

In The Name Of Capitalism

Part 3: Soul

David Harris

set in part to a quote by Lynne Twist, from "The Soul Of Money"

Performance Notes:

The IPA symbols throughout are standard. The sounds can be found on an IPA website, and are as follows:

[i] as in beet
[e] as in bay
[ɪ] as in bit
[ɛ] as in bet
[u] as in boot
[O] as in boat
[n] as in note
[d] as in dog
[m] as in man
[æ] as in cat
[ɹ] as in rim (r)
[ŋ] as in ring (ng)
[ə] as in but
[L] as in lamb (L)

The vocal percussion line eliminates the IPA brackets, and should be treated with less exactness, focusing also on the vocal percussion aspect.

Overtones

This piece has been written so that people who have less overtone singing experience can create the desired effect by focusing on the vowel and consonant shapes. For them, listening for the overtones while singing the shapes will get them close enough to create the sound colors. More experienced groups can begin to tune to the overtones, particularly when they are in unison, and allow that experience to influence the overall tuning, honing the overtone to a strong aural presence.

The overtones are represented in each staff with cue notes (20% smaller) above the pitch that the singer will sing. Note that for the soprano and alto voices, these notes sound an octave above written, and for tenor and bass, they sound two octaves above written. The numbers next to the overtones in each part indicate which overtone above that fundamental (e.g. the sung note) is reinforced. There are no numbers for the vowel gliss sections, as the overtones are more approximate. See below for more on the overtone series.

Learning to overtone sing has two main aspects; hearing the overtones and creating sustained vocal tract shapes that accentuate the overtones you're hearing. Listening is the main guide throughout, though, playing around with the vocal tract shapes can help the singer begin to become aware of the overtones.

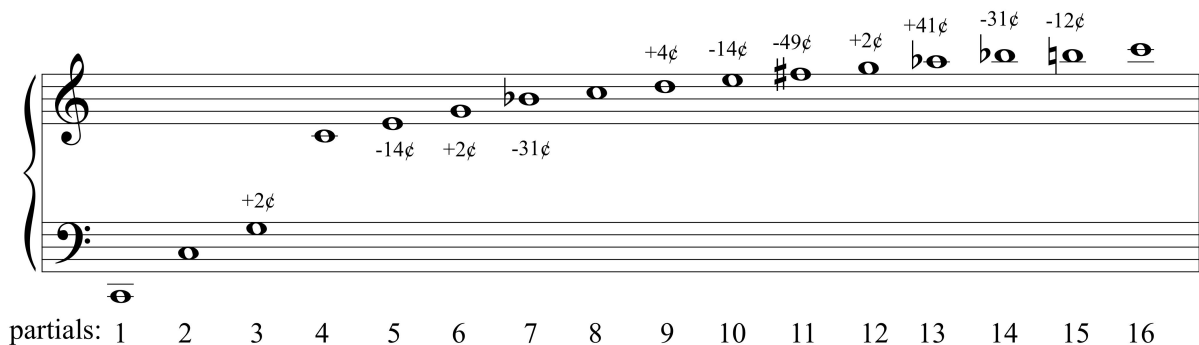
To begin, singers need to become used to sustaining sound while singing [L] and [ɹ]. This will take some personal repetition, and patience. While doing so, try to make a strong, twangy* (not nasal) sound without throat tension. Listen for overtones (whistles) while doing so, but try to avoid allowing your sound to become quiet as you listen. Once you have some capacity with the [L], try to sing the [L] and [ɹ] simultaneously. Then practice sustaining the [L] on a single note and moving back and forth from [ɹ] to [i] to [u] and listening for the overtones to change. None of these coordinations are immediate, but they come with time, and with allowing your body to feel easy and relaxed while exploring them. Note that the tongue and lips combine to make the subtle adjustments needed to focus specific overtones. The ear will guide you better than trying to manipulate lips and tongue, but awareness of those motor functions can be helpful. If you're someone who likes to "know", this process can be frustrating at first, as if you'll never get it, but patience will serve as a wonderful guide.

Conductors are encouraged to avoid learning the notes separate from the IPA phonemes (e.g. on a neutral vowel). Experience on the different phonemes is far more critical than learning the notes, and will take much longer to hone than will learning the notes.

Overtone Scale

The overtone scale is a mathematically-understood natural law wherein harmonics above the first (perceived) note proceed in a logarithmic function. This means that every note in the series is related to the others in a distinct, mathematical way. Specifically, the first overtone above the bottom one is two times the frequency, the third is three times, then four times, etc. in ascending order. They are numbered from the lowest tone, the one that a singer sings, being called "1". This first harmonic is also called the "fundamental." The second harmonic of any sound will always be twice as fast (an octave above) as the first harmonic (fundamental). The third harmonic will always be three times as fast (octave plus a fifth) as the first harmonic. The fourth harmonic will be four times as fast (two octaves), etc. This image shows the overtone scale for a C2.

Importantly, the exact same intervallic relationships will occur for any other note. Trained overtone singers often find the numbers helpful, because, and this is important, when your fundamental frequency (the perceived note) changes, the overtone series changes with it, but, the mathematical order of the overtone sequence remains the same. As you get used to hearing the overtones, you will develop your own way of interpreting them.



All vowel and consonant shapes bring out certain overtones and dampen others. This is why we can differentiate one vowel from another. Therefore, using the vowel and consonant shapes will accentuate the desired overtones. As singers get used to listening for the overtones, they will become more focused at energizing the intended overtones. Small vowel modifications can be made to bring out nearby overtones, especially for lower voice parts. Conductors can help by playing the intended overtone on the keyboard to help focus the ear. In this piece, overtones are often clustered so that the entire ensemble can listen for the same overtone targets.

Where overtone glissandi exist (e.g. [i]-[u]), the fundamental frequency doesn't change (e.g. don't sing a new note unless it's written on your staff), but the overtones will change in a gliss as you change vowel shape. The goal is to hear the cascade of overtones up or down. When those glides happen over a several measures, you can even focus on one overtone at a time.

The vocal percussion part should be performed without a microphone by a single individual. As the piece progresses, the amount of notes in the part increase through a formula known in the financial industry as compound interest ($[P(1+i)^n] - P$) where P=initial value, i=interest rate, and n=amount of time. In this piece, P=7 beats, i=3% and n=5 measures. As in many financial dealings, there are some minor adjustments to the actual math, always in the vocal percussionists favor, of course. By the final 5 measure increment, the vocal percussionist has 18.5 beats over the 5 measures showing how rapidly the initial value can change with compound interest. Compound interest is at the heart of our financial industry, and is one of the key ingredients in predatory lending practices, as many people don't understand how much interest will really be accrued on their initial value. This vocal percussion part demonstrates the incredible amount of increase over time in an aural way. Knowing that it's based in compound interest isn't musically necessary, however.

There are no dynamics, because the vowel shapes and overtones will create dynamics on their own. Singers can sing with a healthy, free tone and focus on the twang* (not nasal) quality in their voice to help create clarity which will bring out the overtones. Consideration can be made when changing from an occluded sound like [L] or [n] to a vowel sound like [i] or [ε] that the vocal sound remains free and twangy, and avoids becoming pressed.

* Working to create sounds while avoiding extra throat and jaw tension can be aided by focusing on the sound you want to hear. Twang will help, as it will assure a strong and focused sound. Twang is a common use term that refers to focusing the epilarynx tube, which is a small tube that sits just above the vocal folds. When focused, the epilarynx tube creates acoustic feedback that help the vocal folds vibrate more easily. When twang is achieved, your sound will feel easier, be more focused, and clearer. Since it comes from the larynx, you can't feel it directly, and people tend to say that they feel the result of twang in the back of their nose or around the soft palate, leading people to confuse twang with nasality or with the soft palate (which you can't directly feel moving either). To find twang, practice

whining like a toddler, say “I don’t wanna!” at different volumes and notice if the focus in the sound remains.

Program Notes:

In The Name Of Capitalism is a three-part piece composed with choral overtone singing as a central component. The piece utilizes English-language vowel and consonant shapes to accentuate the overtones, thereby making the overtones in the piece text-focused, and more accessible to those who haven’t trained in overtone singing.

It explores the social ills that are easily wielded by those who use capitalistic leverage to gain power over a community. Those who wield such power often point to Adam Smith’s concept of “The Invisible Hand” as a way of exonerating themselves from engaging in greed-driven practices to undermine others. In this mythology, the Invisible Hand becomes a god-like figure whose existence allows for anyone to take advantage of anyone else in the name of profit, and creates a false division between the “deserving haves” and the “underproducing have nots.” Within this mythology also exists a belief that the Invisible Hand creates true democracy because everyone, regardless of race or background, has access to the same system. What it ignores is the fact that within that system, individuals can harness more power than others through collusion and misinformation, thereby making the system ultimately inequitable.

I was inspired while reflecting on my family’s financial changes over the last hundred years, and the ways that minorities and women have been excluded from the American Dream through targeted capitalistic discrimination. My great grandfather’s family was forced from their livelihood as farmers by predatory lending practices in the early 20th century. This was an all-too-frequent story in that time, where banks would create lending paradigms that ultimately bankrupted farmers, whose land was repossessed by the banks and sold for profits. When my grandfather was a year old, his family moved to Birmingham so that his father could work the mines with the rest of his family who had already relocated. He died that year, leaving my great grandmother to raise her infant in abject poverty. When my grandfather was working age, after the second world war, he decided to start a business as an insurance salesman, cognizant of not wanting the dead-end life of indentured servitude that the mines had become. He pushed his kids to work multiple jobs while in school to have enough money to attend college. Those decisions, plus a mid-century social system that created renewed opportunities for the poor and middle class, led to my parent’s generation entering the upper middle class. In two generations, they swung from the poorest of the poor to some of the richest in the world. The Invisible Hand would, to some, appear to have won the day. Certainly, the potential for people to choose work outside of the poverty-inducing practices that drove my grandfather’s family into poverty in the first place, is a benefit. It’s hard, though, to overstate the impact of government regulations on the financial system and a widened social safety net that marked the most stable economic period in American history, making it possible for the Invisible Hand to serve more people. My generation has seen an increase in the same kinds of predatory practices that bankrupted my grandfather’s family, and a whole-scale reduction of regulations and social safety net. All of us attended college, and we all have heaping debt. Our children’s education and general cost of living continues to rise while wage growth has been largely stagnant for decades. The rich are richer, and the poor are poorer, just like the decade when my grandfather was born. The

difference in what my parent's generation benefited from and what my grandfather and my generation are going through, was a community-wide belief that everyone has a share to pay to the whole, and that no one should be able to rig the system to their advantage in ways that drags the society down. That belief has been slowly abandoned and attacked since the 1980s. The community at large has been fed a diet of falsehood that has led them to miss the reality lying right before them. As long as we are given all that we want to buy, today's citizens seem happy enough to be taken advantage of, and to slip into wide-spread indentured servitude again.

The use of overtones in this piece, besides being musically satisfying, mimic this economic reality. We relate to overtones with every sound we hear, yet, most people have no idea that their ears are hearing and processing this wealth of information. We are content to focus on the simplest information we can process, and let the rest exist without our awareness. Even though studies have shown that greater awareness of overtones can lead to increased mental capacity, emotional calm, and self-awareness, people, even professional listeners like musicians, often reject the invitation to build their aural capability. This reflects a citizenry willing to take what they get from those in charge.

The third part of "In The Name Of Capitalism", entitled "Soul", is set in part to a text by Lynne Twist from "The Soul of Money", and in part to a text written by the composer. The opening and closing overtone melody comes from the folk song "Bring Me Little Water, Sylvie" that was common in Alabama at the time my grandfather's family was working in the mines. I chose a folk-like melody at the end as a celebration of the marches and protests that have become more prevalent in America since the 2016 Presidential election. They have been promoting the idea that the more people come together, and the more that people believe in the scientifically-supported reality that cooperation, not competition, is the key to everyone's success, the more we'll each thrive. Competition, in fact, grows from and feeds cooperation. Today's economic system reveals a reduction in competition in the name of collusion. The rich have more power, and everyone has less, so there are fewer people to compete or cooperate at the highest levels. Lynne Twist reminds us that when we allow who we are inform how we allow money to shape our lives, we begin to relate to money as the social construct that it is, thereby taking our power back. Listening beyond what we're given, like the overtones in music, opens opportunities to refresh our thinking.

In The Name Of Capitalism

Part 3: Soul

Let your soul inform your money and your money express your soul. -Lynne Twist

David Harris

SA Overtones
Soprano

SA
Alto

TB Overtones
Tenor

TB
Bass

♩=60

[L]

S

A

T

B

VP

K P T S K P T

8

5

7

10 9 8

10 9 8

12

[L] [E] [L]

[L] [E]

[L] [L] [L] [E]

[L] [L] [L] [E]

vowel glissando [i]-[u] over the length of the note will correspond to the overtone glides above

14

S
A
T
B
VP

S K P T S K P T

19

S
A
T
B
VP

S K P K P T S K P T P K T

24 4 3 3

S [L] [I] [n] [f] [O] [ɹ] [m]

A [e] [L] [I] [n] [f] [O] [ɹ] [m]

T [I] [n] [f] [O] [ɹ] [m] [i]

B [I] [n] [f] [O] [ɹ] [m] [i]

VP S K P K P T S K T K

Singers change notes and phonemes individually at their own pace but not too quickly with attention to overtones. Phonemes always sung in the same order. It's not important to have all notes at all times.

28 3 higher sop can use [I]-[ə], [ɪ]

S [i] ~[i]-[u], [ɹ], [m] [ə], [n]~

A [i] ~[i]-[u], [ɹ], [m] [ə], [n]~

T ~[i]-[u], [ɹ], [m] [ə], [n]~

B ~[i]-[u], [ɹ], [m] [ə], [n]~

VP P T P K T S K S P K S P T S P T K T S K

meld mm 36-38: singers choose a moment in 37-38 to move to the new note clusters and the [ɛ], [ɹ]. Once changed, stay with the new phonemes and notes.

33

S

A

T
8
[æ] [n] [d] [æ] [n] [d] [æ] [n] [d]

soloists

B
[æ] [n] [d] [æ] [n] [d]

VP
P T P K T S K S P K S P T S P T K T

37

S
3
[ɛ], [ɹ] A4/C3 [ɛ], [ɹ]

A
4
[ɛ], [ɹ] E5/G4 [ɛ], [ɹ]

T
8
[ɛ], [ɹ] A7/C6 G8/A7 S [ɛ], [ɹ] K P P K S K S

B
C11/D10 D10/E9
[ɛ], [ɹ] K S P P K K S

VP
S M K P T P K T S P S K S P K S P T

sing any pitch in the chord on [m]

change to [ɛ] on the downbeat

41 5

S
[ɛ] [i] gliss [u] gliss [i] gliss [u]

A
[ɛ] [i] gliss [u] gliss

T
[ɛ] [i] gliss [u] gliss [i] gliss

B
12 [ɛ] [i] gliss [u] gliss [i] gliss [u] gliss [i] gliss

VP
M S P T K T S M K K P T P K T S P S M K S T P K S P T

46 3 2 4 4

S
gliss [i] [ɹ] [s] [O] gliss [e] [L]

A
[i] [ɹ] [O] gliss [e] [L]

T
[u] [ɹ] [O] gliss [e] [L]

B
[u] [ɹ] [O] gliss [e] [L]

VP
M S P T K T S M K M K P T S T P K T S P S M K S

In The Name Of Capitalism

harmony second time only

50

S If you're ac - tive - ly part of the so - lu - tion If you're

A 4 4 5

T 8 8 [L] 8 10 9 8

B 8 10 9 8

VP [L]

53

S out there mak - ing your - self known. If you be - lieve u - ni - ty is e - vo - lu - tion, come to - ge -

A 4 4 4 5

T 8 10 8 8 10 9 8

B 12 15 12 8 10 13 12

57

S ther, share the load If you're loa - [u]d

A 4 4 4

T 9 8 10 10

B 13 12 8 8

1st 2nd 3