HOPELESSLY FAILLING
TO DESCRIBE MY ATTACHMENT

I HOLD MY TONGUE

DANAE
IO (gr.)

0.

I rest the words on my tongue before I speak,
to taste them.

Salivating, I clean my palette.

I move my mouth in a speaking motion
but without breath, to practice.

I hit start
and read out loud the highlighted text
of the audition script.

I read:

Your body's central organ is your heart. Your personality's central organ is your voice.

I find a fitting rhythm to pronounce
the sentences; performing my accent in its most
British-ish version. I use "your" as a marker
to make the sentences follow a similar pattern.

I repeat:

Your body's central organ is your heart. Your personality's central organ is your voice.

I imagine myself in a large recording studio.
My enunciation of the text is set in a tone
resembling something between an airport
announcement and a body lotion advertisement—
except for the pitch, which is much
too high for either.

I continue:

Like the lines on your palm, your voice deepens and takes on the melody that reflects its everyday habits and usage.

So how can we emulate a voice when it is so much more than the physical organs that give rise to it?

My breath barely makes it
to the end of the sentence,

so I repeat:

So how can we emulate a voice when it is so much more than the physical organs that give rise to it?

This is where science and technology can give us new hope.

We can now reverse engineer a voice by taking speech from a healthy donor and vocal samples from those in need.

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That's because we have discovered that even a single vowel contains enough vocal DNA to seed the personalization process.

Just as a blended wine has a signature flavor, a blended voice is uniquely crafted to convey the age, gender and cultural linguistic history of the recipient.

My audition was successful and after hours of reading aloud, my voice has entered the VocaliD voice bank.

I am still a bit confused by the analogy between the voice and the heart; my voice as the central organ of my personality. Heart-donors can only donate their heart after their death, but sharing my voice marks no death of my personality.

When I donated my voice, VocaliD was collecting voices to create a more diverse range of options for people with speech impairments using assistive technologies. In an article about VocaliD, I read that they had a shortage of high-pitched voices that can be used as a base to create child-like ones. I started imagining, what kind of person could have a percentage of my voice? Would my voice be part of a blend for a young boy? Would my high-pitch smoothen out another donors lower voice? Would my underlying Greek accent be detectable in the blend? Who would wear it best?

Going on VocaliD's website a year later I found out that they have branched out from their original scope and now they also create voice interfaces for brands. They write:

"Whether you are an individual using assistive technologies, a brand looking for a unique voice, or an organization looking to secure your voice authentication systems, VocaliD has the solution. [...] VocaliD empowers your business with unique synthetic voice capabilities that help you better serve the consumers you target. Design the voice of your brand and be heard."

My voice—or what my voice was a year ago—sits on a database waiting to be used as an ingredient for the speech of a person or a business. My voice is fugitive, is something I grow with. In the last five years I have changed at least four distinct accents in English. As an ingredient though, my voice embeds my histories with my microphone's technicalities, the morphology of my mouth with my sitting position, the echo of my room with the sound absorption of my clothes and much else. It contains no breath or sighs, no hesitating "uhms" or sounds of swallowing before an utterance. My voice in this case is the amalgamation of relations between some human and non-human entities that formed a year ago.

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An articulate amalgamation.

1.

⟦IMAGE 1⟧
SUGGESTED ADVERTISEMENT FROM WISH.COM ON FACEBOOK.

I scroll through my feed and I stumble upon an add of a model of a tongue, sold by Wish.com; a trending item. It looks wet and well textured. Attached to nothing but enveloped by the highly specialized advertising I am targeted. By that point I have been researching voice interfaces, voice modeling and the voice of the erotic for over two years. I find modeling to be a curious process; what features of the thing to be modelled are essential enough to be replicated by the model? Which features feed the purposes of the model? What does a model of an amputated tongue do in my feed?

I hold the tongue in my palm, it fits just in the center of it. It's squishy and somehow moist. It sticks on any non-lustrous surfaces. I lay it flat in my mouth on top of my tongue; it tastes like flubber and makes my mouth feel uncomfortable. I try the trick of letting it fall off my mouth. It's now covered with my saliva.

I imagine the assembly line of thousands of identical tongues moving through industrial conveyor belts, overlooked by underpaid workers in some factory in Shenzhen, China.

89 Tongues are laying flat and silent, individually wrapped in plastic pockets. I keep thinking how many tongues these tongues have touched.

2.1

⟦IMAGE 2_1⟧
3D TONGUE MODEL ON TURBO SQUID.COM.

The model is tagged as: tongue, mouth, taste, anatomy, people, human, character, realistic, lick, licking, buds. I bought it out of a long selection of CGI tongues on turbosquid.com. Its movements seem more realistic than those of most models on the site and the texture feels appropriate.

My new tongue comes without saliva.

It is only sold as an autonomous hollow piece, unattached to any other objects of body parts. Under the right lighting it looks slightly sparkling, like if it was once wet. I can now animate it and encapsulate it into my own environment.

The model is made by ND, a CGI animator who specializes on dental surgery animations and lip-sync. The tongue can morph to 21 positions, allowing it to lick, swallow and potentially pronounce a few phonemes. While researching more about ND, I found out he is one of the best animators of mouth parts; working with various dentists and dental associations. In his spare time he seems to place those models in over-sexualized, feminine characters which are sold as wholes or in parts.

2.2

91 [IMAGE 2_2] SCREENSHOT OF THE VIDEO "HOW TO BRUSH PROPERLY" ON VIMEO.COM.

I came across a video capturing my newly acquired tongue in a character's mouth resting behind the teeth while she demonstrates how to brush teeth properly. The character narrates in a synthetic feminized voice the correct positions to place a toothbrush in a floating mouth while my tongue is changing shapes to accommodate the toothbrush. The levitating mouth then morphs to the mouth of the character and she utters "Finally, don't miss the most dirty place in your mouth: the tongue!".

The video ends with a sweet giggle.

2.3

[IMAGE 2_3]
IMAGE FROM TURBOSQUID.COM SHOWING THE FACE CONTROLS OF THE 3D MODEL 'LOLA V3.9N 'MAX9".

On the same stock model website I purchased my new tongue, the tongue is hosted by the mouths of Jane, Jane-Orthodontic-Mannequin, Laura, Rose, Anna v.4, Anna Basic, Lola v3.9, Linda v3.9, Ballerina-Nova, Clown-Girl-Christi, Jungle-Girl-Laura, Stella-Santa's-helper, and Maggie—all ND's creations. They are modeled to great detail with controls that make them perfect for 3D orthodontic demonstrations, or porn films.

2.4

[IMAGE 2_4]
SCREENSHOT FROM TURBOSQUID.COM SHOWING THE MOUTH CAPABILITIES OF THE 3D MODEL 'JANE'.

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DI: How many tongues have you modeled?
ND: I believe 4 or 5 models, started from scratch.

DI: When you model a tongue, where do you start?
ND: For shapes like a tongue, I like the technique "box modeling" as it gives you a fast start and the ability to see the overall shape and form before adding the details. Then I subdivide and start to create loops. I work on one side first, and at some point the symmetry is destroyed so I can add deviations on every part. Symmetry is not a good word in biological models.

CALL TO

Lucia Dove(uk.)
TRUMPET SCALES

Sea began. Hundreds of chests of drawers hung wide open. Split silos. Saltwater marshes foaming at the mouth with brackish waste: doorknobs; sodden wallpaper; cattle; ruined card games; bed sheets, spoiled; busted bikes; bloated, floating worms.

I knew the land for years prior to my bones inside it. Decay matters more than life, it is true that in the winter everything has sunk and in the summer everything is sinking. I talk to bird watchers while I roll jelly-green sea glass between my fingers until it is round and frosted enough for my earring collection.

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Lucie de Brechard(fr.)
EATING FLOWERS

When I was young and not able to understand why certain things are forbidden, I used to eat flowers. I remember being particularly drawn to one kind that had a creamy white bulb in its center, and pink towards the tips of its five petals. I would pick the flowers that had leaves of wide enough diameter to allow other organics to be rolled up inside. I would then place them on the soil as amuses-bouche on a platter and, once the composition was satisfyingly organized, eat them one by one, trying to analyze the taste, the texture, and the look of each before and after rumination. The process was very strict. I had to go slow so I could taste every layer, each bit of the hybrid matter, in order to compare it later on with the intuition I'd had while making it. I would not swallow them for fear of getting sick and therefore getting caught. My body had to stay safe and sound for the ritual to keep going, as I knew that I had to perform the act secretly, even if at the time I couldn't grasp the reason why it was not allowed, why it was unspeakable. To not voice the rite was to keep it in the body itself; voicing it would have made the excitement of the forbidden fruit melt away.

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DI: What research do you do to create a tongue? Is there any visual research you go through? If so, is it possible to share an example?
ND: The first and easier step is to have a mirror on your desk and take a look at your own tongue. We may look like crazy people, but every facial animator uses this method. A lot of research online is needed for sure, so you can have a good idea of the boundaries. There is infinite number of human tongues, but they all fit in predefined boundaries (by God).

DI: What have the tongues in your animation done (speak / lick / swallow)?
ND: I've tried everything. 75% of my clients are dentists or orthodontics, so I've been through every possible movement of the human tongue. Even those strange "U" and "W" shapes that not everyone can make. :)

DI: What is most important to make a tongue realistic?
ND: It's the texture, the material.
You need a really good balance between roughness, wetness and specular reflection. A bad tongue model can look pretty good with a nice material and vice versa; a perfect model can be ruined with bad textures.

The second most important thing are the lights. You need good studio light simulations to present such a complex object in a beautiful way.

3.

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[IMAGE 3]
SCREENSHOT
OF THE
PRODUCT
"TINY FINGER
VIBRATOR
TONGUE CLIT
RINGS MASSAGE
STICK
MASTURBATION
CLITORIS G-SPOT
ORGASM SQUIRT
BRUSH VIBRATING
SEX TOYS WOMEN'
FROM ALIEX-
PRESS.COM.

The rubbery model is slightly longer than my middle finger, on which it is resting upon.

The two outwards loops are fitting on my index and ring fingers. It is less flexible and a lot narrower than (1). Pressing the bottom button it vibrates and its tip moves rapidly in a small up-and-downwards motion. The exaggerated tongue buds that promise enhanced pleasure look very much like the suckers of an octopus arm. In this iteration, this model of a tongue has almost no visual resemblance to it. Textural and movement qualities of the human tongue are imitated in so far as they allow for an interpretation of the tongue as a sexual organ part taking in oral sex.

Khalil Iskarous, assistant professor of linguistics at the University of Southern California(USC), sees the similitude between the human tongue and the octopus arm too. The tongue's muscular structure is very much like an invertebrate; it moves, flexes and stretches by muscle moving muscle, rather than a typical vertebrate movement which is based on muscle moving bones. Muscular hydrostats are the biological structures that make tongues and tentacles move, bend, extend and change shape in the way that they do. Iskarous works with Andrew Gracey, associate professor of biological sciences at USC to investigate the movements of the human tongue along with octopus arms to understand further both of these complex muscle structures. In turn, this will help them gain knowledge about the way neurological diseases affect speech.

An article describing this interdisciplinary collaboration states, "[The researchers] will strive for a unifying mathematical model, but at the outset, the profusion of linguistic descriptors for the flexible human organ already has the octopus researchers a little tongue tied."

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Although the similarities in their structure are multiple, finding a common vocabulary to identify the movement of the human tongue and the octopus is part of their challenge in creating a model that encompasses both.

4.

Tongues without mouths, voices without bodies.

All models I traced are constructed for different purposes and therefore the tongue takes on various forms according to the use. Yet, in all aforementioned models the tongue exists as an autonomous figure, dislocated from the mouth. The tongue is designed to trick, to swallow, to lick, to articulate, to vibrate, to please. The tongue speaks without taste, and licks without saliva.

This type of compartmentalization of the functions of this complex organ echoes the way voice interface presupposes the possibility of the compartmentalization of the speaking process, as a series of distinct processes that define voice, language and speech recognition independently.

In the construction of voice interfaces, speech is not traced as an embodied method of thinking but rather, it is presupposed to some degree that language is an autonomous faculty that can be modeled computationally, and served to the virtual assistant.

In voice interfaces, voice exists without a body; it is stripped down to the phoneme and bound to grammar ready to bring any phrase in locution. This definition of speech disregards any potential extra/para-liguistic elements, such as breath, murmurs, sighs, breaks and much else.

Once the voice of the voice talent has left their body and lives in the cloud as an autonomous figure, the voice has entered the realm of being a commodity. Nuance's Vocaliser 6 Text-to-Speech demo tells us, "You can use Vocaliser 6 to make me sound natural and engaging, no matter what I am saying." The saying and the said are distinctly separated and the voice has no agency over its speech.

5.

As I touch language to expel it in sound, it lingers in my mouth and gets wetted on my tongue. The slippery muscle moves to accommodate the words. In movement, sometimes it morphs in shapes, like the ones moulded in swallowing liquids, or applies saliva to other surfaces. It trills to bring the Greek "R" forward, and hesitates a little when I speak in my British-ish accent. My tongue wraps my whispers, which my teeth punctuate to decipherable sounds. When I speak, my voice inflects in excess of my words, bluringtheirspacing.

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Each time I donate my voice to an interface, I donate something different. My voice carries me-the-plenty. In my donation, I only share my voice in reading. I log my verbal interpretation of a series of well-composed sentences to the VocaliD database. The voice I donate never betrays grammar. The cracks of my voice, its variabilities and inconsistencies leak from the algorithmic model. The more I read out loud, the more I work towards a coherence compatible with the preferences of the voice model.

I mould my voice to its hearing.

I like thinking of that which
is left in excess of the voice model
as residue.

I dip my tongue
in the residue.

And I repeat:

Your body's central organ
is your heart.

Your personality's
central organ is your voice.

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