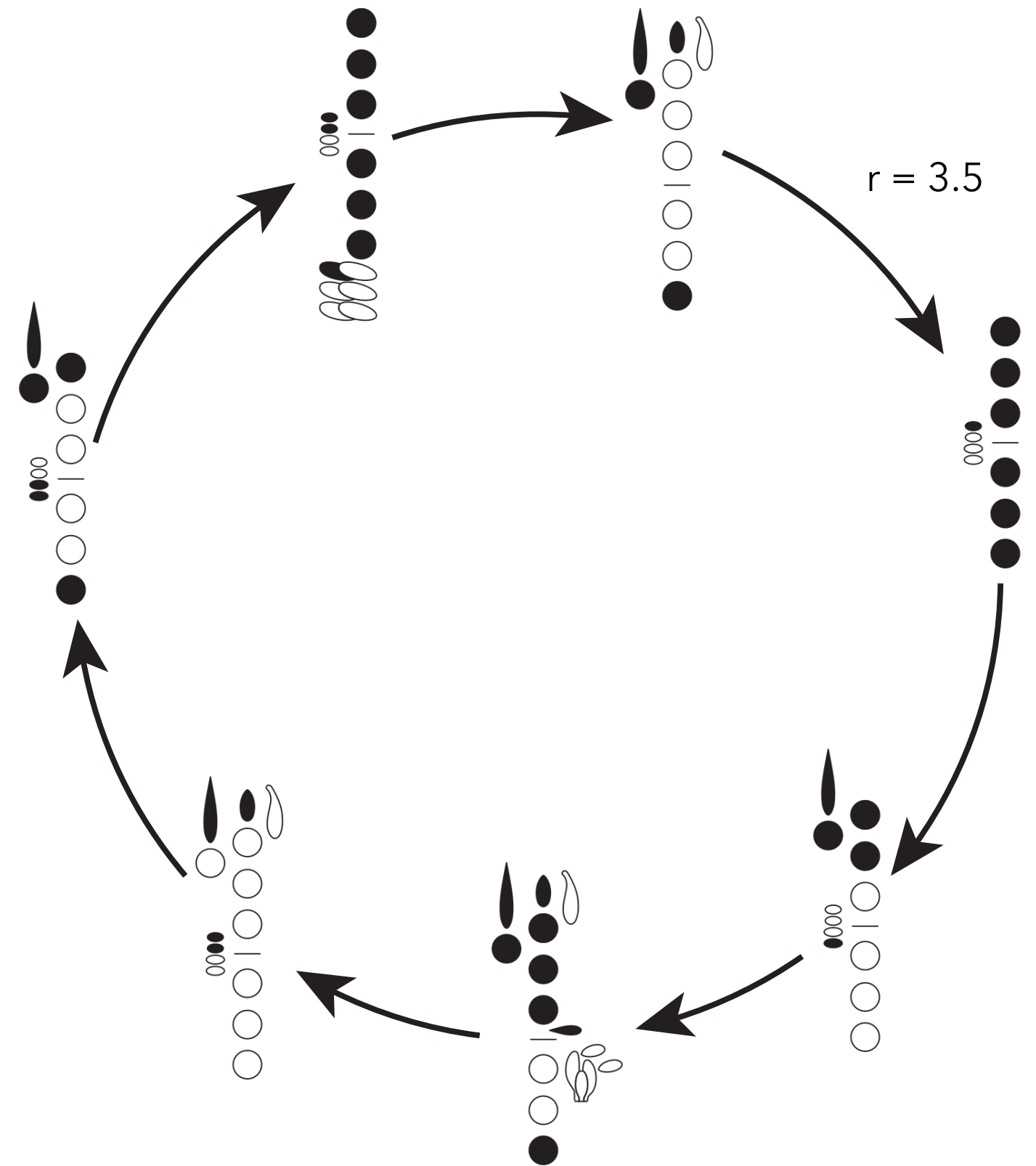


Conditionals

- 1 **If** your instrument/voice responds in a strange/unexpected way **then** suspend self-reflection and explore this sound. Attempt to find its limits. Attempt to control it. Return to self-reflection where you left off.
- 2 **If** you hear a slow, quiet upwards glissando... **then** respond by softly repeating a single pitch or noise 12 times (repetition can be regular or irregular)
- 3 **If** you hear a co-player sing a quiet sustained tone... **then** respond by improvising a gentle accompaniment
- 4 **If** you hear a loud short tone... **then** respond by playing a quiet long event
- 5 **If** you hear a loud short tone/noise... **then** respond by playing another loud & short tone/noise
- 6 **If** you hear a quiet sustained noise or tone... **then** respond by playing a short cloud of loud events
- 7 **If** you observe a co-player to be overwhelmed or fatigued... **then** respond by singing and/or performing 6 notes, each adjacent note should be in a different register.
- 8 **If** you observe a co-player to be overwhelmed or fatigued... **then** respond by miming their events (attempt to translate their sounds through any means currently available to you)
- 9 **If** you hear a sound from any of your co-players that you find interesting... **then** respond with an attempt to re-create it on your own instrument.
- 10 **If** you hear a soft tone... **then** respond by singing the same tone until you run out of breath

Fingering Cycle

You may freely add trills using any key that is not in use



i say 'me' guided by a blind instinct

for mixed quartet

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Harp Part

Conceptual Remarks

I like to think of the image of a plate spinner with their attention ceaselessly shifting from plate to plate. In any one moment, a specific plate may be unstable relative to the others. The perceived danger of the plate falling directs the performer's attention to this particular plate. Attention leads to assessment (reflection) which results in modification (preservation).

What follows is a complex system of self-reflection and social interaction. There is no "correct" way to interact with this system. If you cannot remember all of the rules that is okay, however there should be a sincere effort to do so (which will cultivate a quiet yet intense performance environment). Interacting with this system foregrounds the limitations that make us unique. "Failure" to master the system is not a failure in the traditional sense...it is a moment where latent aspects of an identity can be expressed and reflected upon. With that in mind, the material and how you respond to it should be considered with intimacy and curiosity rather than preconceived formal or sonic ideals.

Score/Materials

- Instrumentation: bass clarinet, horn, harp, viola
- Duration: Flexible (a stopwatch may be used to facilitate a desired duration; minimum 7')
- Staging: Ideally the performers would be arranged in a circle as close together as possible.
- There is no composite score, each performer reads from their own part.
- Due to the extreme quiet of the work, amplification may be warranted.
- You will need a drumstick to bow strings and a collection of random objects of varying material (used in improvisation prompts...you may choose the number and type of objects.)

Notation

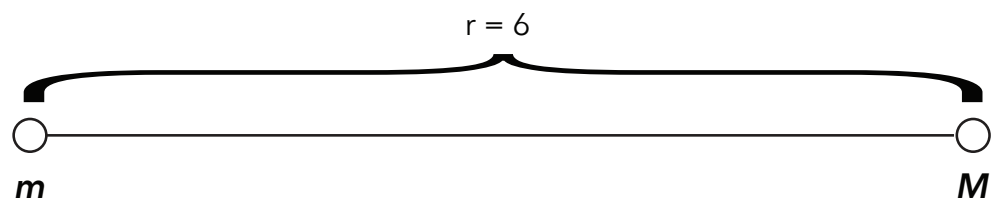
- The central parts of the "score" are two self-reflection prompts: Process A, and Process B
 - Process A is self-reflective (i.e., you do not need to consider any of your co-players) and exclusively uses the drumstick bowing technique
 - Process B is part self-reflective but also allocates attention towards co-players
- These processes stratify the performer into six independent areas: Stick angle, direction, stick pressure, stick position, twitching, and embellishment
- Each area is defined by *continuous transition* between a minimum point (**m**) and a maximum point (**M**).
- **All areas are simultaneously active.** Once a transition is completed (e.g., **m** to **M**) the transition immediately resumes in the opposite direction (i.e., **M** to **m**).
- The transition's duration is measured in number of breaths and expressed as an integral or fractional coefficient applied to the variable 'b':
 - 'b' = a single breath unit
 - In Process A you simply breath in and out (either through your mouth or nose) making each breath as long as possible. Here, 'b' is defined as **either** one in **or** out breath. In Process B you no longer reference your own breathing...'b' is defined as **either** one in **or** out breath performed by the bass clarinetist (you now observe an other's breath rather than consult your own)
 - Fractional coefficients (e.g., 3.5b) do occur. To perform these, the performers must take their current physical state into account, predict how much longer their current breath will last, and estimate when they have reached the indicated fractional point. This is more of a "taking-stock-of" one's current physical state, not an exact measurement.
 - Examples:
 - '2b' in Process A = one as long as possible in breath + one as long as possible out breath [or vice versa]
 - '2b' in Process B = observing one as long as possible in breath + one as long as possible out breath [or vice versa] performed by the bass clarinetist
 - 3.5b in Process A = one as long as possible out breath, one as long as possible in breath, one as long as possible out breath, + half of an as long as possible in breath [the transition will be completed when the performer feels they have reached the halfway point of the fourth breath. At this point the transition starts over in the opposite direction. The performer does not retake the breath when a transition is completed. Breaths should always be finished.]
- **There should be no attempt to assign an absolute value to an "as long as possible breath" or to make these values uniform.**
- The "strain" occurring at the end of an as long as possible breath (i.e., the unstable, shaking sound and discomfort) is desired.

Notation [cont.]

- You begin the performance in your initial state
 - See side bar on pg. 1 of part for details.
 - Any areas not mentioned there can be set to either the **m** or **M** point
- The initial durational coefficient of each transition (i.e., the unique duration of a transition at the start of a performance) is expressed through the variable 'r.'
- During the **m** to **M** (or **M** to **m**) transitions, every *in-between state is inhabited*. Do not jump from one extreme to another (unless of course the duration or physical state necessitate this)
- Below the **m** and **M** points and 'r' values for the areas are presented:

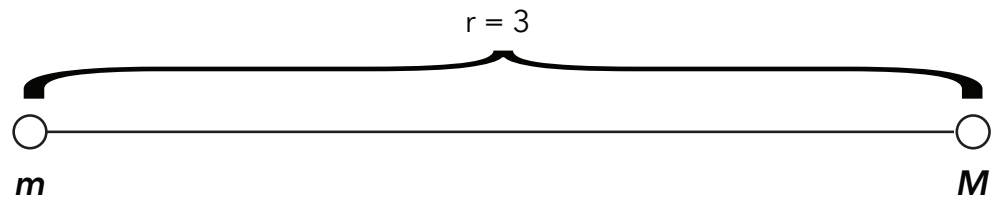
1) Stick Angle

- m** = ord. (perpendicular)
- M** = drumstick is angled plus or minus 45 degrees relative to the string



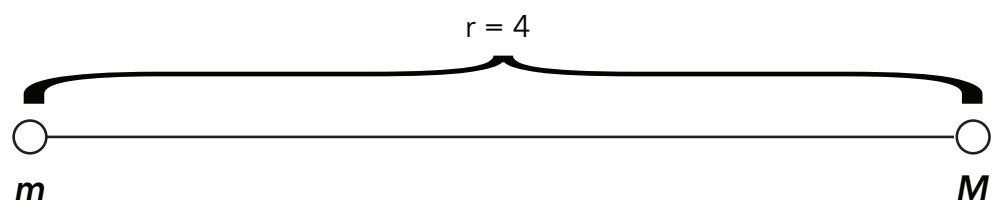
2) Bowing Direction

- m** = Up bow
- M** = Down bow



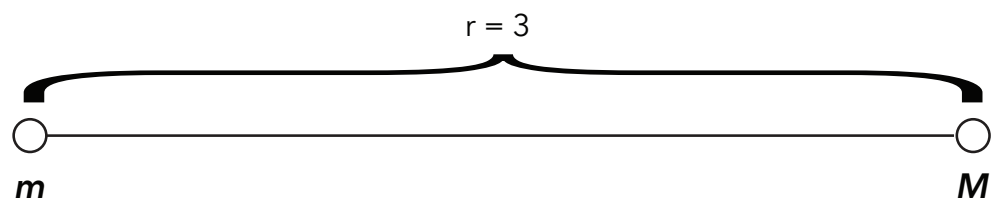
3) Pressure

- m** = Drumstick is held 0.5-5mm away from string
- M** = Drumstick is pressed against the string as hard as possible



4) Position

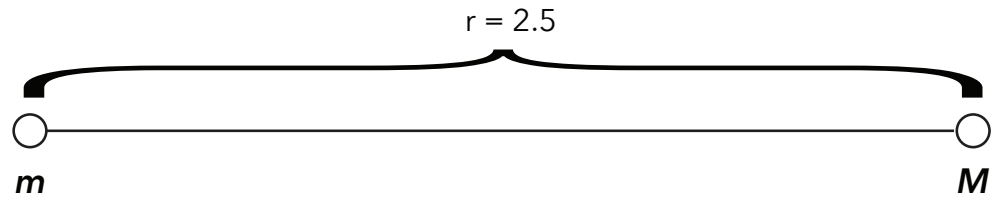
- m** = Drumstick in contact with string as close to the harp's upper neck as possible
- M** = Drumstick in contact with string as close to the soundboard (even touching the soundboard) as possible



5) Twitching

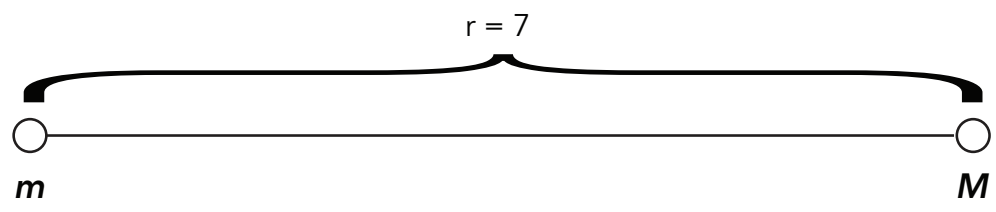
- m** = The bowing hand is as steady as possible
- M** = Introduce small twitches and shakes. Imagine how your hands shake when you are hungry or nervous...

(N.B. **m** represents 0% twitching while **M** represents 100%. The midway point would be 50% twitching)



6) Embellishment

- m** = no embellishment
- M** = relatively frequent embellishment events (i.e., using the other hand to perform ornaments which complement the sounds of the bowed string. It does not need to be limited to the extreme high register and you may use any technique you feel appropriate)



The performers can alter the area transitions in two ways: changing the duration of the transition (i.e., altering the coefficient before 'b') or reversing the transition's direction (e.g., *m* to *M* vs. *M* to *m*). A process of self-reflection is used to identify an area to be changed and the nature of the applied change. Ideally this process should be memorized but the part provides a visual aid available during performance. ***The reflection questions should be asked as simultaneously and often as possible.***

Step 1 - Identify "X"

- Isolate one of the active areas (these are the areas listed in the "extract Y" box on the right of the part) by asking yourself the provided reflection question:
 - "Which area is causing me the greatest amount of physical discomfort?" (Process A)
 - "Which area have I allocated the LEAST* amount of attention to?" (Process B)
 - * ["Least" refers to what area has received the least amount of attention/modification since the start of the current performance]
- The area which best satisfies the question at the time of its asking is now designated "X".
- The answers do not need to occur immediately, the performer should take the necessary time to sincerely answer the questions. This process has no durational constraints.
- Do not stop performing the material when engaging in the process. Self-reflection and resultant alteration occurs concurrently with performance.

Step 2 - Extract "Y"

- "Y" is extracted from a repeating sequence of active areas. Performers must keep track of their location within the sequence.
- Below the Y-cycle (the list of areas in the right hand box) are choices relating to how many times you cycle through the sequence before moving on. In your part you will find information about how to handle repetitions. The numbers always refer to the total amount of times the sequence is to be performed.
 - For example consider this repetition of Process A: the first time "Y" is extracted, "Y" = stick angle. The second time "Y" is extracted, "Y" = direction...The sixth time "Y" is extracted "Y" = embellishment... The seventh time "Y" is extracted "Y" = stick angle...etc.
 - Once the cycle has been repeated the specified amount of times, the performer moves to a new Process (information in [light blue](#) facilitate movement between Processes)

Step 3 - Compare X:Y

- After identifying two areas, compare them by asking the available questions: "Which area is changing at a faster rate?" or "Which area is located closer to an endpoint?"
- If "X" and "Y" are the same area, simply move on [re-ask the "X" question...extract the next area in the "Y" sequence]

Step 4 - Modify

- The area to be changed and the manner in which it is changed depends on the performer's answers to the questions encountered in step #3. Example:
 - Q1: "Which area is changing at a faster rate?"
 - If the answer is "X"...modify the duration of area "Y" in the following manner [$Y_{dnew} = Y_{dcur} \pm 0.25 b$] [read as: the new duration of "Y" = the current duration of "Y" plus or minus 1/4 of a breath]
 - If the answer is "Y"...modify the duration of area "X" in the following manner [$X_{dnew} = X_{dcur} \pm 0.50 b$]
 - Changes in duration are expressed through an equation where the new (modified) durational coefficient [Y_{dnew}] is equal to the current coefficient [Y_{dcur}] plus/minus a specified fraction of a breath.
 - Example: $Y_{dcur} = 1.5 b$...add 0.25 of a breath... $Y_{dnew} = 1.75b$
 - The change made only applies to the identified area ("X" or "Y"). All other durational coefficients remain the same. This means that there is the potential for each area to have a unique duration. The prevailing coefficients and their respective parameters needs to be kept track of through mental bookkeeping.
 - ***** When interpreting which parameter is changing faster, the performer should NOT simply compare the current coefficients. The answer to the question should be a reflection upon ACTUAL observed performance. The coefficients only represent an INTENDED/THEORETICAL duration. The duration actually manifested may differ considerably.*****

Step 4 - Modify [cont.]

- Q2: "Which area is located closer to an endpoint?"

-If the answer is "X"...change the direction of "X" [e.g. if the performer was close to the endpoint **m**, reverse direction towards **M** without reaching **m**]

-If the answer is "Y"...change the direction of "Y"

- After applying the modification, immediately return to step 1 and begin the process (steps 1-4) over again.
- If the performer forgets the current duration of an area revert to the initial duration coefficient ('r').
- Because all durations are expressed through breath measurements, the performer should pay close attention to the fluid nature of their breath's duration.
- **Modifications are applied to active transitions.** For example, consider bow angle as "X" and direction as "Y." If bow angle's current duration is 6b but through reflection you realize that, after 2 breaths, you are more than half way through the cycle (i.e., your actual transitional rate differs from the one intended), you answer area "X" for question 1 (as it is changing faster than direction). The modification is applied to 6b (e.g., it becomes 5.75b) and you recalibrate where you should be in your transition. As the reflection process was taking place, another breath was performed (for a total of 3), this means that you still have 2.75 breaths left before you reach the **m** or **M** point of the transition. Even though a complete cycle (6b) is not completed, the duration of the cycle has been changed.

Relationship to Co-Players

- **Process B contains a Referent cycle where your attention becomes split between your self-reflection and the observation of a co-player.**
 - Any information in **red** means that your attention is no longer solely fixated upon your own actions...part of it is turned outwards to a co-player(s)
 - You may choose to enter into the Referent cycle after any modification has been made (i.e., rather than return to steps 1 and 2 of self-reflection, enter into Referent cycle instead)
 - Work your way through the questions but remain performing.
 - A "conditional" is an event in a co-player's performance which necessitates a specific response. The conditional is performed everytime you perceive the indicated cue. They remain active until they are cancelled. once the conditional is activated, return to the self-reflection process. You may pick any of the conditionals you want to activate.
 - Information in **green** means that you momentarily exit out of the self-reflection process and enter into an improvisatory prompt.
 - You may pick any improvisational prompt you wish (you do not need to go in order and they can be repeated)
 - Your attention will be directed towards events of your co-players and/or the sound of the ensemble as a whole. They instruct an improvisatory response.
 - You determine the duration for the improvisation tasks.
 - When finished, enter back into the self-reflection process continuing from where you left off (or you may begin at 'r' values)
 - Conditionals remain active during improvisation

Additional Comments

- How to end the piece: set a stopwatch or countdown clock and decide on a desired duration (at least 7'). Once the desired duration has elapsed, stop performing when you have completed a full Y-cycle.
- Link to Dropbox with reference recordings and "spark notes" video detailing this front matter: <https://www.dropbox.com/sh/wzwq0aclxqi9yci/AAB8YtudH-Zw8B1-OAeCyLOca?dl=0>
- All questions can be directed to ryan@ryancarraher.com

Harp Process A

Initial State

You may choose which string to bow (as long as it is extremely high), the position of the drumstick on the string, and the angle. The stick should be 0.5 - 5mm away from the string. There should always be the danger that the small twitches of your muscles will bring the drumstick into contact with the string.

Reach with your other hand so it hovers above the low wound strings. Keep the hand 0.5-5mm away from the strings. Do not mute any resonances. When you feel like you can no longer hold this stretch you may return this hand/arm to its normal position.

When this occurs, you enter into the self-reflection process (i.e., the initial state ends when you can no longer comfortably maintain the position)

Dynamic Environment

Extremely quiet.

Breath

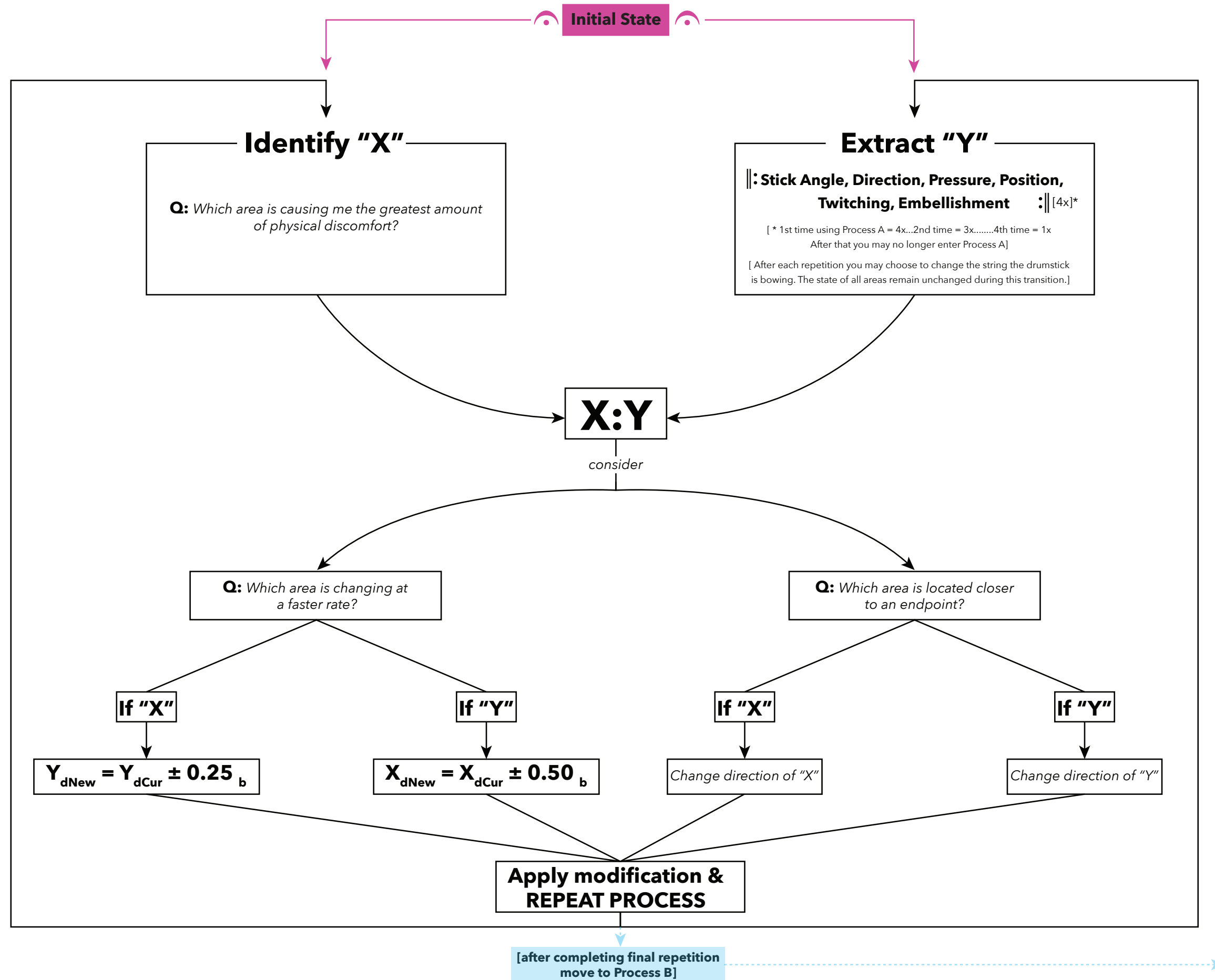
Alternate between IN and OUT breaths making each last as long as possible. You may choose to breath through your nose or your mouth. The breathing should be barely audible. The audience should be aware of it but unsure of its source. **'b' = either one IN or OUT breath.**

Changing String

Upon completing a complete passage through the Y-Cycle (i.e., starting with Stick Angle...ending with Embellishment) you may choose to move the drumstick to a new string or keep it where it is. As you move the drumstick, hum a soft tone. Stop humming when the drumstick is in contact with the new string. The state of all other areas is maintained (i.e., "transposed" to the new string)

'r' Values

Stick Angle: 6b
 Pressure: 4b
 Direction: 3b
 Position: 3b
 Twitching: 2.5b
 Embellishment: 7b



Harp Process B

Dynamic Environment

Self-reflection events involving the bowed string remain very quiet. Improvised events and conditionals may vary widely.

Breath Definition

You no longer take your own breath as 'b'. Observe the breath of the BASS CLARINET player. Keep track of their breath through visual and/or aural observation. Simultaneously pay attention to the self-reflection process AND the nature of the bass clarinetist's breath.

'b' = either one IN or OUT breath performed by the bass clarinet player

Referent

The first referent is the performer directly to your left, the second referent is the second performer from your left...

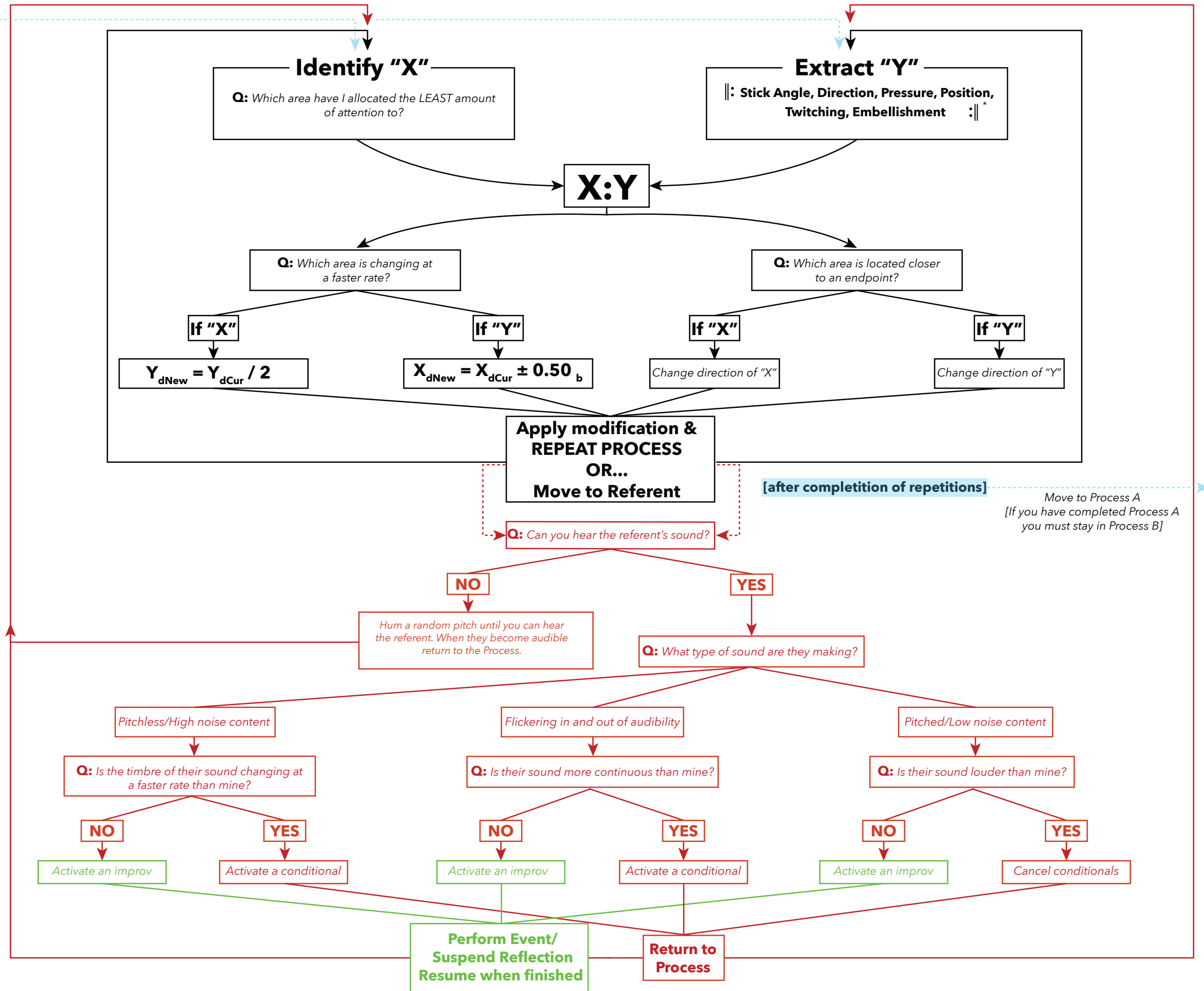
All improv initiated by the referent cycle exists outside of self-reflection. The duration of each event depends on a specified co-player or remains free. When you finish an event, resume the self-reflection process either from where you left off or from default 'r' values.

Process B "Y-Cycle" Repetition

First Interaction = 1x
 Second Interaction = 2x
 Third Interaction = 3x
 Fourth Interaction = 4x
 [At this point, you will have completed Process A]
 Continue Process B until the end of the piece.

'r' Values

Stick Angle: 6b
 Direction: 3b
 Pressure: 4b
 Position: 3b
 Twitching: 2.5b
 Embellishment: 7b



Improv Prompts

- 1 Imagine the current sound of the entire ensemble is accompanying an absent soloist. What would this solo material sound like?
- 2 Improvise using only metallic sounds
- 3 Improvise using only percussive sounds
- 4 Improvise without directly touching the harp with your hands
- 5 Consider the current events of all your co-players, attempt to improvise a real-time-reduction which simultaneously translates abstract characters and/or specific events from all of your co-players.
- 6 Improvise using the following sounds based on audibility:
If you can currently hear the bass clarinet: you may use pitches
If you can currently hear the horn: you may use metallic sounds
If you can currently hear the viola: you may use percussive sounds
If you hear no sound you may improvise with silence
- 7 Right hand translates the horn player's sounds,
left hand translates the violist's sounds
- 8 Improvise on a single string (using any objects and techniques you wish)
- 9 Improvise using any sounds you wish but observing the following:
If you can currently hear the bass clarinet: you may use the lower register
If you can currently hear the horn: you may use the extreme high register
If you can currently hear the viola: you may use the middle register
If you hear no sound you can only improvise on a single string
- 10 Improvise freely

Conditionals

- 1 *If* your instrument/voice responds in a strange/unexpected way **then** suspend self-reflection and explore this sound. Attempt to find its limits. Attempt to control it. Return to self-reflection where you left off.
- 2 *If* you hear a slow, quiet upwards glissando... **then** respond by softly repeating a single pitch or noise 12 times (repetition can be regular or irregular)
- 3 *If* you hear a co-player sing a quiet sustained tone... **then** respond by improvising a gentle accompaniment
- 4 *If* you hear a loud short tone... **then** respond by playing a quiet long event
- 5 *If* you hear a loud short tone/noise... **then** respond by playing another loud & short tone/noise
- 6 *If* you hear a quiet sustained noise or tone... **then** respond by playing a short cloud of loud events
- 7 *If* you observe a co-player to be overwhelmed or fatigued... **then** respond by singing and/or performing 6 notes, each adjacent note should be in a different register.
- 8 *If* you observe a co-player to be overwhelmed or fatigued... **then** respond by miming their events (attempt to translate their sounds through any means currently available to you)
- 9 *If* you hear a sound from any of your co-players that you find interesting... **then** respond with an attempt to re-create it on your own instrument.
- 10 *If* you hear a soft tone... **then** respond by singing the same tone until you run out of breath

i say 'me' guided by a blind instinct

for mixed quartet

Ryan Carraher (2021)

Horn Part

Conceptual Remarks

I like to think of the image of a plate spinner with their attention ceaselessly shifting from plate to plate. In any one moment, a specific plate may be unstable relative to the others. The perceived danger of the plate falling directs the performer's attention to this particular plate. Attention leads to assessment (reflection) which results in modification (preservation).

What follows is a complex system of self-reflection and social interaction. There is no "correct" way to interact with this system. If you cannot remember all of the rules that is okay, however there should be a sincere effort to do so (which will cultivate a quiet yet intense performance environment). Interacting with this system foregrounds the limitations that make us unique. "Failure" to master the system is not a failure in the traditional sense...it is a moment where latent aspects of an identity can be expressed and reflected upon. With that in mind, the material and how you respond to it should be guided more by intimacy and curiosity rather than preconceived sonic or formal ideals.

Score/Materials

- Instrumentation: bass clarinet, horn, harp, viola
- Duration: Flexible (a stopwatch may be used to facilitate a desired duration; minimum 7')
- Staging: Ideally the performers would be arranged in a circle as close together as possible.
- There is no composite score, each performer reads from their own part.
- Due to the extreme quiet of the work, amplification may be warranted.
- A harmon mute is in the horn throughout the whole piece.

Notation

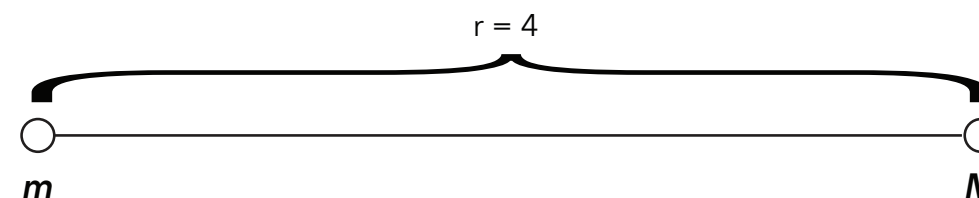
- The central parts of the "score" are three self-reflection prompts: Process A, Process B, and Process C
 - Process A is self-reflective (i.e., you do not need to consider any of your co-players) and exclusively uses the voice
 - Process B is self-reflective and uses the voice and instrument
 - Process C is part self-reflective but also allocates attention towards co-players
- Each of these processes stratify the performer into independent areas:
 - Process A identifies four areas: Oral cavity, tongue (tng.), larynx, and pitch
 - Process B identifies six areas: Lip tension, distance, oral cavity, growl, fingering, and mute
 - Process C identifies seven areas: Lip tension, distance, oral cavity, growl, fingering, larynx, and breath/constriction ("Breath/Con.") [N.B. the harmon mute is still in the horn, you may freely control how you use it in Process C]
- Each area (with the exceptions of oral cavity, tng., and fingering) is defined by *continuous transition* between a minimum point (**m**) and a maximum point (**M**).
- **All areas are simultaneously active.** Once a transition is completed (e.g., **m** to **M**) the transition immediately resumes in the opposite direction (i.e., **M** to **m**).
- The transition's duration is measured in number of breaths and expressed as an integral or fractional coefficient applied to the variable 'b':
 - 'b' = a single breath unit
 - In Processes A and B, the performer alternates between in and out breaths both lasting as long as possible. Here, 'b' is defined as **either** one in **or** out breath...in Process C the performer is performing an out breath as long as possible but the in breath is now as fast as possible. 'b' is redefined as **only** one out breath. The in breath no longer has durational import.
 - Fractional coefficients (e.g., 3.5b) do occur. To perform these, the performers must take their current physical state into account, predict how much longer their current breath will last, and estimate when they have reached the indicated fractional point. This is more of a "taking-stock-of" one's current physical state, not an exact measurement.
 - Examples:
 - '2b' in Process A = one as long as possible in breath + one as long as possible out breath [or vice versa]
 - '2b' in Process C = two as long as possible out breaths
 - 3.5b in Process B = one as long as possible out breath, one as long as possible in breath, one as long as possible out breath, + half of an as long as possible in breath [the transition will be completed when the performer feels they have reached the halfway point of the fourth breath. At this point the transition starts over in the opposite direction. The performer does not retake the breath when a transition is completed. Breaths should always be finished.]
 - 3.5b in Process C = three as long as possible out breaths + half of another as long as possible out breath
- **There should be no attempt to assign an absolute value to an "as long as possible breath" or to make these values uniform.**
- The "strain" occurring at the end of an as long as possible breath (i.e., the unstable, shaking sound and discomfort) is desired.

Notation [cont.]

- The performers may begin a performance at either the **m** or **M** point of a respective area (this is the "initial state")
- The initial durational coefficient of each transition (i.e., the unique duration of a transition at the start of a performance) is expressed through the variable 'r.'
- During the **m** to **M** (or **M** to **m**) transitions, *every in-between state is inhabited*. Do not jump from one extreme to another (unless of course the duration or physical state necessitate this)
- Below the **m** and **M** points and 'r' values for the areas are presented:

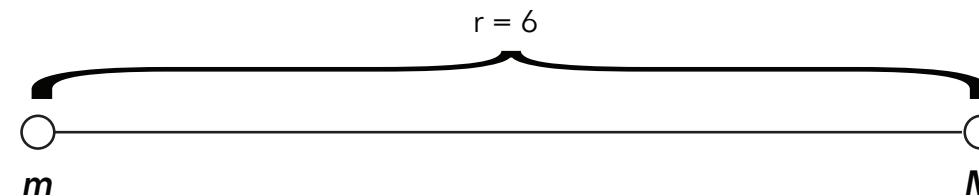
1) Lip Tension

- m** = lips are as loose as possible
- M** = lips are as tight as possible



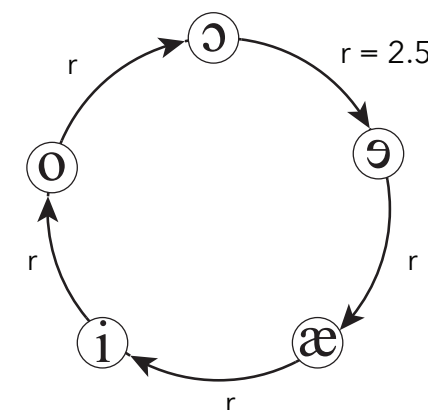
2) Distance

- m** = your lips are ca. 0.5 inches away from the mouthpiece
- M** = your lips are in normal contact with the mouthpiece



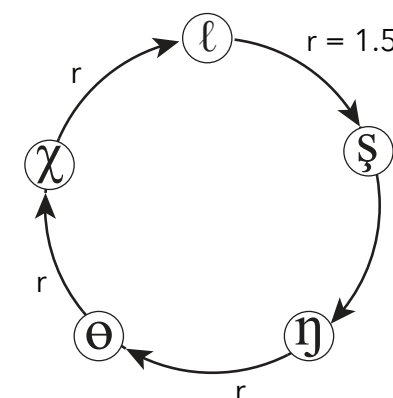
3) Oral Cavity

Oral cavity shape is represented by a cycle. There are 5 positions represented by IPA symbols. Begin progressing clockwise. Start from any point. The transition between any points in the cycle share the same 'r' value.



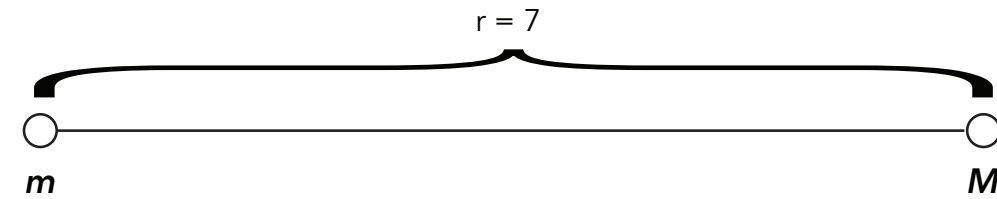
4) Tongue (tng.)

Tongue position is also represented by a cycle. There are 5 positions represented by IPA symbols. Begin progressing clockwise. Start from any point. The transition between any points in the cycle share the same 'r' value. The tongue position is superimposed upon the active oral cavity shape. Used in process A only!

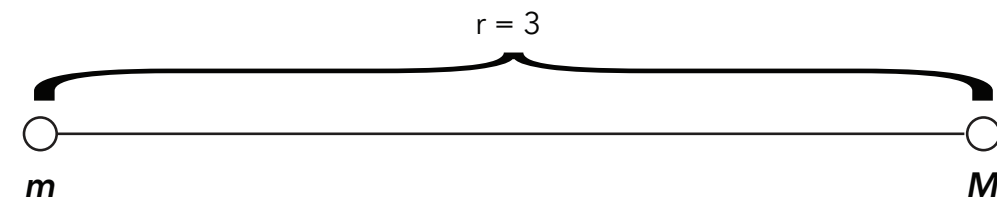


Notation [cont.]**5) Growl****m** = no growl**M** = continuous growl, back of throat, gargle

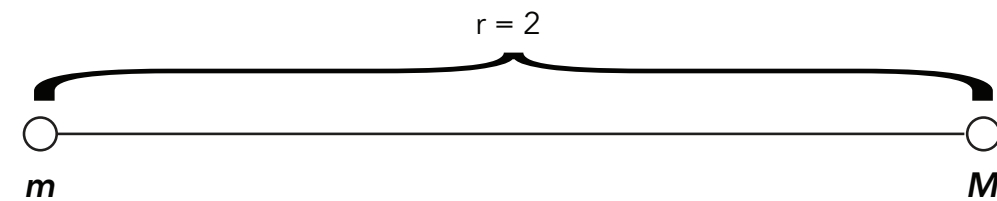
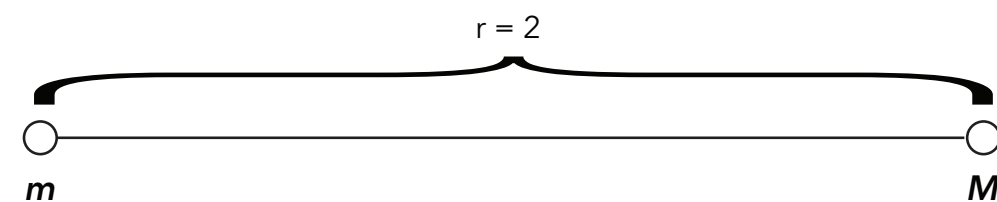
(N.B. every state in between should be inhabited. There will be points where intermittent growls occur as you build up energy in the throat. Can be combined with a tight larynx)

**6) Larynx****m** = loose/croaky**M** = tight/creaky

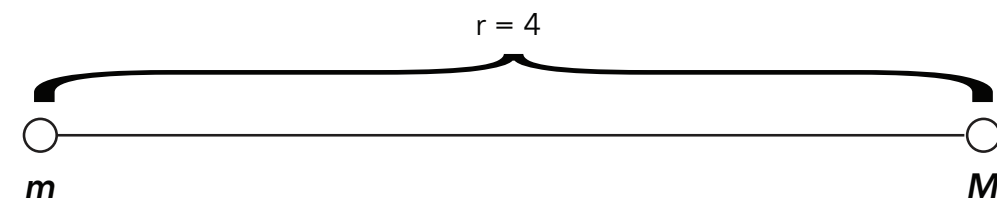
(N.B. every state in between should be inhabited. Both of these states are discontinuous, they will chop up the airstream. In the middle would be a continuous, as soft as possible airstream; see Dropbox folder for recordings)

**7) Pitch****m** = vocal pitch (which is always extremely high) is stable (i.e., the pitch doesn't change but the air stream supporting the pitch may not be correspondingly stable)**M** = the vocal pitch is a quarter-tone higher or lower than the original.

Only used in Process A!

**8) Breath/Con.****m** = barely expelling/intaking any air; discontinuous, faint air stream; the *effort* of "pppp"; little constriction needed**M** = pushing the air out with great effort; continuous air stream; the *effort* of "fff"; a lot of constriction needed**9) Fingering**

Fingering, like oral cavity and tng., is controlled by a cycle. The cycle and 'r' value can be found in the part. Gray coloring represents half-valve.

10) Mute**m** = mute is uncovered**M** = mute is completely covered

Self-Reflection

The performers can alter the area transitions in two ways: changing the duration of the transition (i.e., altering the coefficient before 'b') or reversing the transition's direction (e.g., *m* to *M* vs. *M* to *m*). A process of self-reflection is used to identify an area to be changed and the nature of the applied change. Ideally this process should be memorized but the part provides a visual aid available during performance. **The reflection questions should be asked as simultaneously and often as possible.**

Step 1 - Identify "X"

- Isolate one of the active areas (these are the areas listed in the "extract Y" box on the right of the part) by asking yourself the provided reflection question:
 - "Which area is causing me the greatest amount of physical discomfort?" (Processes A and B)
 - "Which area have I allocated the LEAST* amount of attention to?" (Process C)
 - * ["Least" refers to what area has received the least amount of attention/modification since the start of the performance]
- The area which best satisfies the question at the time of its asking is now designated "X".
- The answers do not need to occur immediately, the performer should take the necessary time to sincerely answer the questions. This process has no durational constraints.
- Do not stop performing the material when engaging in the process. Self-reflection and resultant alteration occurs concurrently with performance.

Step 2 - Extract "Y"

- "Y" is extracted from a repeating sequence of active areas. Performers must keep track of their location within the sequence.
- Below the Y-cycle (the list of areas in the right hand box) are choices relating to how many times you cycle through the sequence before moving on. You may choose any of these values. The numbers refer to the total amount of times the sequence is to be performed.
 - For example consider this repetition of Process A: the first time "Y" is extracted, "Y" = oral cavity. The second time "Y" is extracted, "Y" = tng. The fourth time "Y" is extracted "Y" = pitch... The fifth time "Y" is extracted "Y" = oral cavity...etc.
 - Once the cycle has been repeated the specified amount of times, the performer moves to a new Process (information in [light blue](#) facilitate movement between Processes)

Step 3 - Compare X:Y

- After identifying two areas, compare them by asking the available questions: "Which area is changing at a faster rate?" or "Which area is located closer to an endpoint?"
- If "X" and "Y" are the same area, simply move on [re-ask the "X" question...extract the next area in the "Y" sequence]

Step 4 - Modify

- The area to be changed and the manner in which it is changed depends on the performer's answers to the questions encountered in step #3. Example:
 - Q1: "Which area is changing at a faster rate?"
 - If the answer is "X"...modify the duration of area "Y" in the following manner [$Y_{dnew} = Y_{dcur} \pm 0.25 b$] [read as: the new duration of "Y" = the current duration of "Y" plus or minus 1/4 of a breath]
 - If the answer is "Y"...modify the duration of area "X" in the following manner [$X_{dnew} = X_{dcur} \pm 0.50 b$]
 - Changes in duration are expressed through an equation where the new (modified) durational coefficient [Y_{dnew}] is equal to the current coefficient [Y_{dcur}] plus/minus a specified fraction of a breath.
 - Example: $Y_{dcur} = 1.5 b$...add 0.25 of a breath... $Y_{dnew} = 1.75b$
 - The change made only applies to the identified area ("X" or "Y"). All other durational coefficients remain the same. This means that there is the potential for each area to have a unique duration. The prevailing coefficients and their respective parameters needs to be kept track of through mental bookkeeping.
 - ***** When interpreting which parameter is changing faster, the performer should NOT simply compare the current coefficients. The answer to the question should be a reflection upon ACTUAL observed performance. The coefficients only represent an INTENDED/THEORETICAL duration. The duration actually manifested may differ considerably.*****

Step 4 - Modify [cont.]

v

- Q2: "Which area is located closer to an endpoint?"

-If the answer is "X"...change the direction of "X" [e.g. if the performer was close to the endpoint **m**, reverse direction towards **M** without reaching **m**]

-If the answer is "Y"...change the direction of "Y"

-In the case of the oral cavity/tng./fingering areas, if you were moving clockwise through the cycle, now move counterclockwise through the cycle, and vice versa.

- After applying the modification, immediately return to step 1 and begin the process (steps 1-4) over again.
- If the performer forgets the current duration of an area revert to the initial duration coefficient ('r').
- Because all durations are expressed through breath measurements, the performer should pay close attention to the fluid nature of their breath's duration.
- **Modifications are applied to active transitions.** For example, consider lip tension as "X" and growl as "Y." If lip tension's current duration is 6b but through reflection you realize that, after 2 breaths, you are more than half way through the cycle (i.e., your actual transitional rate differs from the one intended), you answer area "X" for question 1 (as it is changing faster than growl). The modification is applied to 6b (e.g., it becomes 5.75b) and you recalibrate where you should be in your transition. As the reflection process was taking place, another breath was performed (for a total of 3), this means that you still have 2.75 breaths left before you reach the **m** or **M** point of the transition. Even though a complete cycle (6b) is not completed, the duration of the cycle has been changed.

Relationships Between Processes

- Process A's material is a very high vocal pitch which flickers in and out of sounding. See recording for example of this. You should attempt to find the greatest amount of breath pressure you can expel without causing a pitch to sound. When a pitch does result, immediately adjust breath pressure to achieve silence. Keep brushing up against this line.
- Information/dashed arrows in **light blue** instruct movement between Processes.
- You must begin in your initial state, and go through each Process in order at least once. After this, any time you are instructed to transition, you may freely decide which Process to move to.
- Information in **green** communicates shared material between Processes A and B ("freezing")
 - Areas which are not shared between Processes A and B becomes "frozen." For example, after completing the chosen amount of cycles of Process A you move on to Process B. Both Processes contain oral cavity as an active area thus it continues to be available for reflection and adjustment. The tongue, larynx, and pitch (referring to vocal pitch) are no longer active in Process B. **These areas maintain the state they are in at the time of the transition between Processes** (i.e., they "freeze" and are no longer available for reflection). If you decided to move back to Process A from Process B, a similar thing occurs (the distance, lip tension, growl, mute, and fingering areas freeze). Any/all frozen areas are nullified if you enter Process C.
- The general dynamic of Process C remains "as soft as possible" but is approached differently than Process A and B through the inclusion of the "Breath/Con." area:
 - **The breath pressure area is directly linked to diaphragm constriction:** as breath pressure increases, constriction must increase in order to maintain silence. At any given time, the performers should attempt to subject themselves to the least amount of imposed constriction. Following the point where constriction has cancelled sound, gradually relax the imposed constriction. Search for the least amount of constriction needed to maintain silence in this moment. There will be a point where the constriction no longer subdues the breath and a sound is produced. The performer must immediately re-impose a degree of constriction to obtain active silence.
 - Processes A and B are about barely activating sound whereas Process C is about barely containing energy.
- **Process C contains a Referent cycle where your attention becomes split between your self-reflection and the observation of a co-player.**
 - You may choose to enter into the Referent cycle after any modification has been made (i.e., rather than return to steps 1 and 2 of self-reflection, enter into Referent cycle instead)
 - Work your way through the questions
 - A "conditional" is an event in a co-player's performance which necessitates a specific response. The conditional is performed everytime you perceive the indicated cue. They remain active until they are cancelled.
 - The instruction to "mimic" an area of a co-player means that the indicated area is removed from the self-reflection process and changes in this area are now linked to a co-player. Example:
 - You are instructed to link lip tension transition to a co-player.
 - Identify an attribute of your co-player's performance (e.g., the bow direction of the viola, the range the harpist is using, the breath of the bass clarinetist, etc.)
 - The **m** and **M** points of lip tension are now mapped to the bow direction of the viola.
 - This continues as you return to self-reflection but now lip tension is no longer part of the Y-Cycle.
 - This stipulation is nullified when you leave Process C (i.e., the linked area is no longer linked to a Referent and re-enters the self-reflection process)

Additional Comments

- How to end the piece: set a stopwatch or countdown clock and decide on a desired duration (at least 7'). Once the desired duration has elapsed, stop performing when you have completed a full Y-cycle.
- Link to Dropbox with reference recordings and "spark notes" video detailing this front matter: <https://www.dropbox.com/sh/wzwq0aclxqi9yci/AAB8YtudH-Zw8B1-OAeCyLOca?dl=0>
- For IPA symbol pronunciation chart/sound files: <https://www.internationalphoneticalphabet.org/ipa-sounds/ipa-chart-with-sounds/>
- All questions can be directed to ryan@ryancarraher.com

Horn

Dynamic Environment

(i), A, B, and C should always be as soft as possible. Within this, sounds can be on the cusp of articulation (i.e., discontinuous) or continuous.

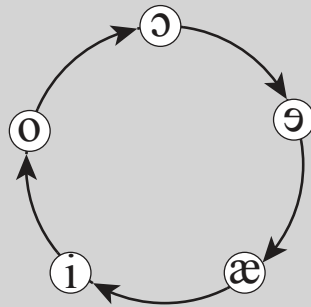
Blow just enough air so the events "flicker" in and out of perception. Whether or not the sound sustains depends on the larynx area.

The dynamic environment of conditionals can be found in the text of the conditional.

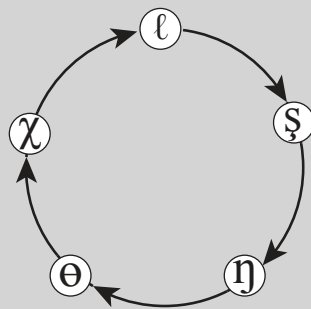
Breath

Alternate between IN and OUT breaths; always as long as possible; allow for moments of strain; 'b' = either one IN or OUT breath.

Oral Cavity Cycle Reference



Tongue Cycle Reference

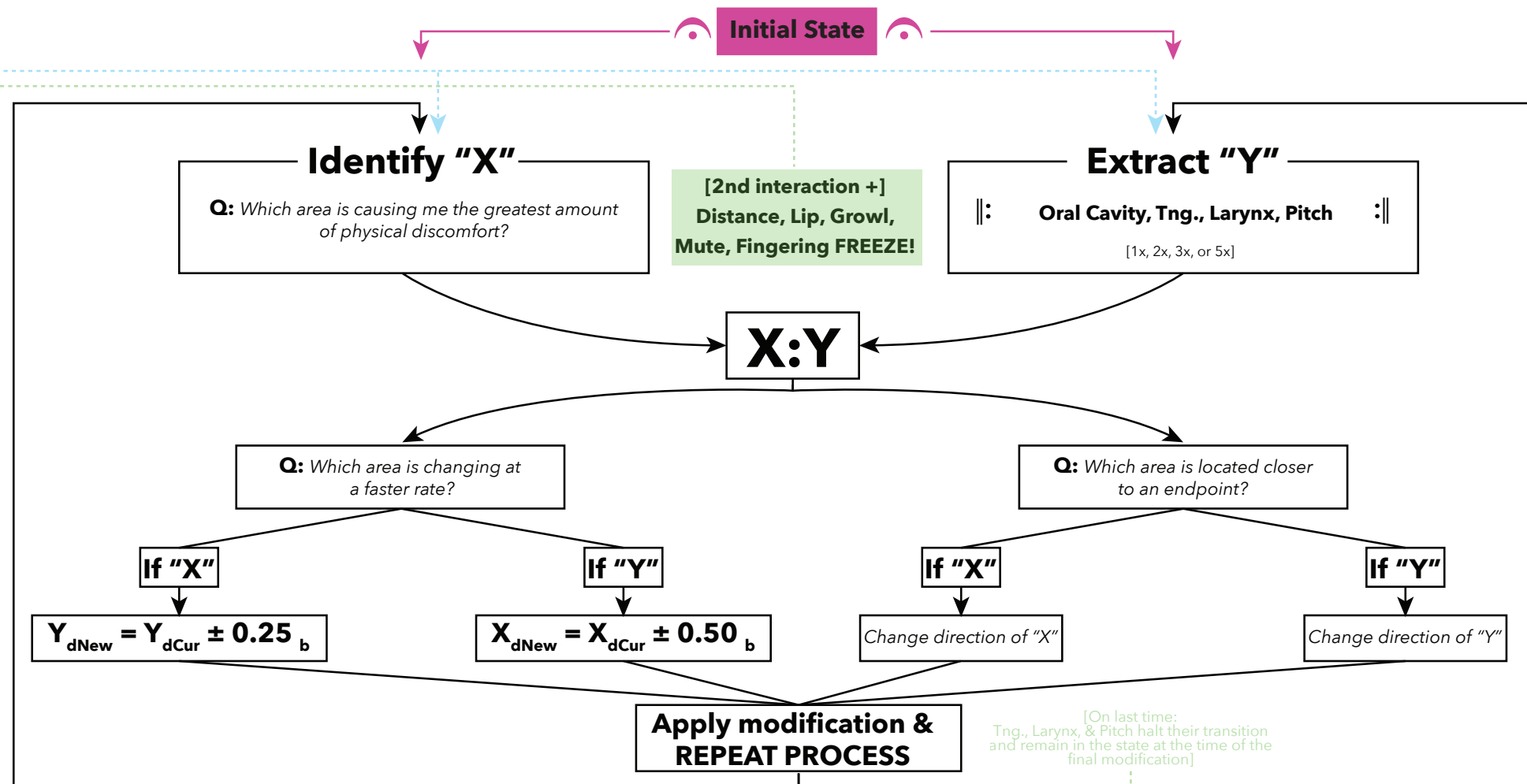


'r' Values

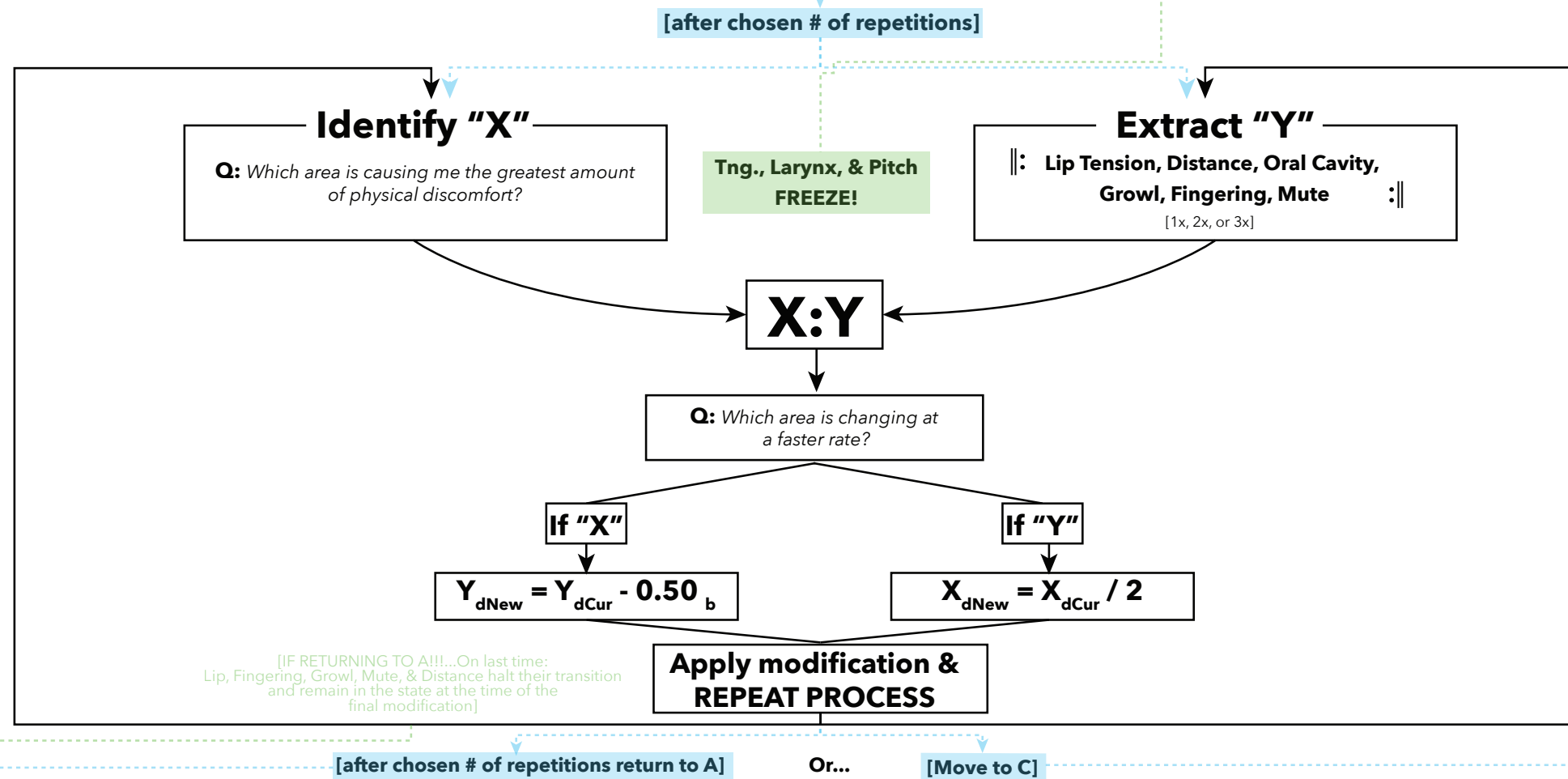
Distance: 6b	Fingering: 3.5b
Lip Tension: 4b	Pitch: 2b
Larynx: 3b	Tongue: 1.5b
Oral Cavity: 2.5b	Mute: 4b
Growl: 7b	

(i)

A
(voice only)



B
(voice + inst.)



Horn

Dynamic Environment

(i), A, B, and C should always be as soft as possible. Within this, sounds can be on the cusp of articulation (i.e., discontinuous) or continuous.

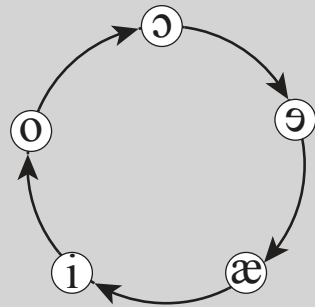
For C, breath pressure is tied with diaphragm constriction. As breath pressure increases, the amount of imposed constriction must increase.

The dynamic environment of conditionals can be found in the text of the conditional.

Breath

OUT breath is as long as possible; no strain;
IN breath as fast as possible;
'b' = one OUT breath

Oral Cavity Cycle Reference

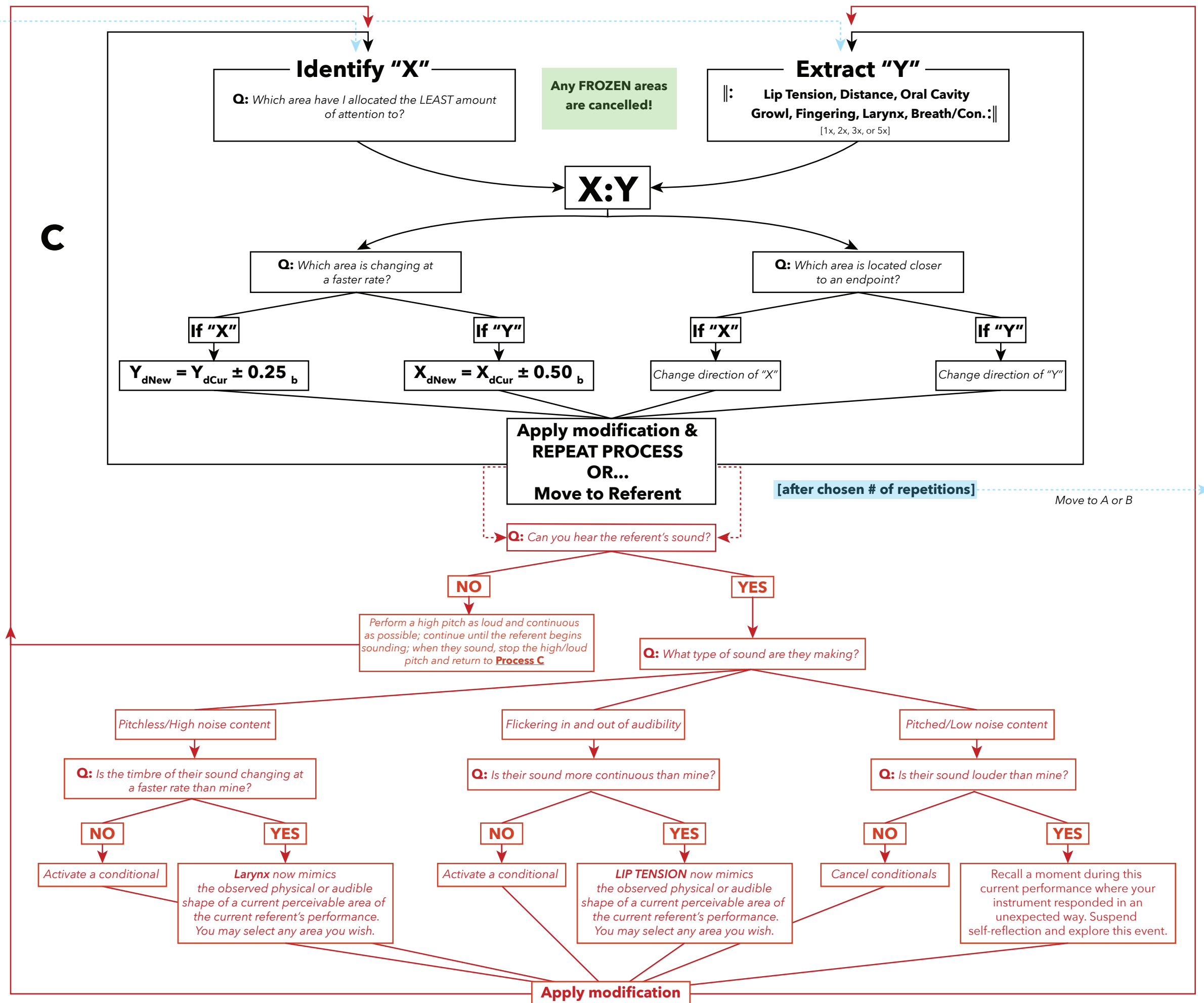


Referents

The first referent is the performer directly to your left, the second referent is the second performer from your left...; attempt to continue the self-reference while simultaneously allocating attention to the referent; **do not "exit" from your current physical state.**

'r' Values

Distance: 6b	Fingering: 3.5b
Lip Tension: 4b	Pitch: 2b
Larynx: 3b	Tongue: 1.5b
Oral Cavity: 2.5b	Breath/Con.: 2b
Growl: 7b	

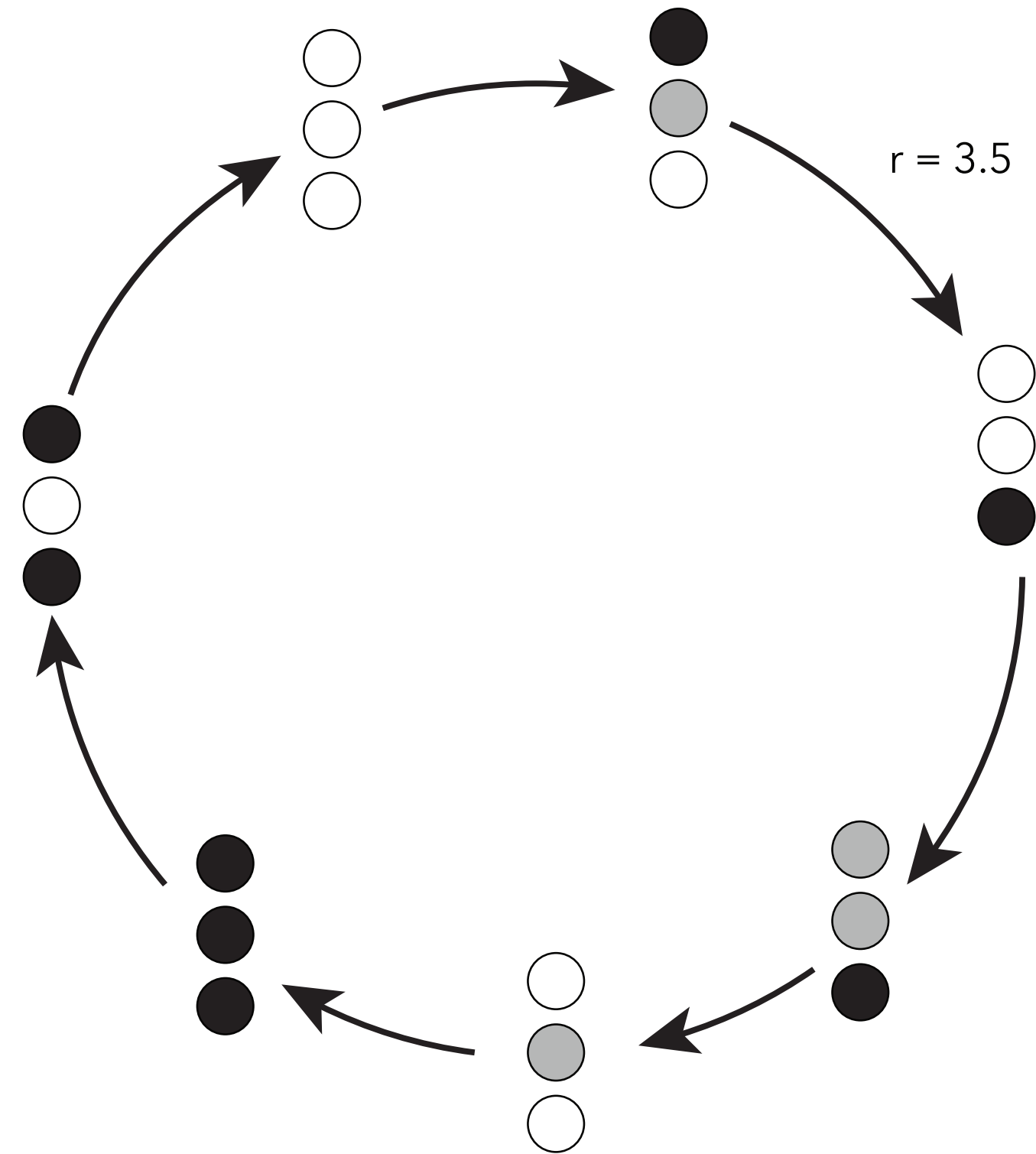


Conditionals

- 1 **If** your instrument/voice responds in a strange/unexpected way **then** suspend self-reflection and explore this sound. Attempt to find its limits. Attempt to control it. Return to self-reflection where you left off.
- 2 **If** you hear a slow, quiet upwards glissando... **then** respond by softly repeating a single pitch or noise 12 times (repetition can be regular or irregular)
- 3 **If** you hear a co-player sing a quiet sustained tone... **then** respond by improvising a gentle accompaniment
- 4 **If** you hear a loud short tone... **then** respond by playing a quiet long event
- 5 **If** you hear a loud short tone/noise... **then** respond by playing another loud & short tone/noise
- 6 **If** you hear a quiet sustained noise or tone... **then** respond by playing a short cloud of loud events
- 7 **If** you observe a co-player to be overwhelmed or fatigued... **then** respond by singing and/or performing 6 notes, each adjacent note should be in a different register.
- 8 **If** you observe a co-player to be overwhelmed or fatigued... **then** respond by miming their events (attempt to translate their sounds through any means currently available to you)
- 9 **If** you hear a sound from any of your co-players that you find interesting... **then** respond with an attempt to re-create it on your own instrument.
- 10 **If** you hear a soft tone... **then** respond by singing the same tone until you run out of breath

Fingering Cycle

You may freely add trills using any key that is not in use



i say 'me' guided by a blind instinct

for mixed quartet

Ryan Carraher (2021)

Viola Part

Conceptual Remarks

I like to think of the image of a plate spinner with their attention ceaselessly shifting from plate to plate. In any one moment, a specific plate may be unstable relative to the others. The perceived danger of the plate falling directs the performer's attention to this particular plate. Attention leads to assessment (reflection) which results in modification (preservation).

What follows is a complex system of self-reflection and social interaction. There is no "correct" way to interact with this system. If you cannot remember all of the rules that is okay, however there should be a sincere effort to do so (which will cultivate a quiet yet intense performance environment). Interacting with this system foregrounds the limitations that make us unique. "Failure" to master the system is not a failure in the traditional sense...it is a moment where latent aspects of an identity can be expressed and reflected upon. With that in mind, the material and how you respond to it should be considered with intimacy and curiosity rather than preconceived formal or sonic ideals.

Score/Materials

- Instrumentation: bass clarinet, horn, harp, viola
- Duration: Flexible (a stopwatch may be used to facilitate a desired duration; minimum 7')
- Staging: Ideally the performers would be arranged in a circle as close together as possible.
- There is no composite score, each performer reads from their own part.
- Due to the extreme quiet of the work, amplification may be warranted.
- The primary material of the piece is a collection of multiphonics. On pg. 4 of your part there will be a space for you to write-in your selected multiphonics.

Notation

- The central parts of the "score" are two self-reflection prompts: Process A, and Process B
 - Process A is self-reflective (i.e., you do not need to consider any of your co-players)
 - Process B is part self-reflective but also allocates attention towards co-players
- These processes stratify the performer into seven independent areas: Continuity, angle, position, bow pressure, LH pressure, LH skew, and embellishment.
- Each area is defined by *continuous transition* between a minimum point (**m**) and a maximum point (**M**).
- **All areas are simultaneously active.** Once a transition is completed (e.g., **m** to **M**) the transition immediately resumes in the opposite direction (i.e., **M** to **m**).
- The transition's duration is measured in number of breaths and expressed as an integral or fractional coefficient applied to the variable 'b':
 - 'b' = a single breath unit
 - In Process A you simply breath in and out (either through your mouth or nose) making each breath as long as possible. Here, 'b' is defined as **either** one in **or** out breath. In Process B you no longer reference your own breathing...'b' is defined as **either** one in **or** out breath performed by the horn player (you now observe an other's breath rather than consult your own)
 - Fractional coefficients (e.g., 3.5b) do occur. To perform these, the performers must take their current physical state into account, predict how much longer their current breath will last, and estimate when they have reached the indicated fractional point. This is more of a "taking-stock-of" one's current physical state, not an exact measurement.
 - Examples:
 - '2b' in Process A = one as long as possible in breath + one as long as possible out breath [or vice versa]
 - '2b' in Process B = observing one as long as possible in breath + one as long as possible out breath [or vice versa] performed by the horn player
 - 3.5b in Process A = one as long as possible out breath, one as long as possible in breath, one as long as possible out breath, + half of an as long as possible in breath [the transition will be completed when the performer feels they have reached the halfway point of the fourth breath. At this point the transition starts over in the opposite direction. The performer does not retake the breath when a transition is completed. Breaths should always be finished.]
- **There should be no attempt to assign an absolute value to an "as long as possible breath" or to make these values uniform.**
- The "strain" occurring at the end of an as long as possible breath (i.e., the unstable, shaking sound and discomfort) is desired.
- You begin the performance in your initial state
 - See side bar on pg. 1 of part for details.
 - Any areas not mentioned there can be set to either the **m** or **M** point
- The initial durational coefficient of each transition (i.e., the unique duration of a transition at the start of a performance) is expressed through the variable 'r.'
- During the **m** to **M** (or **M** to **m**) transitions, *every in-between state is inhabited*. Do not jump from one extreme to another (unless of course the duration or physical state necessitate this)
- Regarding bowing: always alternate between up and down bows.

Notation [cont.]

- Below the **m** and **M** points and 'r' values for the areas are presented:

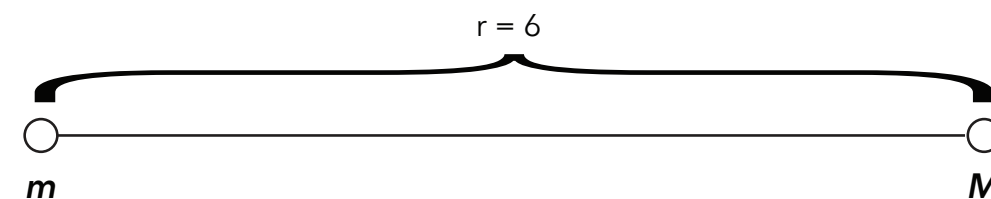
1) Continuity

This essentially refers to bow speed but should be thought of in terms of sonic continuity.

Slow = barely any sound/discontinuous sound; Fast = sound has just started to become continuous and clear.

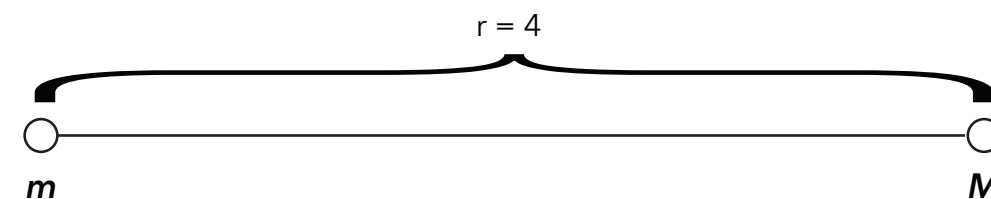
m = as slow as possible; barely any movement at all

M = the bow is moving fast enough to produce a continuous sound

**2) Bow Angle**

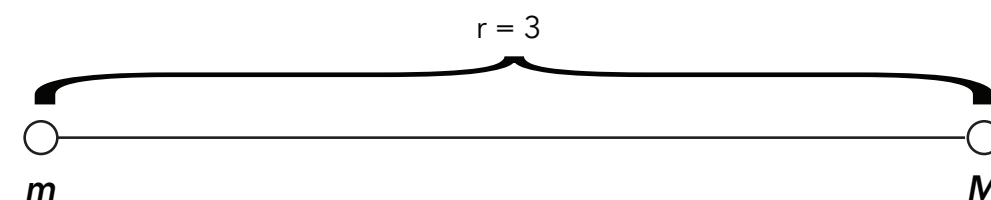
m = ord (most likely perpendicular); the angle that best serves the production of the current multiphonic

M = -20 degrees or +20 degrees

**3) Bow Position**

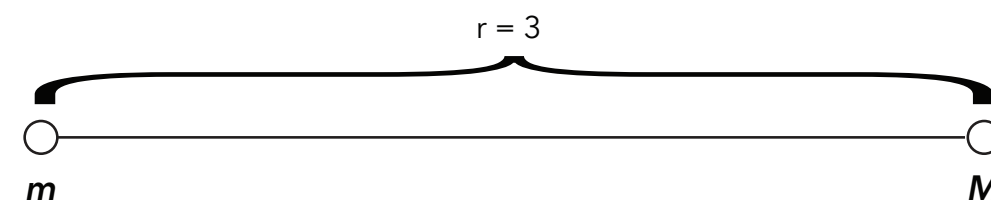
m = Bow is in the position which best serves the production of the current multiphonic

M = Bow either 2-3 inches above or below the ideal contact point of current multiphonic

**4) Bow Pressure**

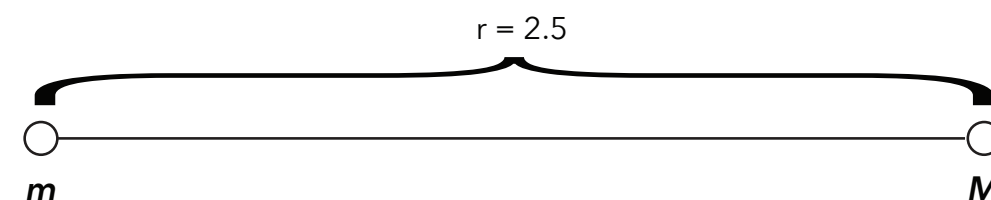
m = the bow is positioned 0.5-5mm above the string. The micromovements of the hand should be enough to cause the bow to come into contact with the string on occasion.

M = the bow pressure is the ideal amount of pressure for the production of the multiphonic

**5) Left Hand (LH) Pressure**

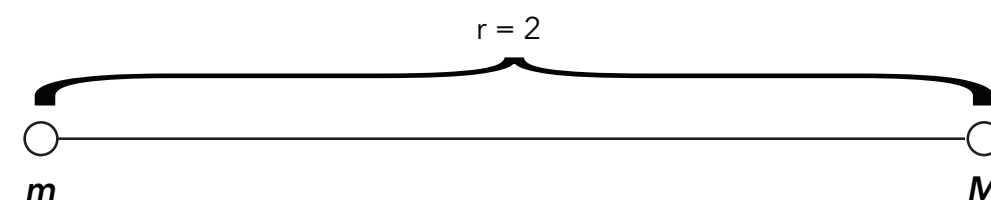
m = the finger is barely touching the string (muting)

M = the finger is in ideal pressure for the multiphonic

**6) LH Skew**

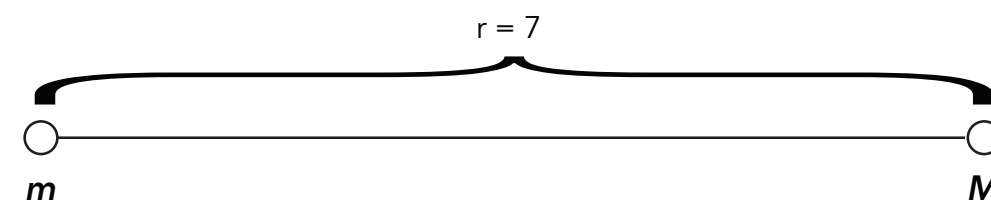
m = the finger is "skewed" slightly above or below the ideal node for the multiphonic

M = the finger is in the ideal place for the production of the multiphonic

**7) Embellishment**

m = no embellishment

M = relatively frequent embellishment events (e.g., trills, ornaments, tremolo, etc.)



The performers can alter the area transitions in two ways: changing the duration of the transition (i.e., altering the coefficient before 'b') or reversing the transition's direction (e.g., *m* to *M* vs. *M* to *m*). A process of self-reflection is used to identify an area to be changed and the nature of the applied change. Ideally this process should be memorized but the part provides a visual aid available during performance. ***The reflection questions should be asked as simultaneously and often as possible.***

Step 1 - Identify "X"

- Isolate one of the active areas (these are the areas listed in the "extract Y" box on the right of the part) by asking yourself the provided reflection question:
 - "Which area is causing me the greatest amount of physical discomfort?" (Process A)
 - "Which area have I allocated the LEAST* amount of attention to?" (Process B)
 - * ["Least" refers to what area has received the least amount of attention/modification since the start of the current performance]
- The area which best satisfies the question at the time of its asking is now designated "X".
- The answers do not need to occur immediately, the performer should take the necessary time to sincerely answer the questions. This process has no durational constraints.
- Do not stop performing the material when engaging in the process. Self-reflection and resultant alteration occurs concurrently with performance.

Step 2 - Extract "Y"

- "Y" is extracted from a repeating sequence of active areas. Performers must keep track of their location within the sequence.
- Below the Y-cycle (the list of areas in the right hand box) are choices relating to how many times you cycle through the sequence before moving on. In your part you will find information about how to handle repetitions. The numbers always refer to the total amount of times the sequence is to be performed.
 - For example consider this repetition of Process A: the first time "Y" is extracted, "Y" = continuity. The second time "Y" is extracted, "Y" = bow angle...The seventh time "Y" is extracted "Y" = embellishment... The seventh time "Y" is extracted "Y" = continuity...etc.
 - Once the cycle has been repeated the specified amount of times, the performer moves to a new Process (information in [light blue](#) facilitate movement between Processes)

Step 3 - Compare X:Y

- After identifying two areas, compare them by asking the available questions: "Which area is changing at a faster rate?" or "Which area is located closer to an endpoint?"
- If "X" and "Y" are the same area, simply move on [re-ask the "X" question...extract the next area in the "Y" sequence]

Step 4 - Modify

- The area to be changed and the manner in which it is changed depends on the performer's answers to the questions encountered in step #3. Example:
 - Q1: "Which area is changing at a faster rate?"
 - If the answer is "X"...modify the duration of area "Y" in the following manner [$Y_{dnew} = Y_{dcur} \pm 0.25 b$] [read as: the new duration of "Y" = the current duration of "Y" plus or minus 1/4 of a breath]
 - If the answer is "Y"...modify the duration of area "X" in the following manner [$X_{dnew} = X_{dcur} \pm 0.50 b$]
 - Changes in duration are expressed through an equation where the new (modified) durational coefficient [Y_{dnew}] is equal to the current coefficient [Y_{dcur}] plus/minus a specified fraction of a breath.
 - Example: $Y_{dcur} = 1.5 b$...add 0.25 of a breath... $Y_{dnew} = 1.75b$
 - The change made only applies to the identified area ("X" or "Y"). All other durational coefficients remain the same. This means that there is the potential for each area to have a unique duration. The prevailing coefficients and their respective parameters needs to be kept track of through mental bookkeeping.
 - ***** When interpreting which parameter is changing faster, the performer should NOT simply compare the current coefficients. The answer to the question should be a reflection upon ACTUAL observed performance. The coefficients only represent an INTENDED/THEORETICAL duration. *The duration actually manifested may differ considerably.******

Step 4 - Modify [cont.]

- Q2: "Which area is located closer to an endpoint?"

-If the answer is "X"...change the direction of "X" [e.g. if the performer was close to the endpoint **m**, reverse direction towards **M** without reaching **m**]

-If the answer is "Y"...change the direction of "Y"

- After applying the modification, immediately return to step 1 and begin the process (steps 1-4) over again.
- If the performer forgets the current duration of an area revert to the initial duration coefficient ('r').
- Because all durations are expressed through breath measurements, the performer should pay close attention to the fluid nature of their breath's duration.
- **Modifications are applied to active transitions.** For example, consider bow angle as "X" and LH skew as "Y." If bow angle's current duration is 6b but through reflection you realize that, after 2 breaths, you are more than half way through the cycle (i.e., your actual transitional rate differs from the one intended), you answer area "X" for question 1 (as it is changing faster than LH Skew). The modification is applied to 6b (e.g., it becomes 5.75b) and you recalibrate where you should be in your transition. As the reflection process was taking place, another breath was performed (for a total of 3), this means that you still have 2.75 breaths left before you reach the **m** or **M** point of the transition. Even though a complete cycle (6b) is not completed, the duration of the cycle has been changed.

Relationship to Co-Players

- **Process B contains a Referent cycle where your attention becomes split between your self-reflection and the observation of a co-player.**
 - Any information in **red** means that your attention is no longer solely fixated upon your own actions...part of it is turned outwards to a co-player(s)
 - You may choose to enter into the Referent cycle after any modification has been made (i.e., rather than return to steps 1 and 2 of self-reflection, enter into Referent cycle instead)
 - Work your way through the questions but remain performing.
 - A "conditional" is an event in a co-player's performance which necessitates a specific response. The conditional is performed everytime you perceive the indicated cue. They remain active until they are cancelled. once the conditional is activated, return to the self-reflection process. You may pick any of the conditionals you want to activate.
 - Information in **green** means that you momentarily exit out of the self-reflection process and enter into an improvisatory prompt.
 - You may pick any improvisational prompt you wish (you do not need to go in order and they can be repeated)
 - Your attention will be directed towards events of your co-players and/or the sound of the ensemble as a whole. They instruct an improvisatory response.
 - You determine the duration for the improvisation tasks.
 - When finished, enter back into the self-reflection process continuing from where you left off (or you may begin at 'r' values)
 - Conditionals remain active during improvisation

Additional Comments

- How to end the piece: set a stopwatch or countdown clock and decide on a desired duration (at least 7'). Once the desired duration has elapsed, stop performing when you have completed a full Y-cycle.
- On Multiphonics
 - Choose 3 multiphonics for each string (aim for a mix of extremely unstable/fickle ones and more reliable ones)
 - Write them in the spaces provided on page 4 of the part. An upper stave is provided if you wish to include the partials.
 - You may move to any multiphonic you haven't performed yet. When/if you perform all the multiphonics once, you may begin repeating
- Link to Dropbox with reference recordings and "spark notes" video detailing this front matter: <https://www.dropbox.com/sh/wzwq0aclxqi9yci/AAB8YtudH-Zw8B1-OAeCyLOca?dl=0>
- All questions can be directed to ryan@ryancarraher.com

Viola Process A

Initial State

You may choose the state of all the areas except for continuity. Begin with the bow 0.5-5mm above the appropriate string. There should always be the danger that the small twitches of your muscles will bring the bow into contact with the string.

Dynamic Environment

Extremely quiet

Breath

Alternate between IN and OUT breaths making each last as long as possible. You may choose to breath through your nose or your mouth. The breathing should be barely audible. The audience should be aware of it but unsure of its source. **'b' = either one IN or OUT breath.**

Changing Multiphonic

Upon completing a complete performance of the Y-Cycle (i.e., starting with Continuity...ending with Embellishment) you may choose to move to a new multiphonic or continue using the current one. The states of all other areas are maintained (i.e., "transposed" to the new multiphonic)

'r' Values

Continuity: 6b

Angle: 4b

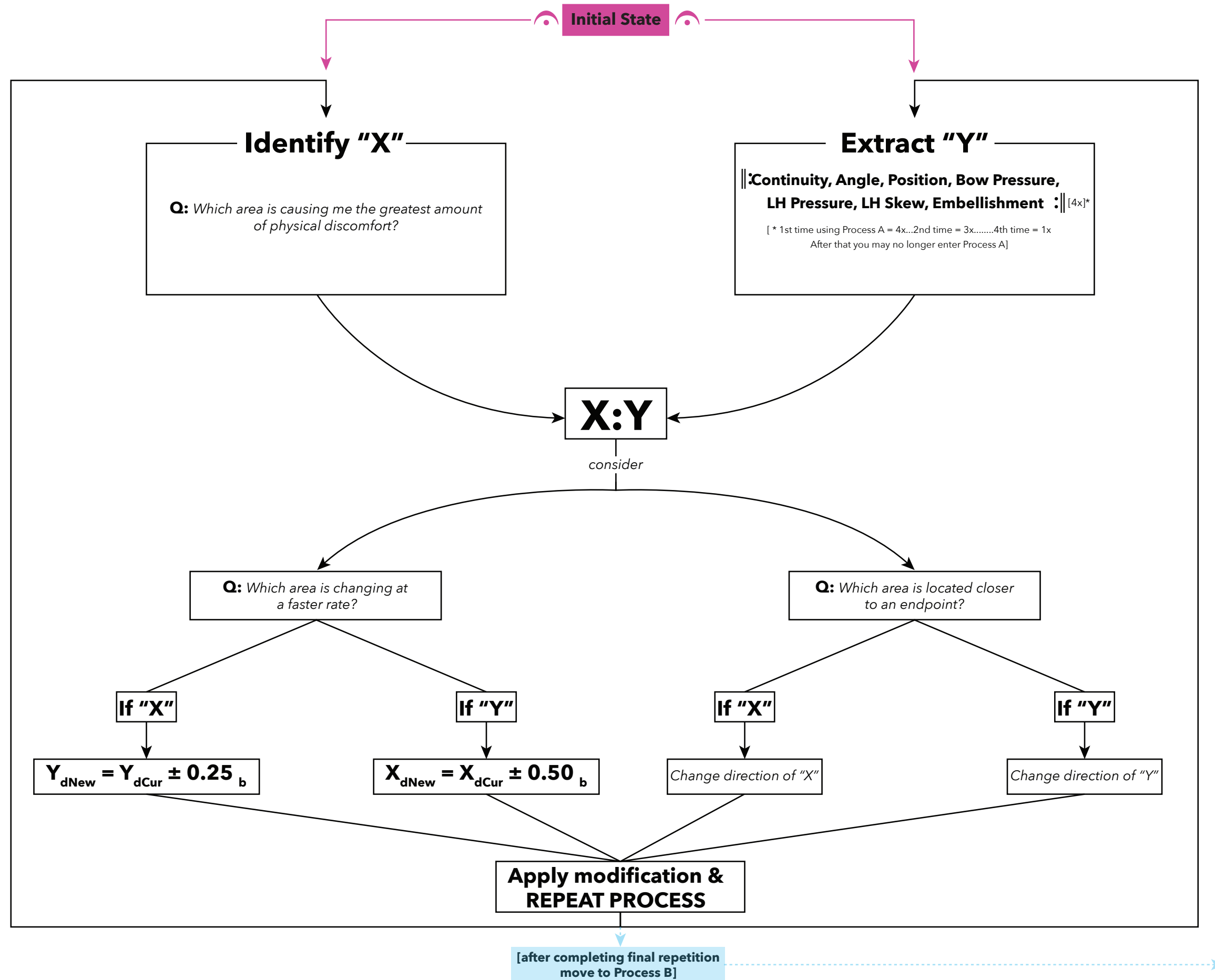
Position: 3b

Bow Pressure: 3b

LH Pressure: 2.5b

LH Skew: 2b

Embellishment: 7b



Viola Process B

Dynamic Environment

Self-reflection events remain very quiet. Improvised events and conditionals may vary widely.

Breath Definition

You no longer take your own breath as 'b'. Observe the breath of the HORN player. Keep track of their breath through visual and/or aural observation. Simultaneously pay attention to the self-reflection process AND the nature of the horn player's breath.

'b' = either one IN or OUT breath performed by the horn player

Referent

The first referent is the performer directly to your left, the second referent is the second performer from your left...

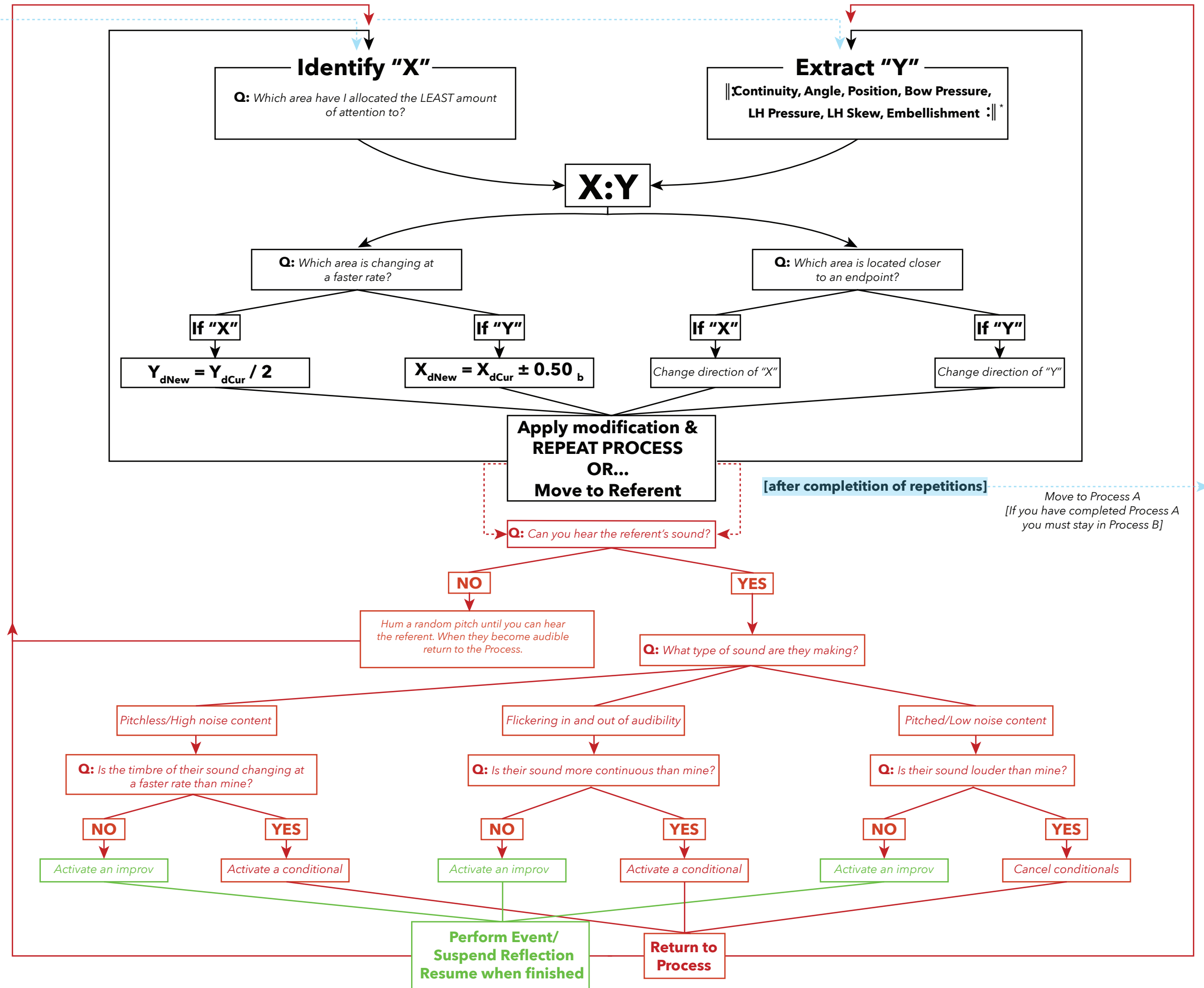
All improv initiated by the referent cycle exists outside of self-reflection. The duration of each event depends on a specified co-player or remains free. When you finish an event, resume the self-reflection process either from where you left off or from default 'r' values.

Process B "Y-Cycle" Repetition

First Interaction = 1x
 Second Interaction = 2x
 Third Interaction = 3x
 Fourth Interaction = 4x
 [At this point, you will have completed Process A]
 Continue Process B until the end of the piece.

'r' Values

Continuity: 6b
 Angle: 4b
 Position: 3b
 Bow Pressure: 3b
 LH Pressure: 2.5b
 LH Skew: 2b
 Embellishment: 7b



Improv Prompts

1 Imagine the current sound of the entire ensemble is accompanying an absent soloist. What would this solo material sound like?

2 Improvise using only metallic sounds

3 Improvise using only percussive sounds

4 Improvise a melody. Use the current context to guide its character

5 Consider the current events of all your co-players, attempt to improvise a real-time-reduction which simultaneously translates abstract characters and/or specific events from all of your co-players.

6 Improvise using the following sounds based on audibility:
If you can currently hear the bass clarinet: you may use pitches
If you can currently hear the horn: you may use metallic sounds
If you can currently hear the harp: you may use percussive sounds
If you hear no sound you may improvise with silence

7 Right hand translates the bass clarinet's performance,
left hand translates the harp's performance

8 Improvise on a single string (using any objects and techniques you wish)

9 Improvise using any sounds you wish but observing the following:
If you can currently hear the bass clarinet: you may use the lower register
If you can currently hear the horn: you may use the extreme high register
If you can currently hear the harp: you may use the middle register
If you hear no sound you can only improvise on a single string

10 Improvise freely

Conditionals

1 *If* your instrument/voice responds in a strange/unexpected way **then** suspend self-reflection and explore this sound. Attempt to find its limits. Attempt to control it. Return to self-reflection where you left off.

2 *If* you hear a slow, quiet upwards glissando... **then** respond by softly repeating a single pitch or noise 12 times (repetition can be regular or irregular)

3 *If* you hear a co-player sing a quiet sustained tone... **then** respond by improvising a gentle accompaniment

4 *If* you hear a loud short tone... **then** respond by playing a quiet long event

5 *If* you hear a loud short tone/noise... **then** respond by playing another loud & short tone/noise

6 *If* you hear a quiet sustained noise or tone... **then** respond by playing a short cloud of loud events

7 *If* you observe a co-player to be overwhelmed or fatigued... **then** respond by singing and/or performing 6 notes, each adjacent note should be in a different register.

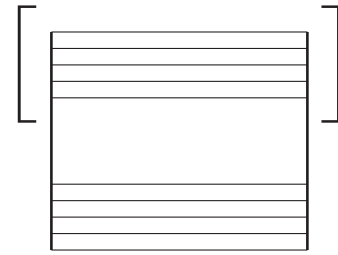
8 *If* you observe a co-player to be overwhelmed or fatigued... **then** respond by miming their events (attempt to translate their sounds through any means currently available to you)

9 *If* you hear a sound from any of your co-players that you find interesting... **then** respond with an attempt to re-create it on your own instrument.

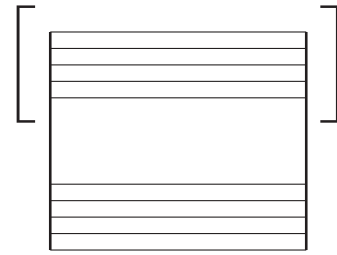
10 *If* you hear a soft tone... **then** respond by singing the same tone until you run out of breath

Multiphonics

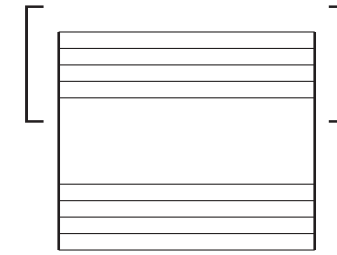
Sul C



#1

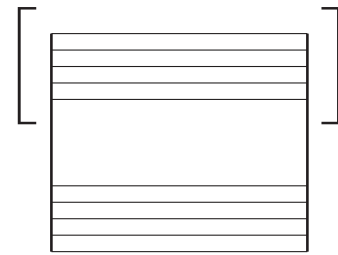


#2

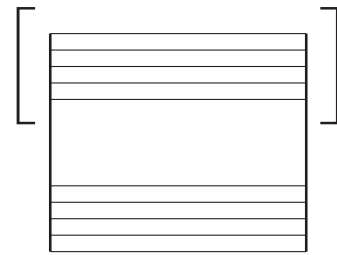


#3

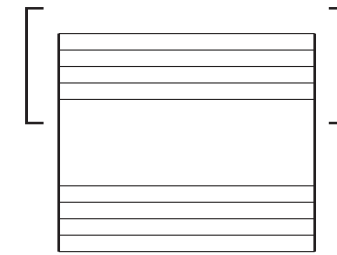
Sul G



#4

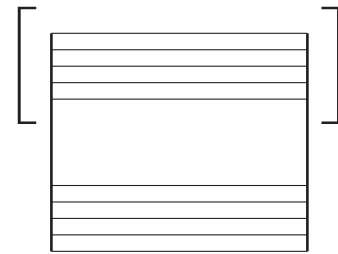


#5

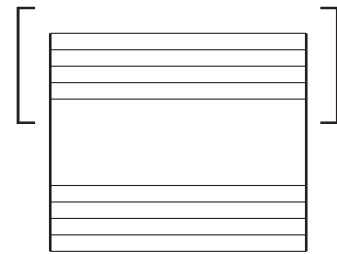


#6

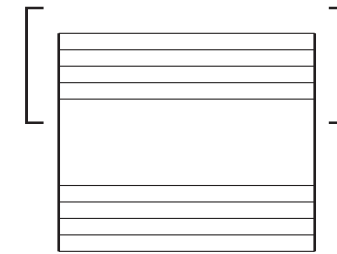
Sul D



#7

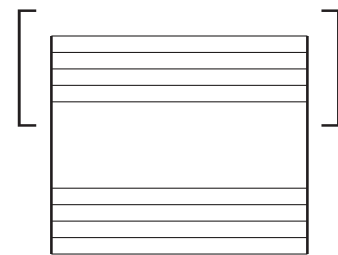


#8

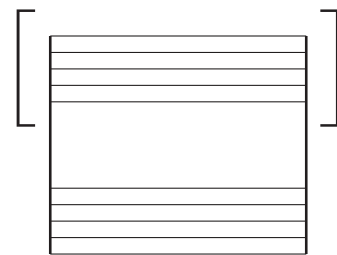


#9

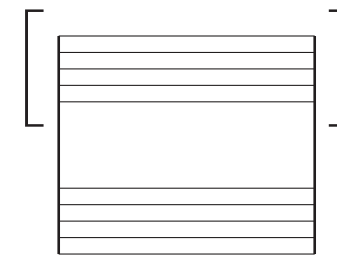
Sul A



#10



#11



#12