

# Chapter 1

## The Phonemes

The frontal lisp and the lateral lisp represent two different problems imposed on the same set of phonemes. The phonemes that are affected are these six sounds: /s/, /z/, /ʃ/, /ʒ/, /tʃ/ and /dʒ/. The phonemes of concern to us comprise six distinct sounds, however each is represented by several spelling patterns. Table 1 presents a list of each phoneme and their spelling options.

### Sibilants, Stridents, Fricatives and Affricates

The individual phonemes in our set have been called *sibilants*, *stridents*, *fricatives* and *affricates*. The following definitions contain quoted elements from Nicolosi, Harryman and Kresheck.

1. *Sibilant*: A sibilant is a phoneme “whose production is accompanied by a hissing noise.” This set includes /s/, /z/, /ʃ/, /ʒ/, /tʃ/ and /dʒ/. The term comes from the phonetics literature.
2. *Strident*: A strident phoneme is one that is “characterized by noisiness resulting from a fast rate of air flow directed against the hard surfaces of the teeth.” This set includes /f/, /v/, /s/, /z/, /ʃ/, /ʒ/, /tʃ/ and /dʒ/. The term comes from the phonology literature.
3. *Fricative*: A fricative phoneme is one that is formed “by directing the breath stream with adequate pressure against one or more surfaces, principally the hard palate,

Table 1

Phoneme	Spelling	Sample Word
/s/	s	soup
	c	city
	sc	scene
	ss	boss
/z/	z	zoo
	zz	buzz
	s	his
/ʃ/	sh	shoe
	ss	passion
	t	nation
	sch	schilling
	c	appreciate
	ch	Chicago
/ʒ/	s	sugar
	g	television
	z	beige azure
/tʃ/	ch	chew
	tch	watch
	t	question
	c	cello
/dʒ/	j	jump
	g	gem
	dg	edge
	dj	adjust
	gg	exaggerate
ld	soldier	

# Chapter 2

## Oral Position for Sibilant Production

The oral mechanism must be positioned in precise ways in order to achieve the hissing element necessary for correct production of each of our six target phonemes. We shall discuss this idea generally for all six of the phonemes, and then specifically for the characteristics that differentiate one pair from another.

### Midline Stridency

Midline stridency is the most important element of sibilant production. Stridency is created upon exhalation through the mouth. As we exhale, we direct our voiced or voiceless air stream through the oral cavity along a mid line channel from back to front. The basic groove shape is created by elevating the sides of the tongue and by keeping its midline low (figures 01 and 02). This fundamental grooved tongue pattern is essential for correct production of all six phonemes because it ensures that the exhaled air stream will strike against the lingual surfaces of the incisors in such a way as to create air turbulence right at midline. Turbulence is created as the air stream (1) tumbles around between the tongue and the incisors, (2) cuts between the upper and lower teeth, and (3) exits the mouth between the lips.

Figure 01

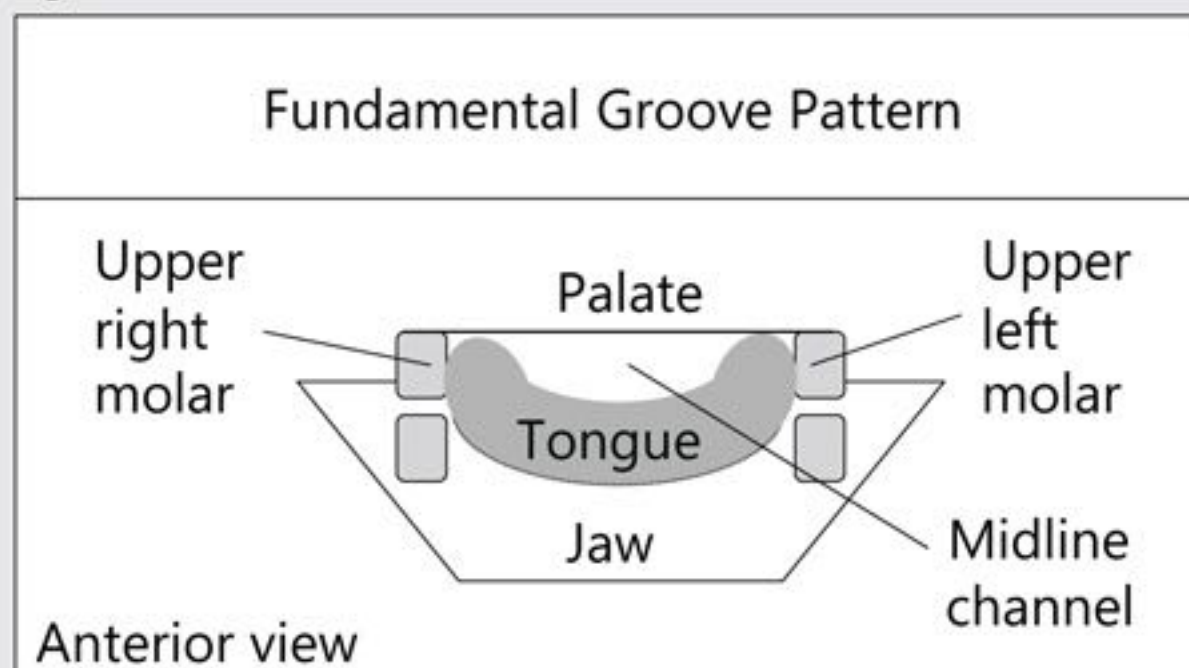


Figure 35

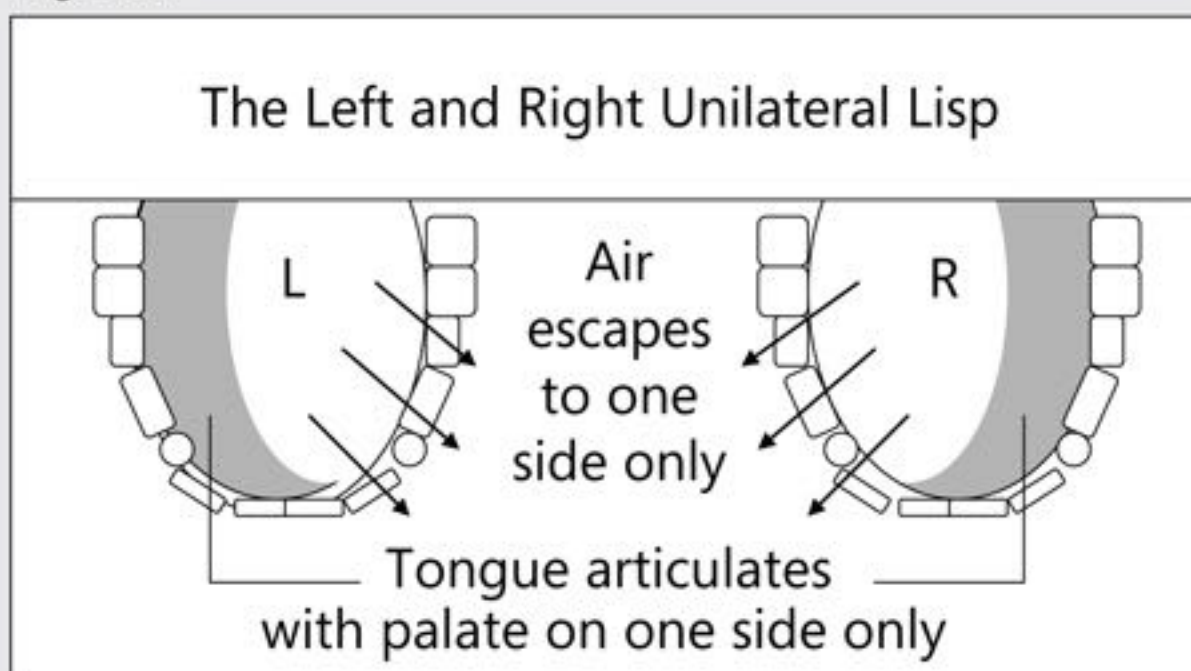


Figure 36

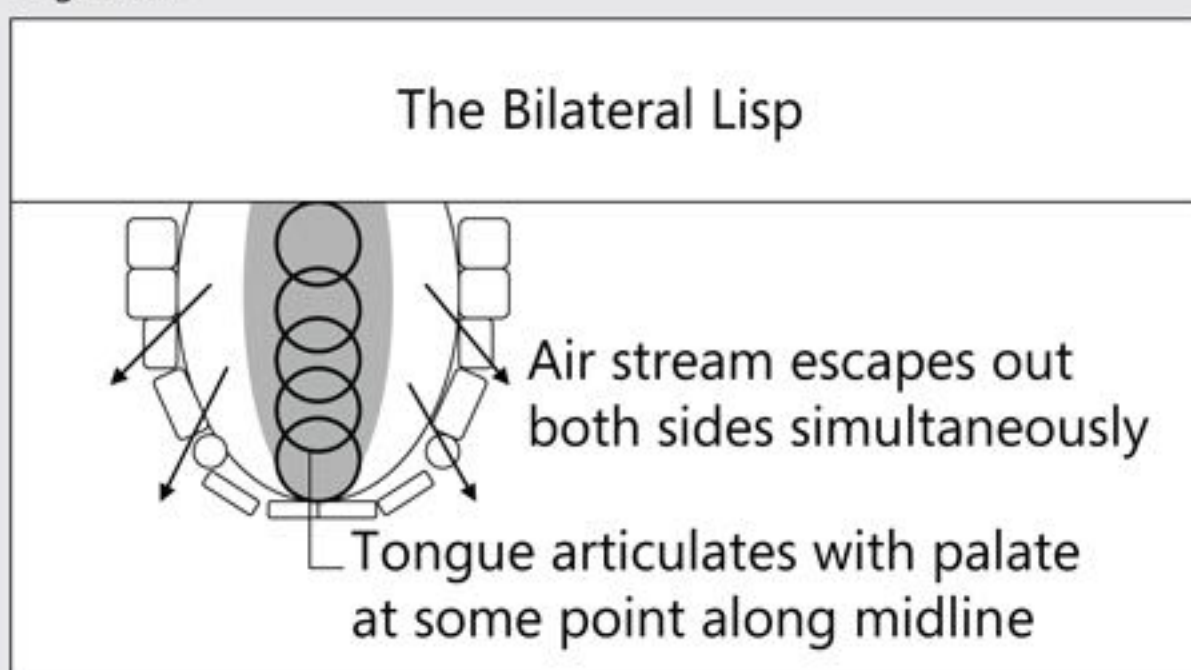
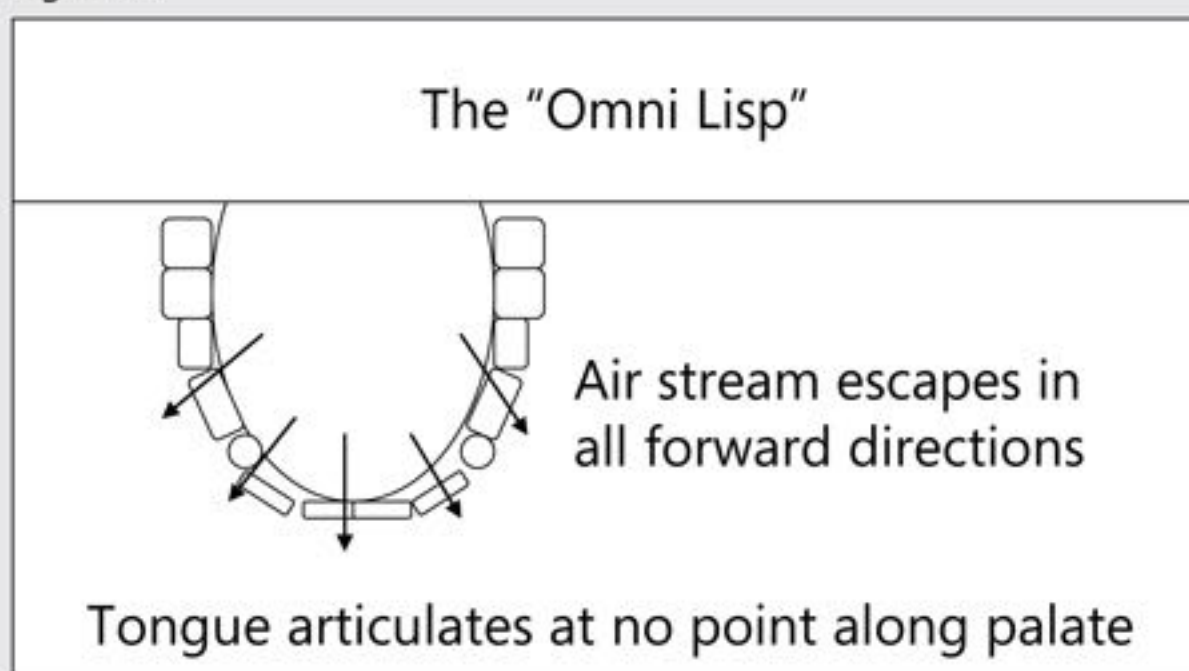


Figure 37





I got coat sand in my pocket.  
The right side came off.  
I like the night seat.

The boat sail broke.  
The bright side came on.  
Take the light saw to the back yard.

### Non-standard Initial Position /ts/ Practice

In English, we do not use /ts/ in the initial position of syllables or words. But some clients cannot produce /s/ without /t/ for a long time. They need that /t/ to help keep the tongue back and to keep their air stream midline. However, their lack of skill need not stop us from marching forward. We do so by practicing words with a ts/s substitution.

I tell clients to pretend that their words have a /t/ in front of them, and I write a little “t” in front of the “s.” Any words that begin with /s/ can be used as long as there are no other /s/ sounds in the words. Single-syllable words that do not contain s-blends work best at first.

#### *Words – initial /ts/*

'Sad	'Sail	'Saint	'Sand	'Sank
'Sap	'Save	'Saw	'Seat	'Seek
'Seen	'Seep	'Set	'Sew	'Sick
'Side	'Sign	'Sin	'Sing	'Soak
'Soap	'Sob	'Sold	'Sound	'Soy
'Sue	'Sung	'Sub	'Such	'Surf

#### *Phrases – initial /ts/ – first word*

'Sad man	'Sail home	'Saint Paul	'Sand pail	'Sank low
'Seek more	'Seep down	'Set right	'Sign up	'Sing along
'Soak up	'Soap bar	'Sold out	'Sound off	'Soy bean

#### *Phrases – initial /ts/ – second word*

Wet 'sand	Hot 'seat	Not 'seen	My 'set	Can 'sew
Other 'side	Neon 'sign	Can't 'sing	Loud 'sound	Good 'surf

#### *Sentences – initial /ts/*

I am 'sad about it.	Get the 'sail ready.
He bought 'sand and rock.	We 'sank and called for help.
Tree 'sap flowed into the bucket.	'Save the paper.
We 'saw the people.	'Set the food on the table.
What 'side do you want?	The 'sign fell down.

#### *Reading with /ts/ in Initial Position*

We can work toward carryover of correct tongue position by reading aloud using the ts/s substitution. Select a passage of reading material, highlight the initial /s/ sounds, and then have the client read the passage aloud using ts/s each time. Do not concern yourself with words that contain /s/ in other positions, only focus on the initial /s/ words. Have the client read slowly at first, and increase speed over time. Use bland reading material at first so the client can concentrate on his tongue position. Gradually work toward more interesting

## Chapter 11 Summary

### Onward to the Other Sibilants

- A client who is successful with the Long T Method and the Cornerstone Approach will be able to move from /ts/ and /s/ to the rest of the sibilants – /ʃ/, /tʃ/, /z/, /ʒ/ and /dʒ/.
- The rest of the sibilants are made by altering /s/. The client learns to widen the groove, round the lips and/or add voice.
- Use the Butterfly Position to widen the midline channel for /ʃ/, /ʒ/ and /tʃ/.
- Help the client use his ear to tune his production from /s/ to the other sounds. Auditory discrimination guides him in learning all the sibilants.
- Encourage the client to pause between the sibilant sound and the rest of his syllable or word. This helps him achieve correct oral movement and position while speaking slowly and deliberately.
- The client will need to work slowly in order to maintain control over the sounds. Start slow and work with greater speed over time.
- Rehearse all the sibilants in words, phrases, sentences, paragraphs and conversation.
- Clients who have failed in the Long T Method and/or the Cornerstone Approach will need to move on to the methods described in chapters eight and nine.



# Chapter 14

## Real Clients in Real Therapy

Our discussion of the evaluation and treatment of the frontal and lateral lisps is complete. This final chapter demonstrates that treatment of the frontal and lateral lisps can be quite varied in terms of content and time involved. It presents summaries of real clients enrolled in real therapy. These examples are meant to help the reader understand the divergent nature of these therapies. Each case presents basic information about the client, his speech problem, the treatment process, results and lessons learned in the process.

### David: The Easiest Therapy Imaginable for a Bilateral Lisp

David was a fourth grade student enrolled in public school during the 1970's. David was new to the school district after having moved to the United States from England the prior summer. His teacher had referred him for speech screening during the fall semester. She wanted to know if his problem was one of error or accent. David had received no prior therapy and demonstrated no other developmental or learning problems.


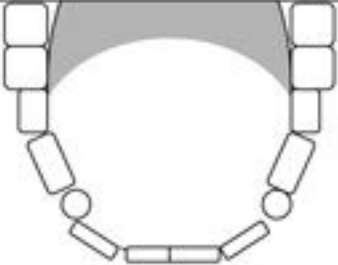
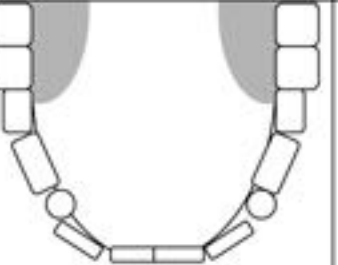
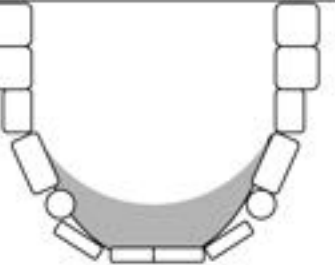
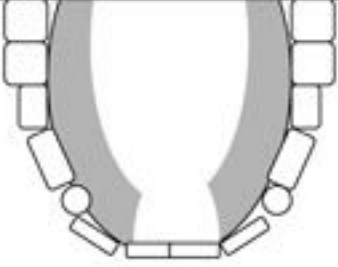
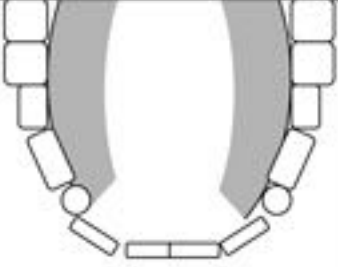
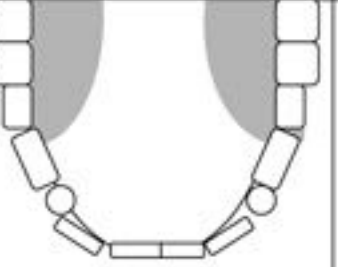
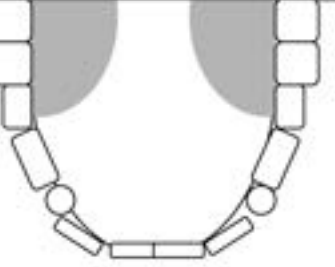
- *Screening:* Initial screening revealed that in addition to speaking a dialect of British English, David used a bilateral lisp on all the sibilant phonemes. Oral-motor skills appeared well developed and the lisp seemed to be the result of simple habit. Articulation on all other phonemes was excellent.
- *Treatment:* During the initial screening session, I described the problem of the sibilants to the student. David seemed to understand the problem and was willing to be enrolled in therapy. David was scheduled to begin weekly therapy the following week.
- *Results:* David returned the following week for his first session and his bilateral lisp had completely disappeared! Stunned, I looked back at my original notes to make sure I was not remembering his problem incorrectly. After assuring myself that I was not imagining things, I asked him what he did to make this rapid and dramatic change. David replied that no one had ever explained to him that he was making these sounds incorrectly. He said that the things I had explained to him the prior week had made sense. During the week between his screening appointment and his first therapy session, David had figured out which phonemes were affected. Then he had figured out how to say them correctly from the description

## Appendix 2

### The Palatograms

Inferior view of the palate. Gray sections represent areas where the tongue makes contact with the palate. White areas represent areas where the tongue does not make contact with the palate. Adapted from Zemlin, 1968.

Figure 75

Palatograms			
<i>/t/, /d/, /n/</i>	<i>/k/, /g/, /ŋ/</i>	<i>/p/, /b/, /w/, /m/</i>	<i>/l/</i>
			
<i>/s/, /z/</i>	<i>/ʃ/, /ʒ/</i>	<i>/y/</i>	<i>/r/</i>
			

## Appendix 13

### Sample Dialogue

Learn to do articulation work at a conversational level by studying this dialogue. The therapist combines articulation work with a subject of the child's interest. She balances work on phoneme with topic elaboration to help the client learn to think about his speech work at the same time he is thinking about other things. Notice that the therapist uses every opportunity to bring up target words, but she allows the conversation to sound as natural as possible. Also notice that she ignores sound and words for which the client is not ready.

THERAPIST: Do you like rats?

CLIENT: I have a rat in my classroom.

THERAPIST: Many rats, or only one rat?

CLIENT: Only one rat.

THERAPIST: Do you like rats?

CLIENT: Rats are okay.

THERAPIST: Hey. You remembered to use the Long T. Very nice.

CLIENT: My teacher's rat is fat.

THERAPIST: A fat rat! Fat rats are funny.

CLIENT: Yea.

THERAPIST: Say, "Fat rats are funny."

CLIENT: Fat rats are funny.

THERAPIST: Oh, you forgot to use the "Long T" we practiced.

CLIENT: Oh yea.

THERAPIST: Say it again, but use the correct "Long T." Say, "Fat rats are funny."

CLIENT: Fat rats are funny.

THERAPIST: That was good. Why is that rat so fat?

CLIENT: I guess he eats too much.

THERAPIST: (Smiles.) Yea. He probably eats too much. Now there's another word with a Long T. Eats.