Unit 5b: English Affricates and Fricatives /tf d3, f v, θ δ , s z, \int 3, h/

1 INTRODUCTION

This unit describes the sounds referred to as affricate and fricative sounds.

2 OBJECTIVES

By the end of the unit, learners will be able to identify and describe:

- the affricate sounds,
- the fricative sounds, and
- distinguish between the acoustic cues for the affricate and fricative sounds.

3.1 THE AFFRICATE SOUNDS

Affricate sounds are produced at two points of the organs of speech namely the alveolar and palatal regions. Their rendition is achieved by placing the tip of the tongue at the alveolar; at the same time stuck the blade to the palatal region. This results in their double-phonemic phonetic representations.

Table: Three part description of the consonant phonemes in English

Place	Bi- labi	al	Labio- dental	Dental	Alveolar	Palato- alveola		Velar	Glottal
Manner	14101		dentar						
Plosive	р	b			t d			k g	?
Fricative			f v	θð	S Z	J 3	3		h
Affricate						t∫ d	3		
Nasal	m				n			ŋ	
Lateral					1				
Liquid					r				
Semi-vowel	W						j		

3.1.1 /tf dx/: Palato-alveolar Affricate

The first of this pair is voiceless and fortis while the other is voiced and lenis. They are the two main affricate consonant sounds of English. The first pair, /tʃ/, is a combination of the voiceless fortis alveolar /t/ and its voiceless fortis but palato-alveolar counterpart, /ʃ/. The second pair, /dʒ/, combines the voiced lenis alveolar, /d/, with the voiced lenis palato-alveolar, /ʒ/. This is the reason they are described as *palato-alveolar* consonants. Like the plosive sounds, they completely obstruct or stop the airflow in the oral tract; but unlike the plosive sounds, do not abruptly release the pent up air with an explosion, but by gentle release. This is why they are called *affricate* consonant sounds.

/tʃ/ Can occur as: ch, tch, t as in e.g.: choice, catch, feature.

When initial: choice, chess; medial: orchard, wretched; and final: catch, batch.

/dʒ/ Can occur as: j, g, dg, gg, dj, de, di, ch as in: Jos, gem, bridge, suggest, adjective, grandeur, soldier, Norwich.

When initial: joy, jam; medial: budget, urgent; and final: large, judge.

3.2 THE FRICATIVE SOUNDS

The plosive and the affricate sounds are produced with some degrees of stoppage. Fricative sounds do not experience such stoppage as the articulators involved in producing them do not often make a complete closure against the air which travels to the mouth. Thus, within the little opening between the articulators, the emanating air is allowed to come outer space with a little sibilant (sss) sound.

3.2.1 /f v/: Labio-dental Fricative

Just like the pairs before, first of this pair is voiceless and fortis while the other is voiced and lenis. The main articulators employed to produce these sounds are the lower lip and the upper teeth; this is where they have earned the name "labio-dental". They are fricatives because, as explained above, there is left a little gap between the lower lip and the upper teeth; it's through this little gap that the air which produces the two sounds passes.

/f/ occurs as: f, ff, ph, gh as: in file, office, philosophy and cough. When initial: fill, phoneme; medial: affair, orphan; and final: staff puff.

/v/ occurs as: v, f, ph, as in: Victor, of, nephew.

When initial: vain, Valentine; medial: avoid reveal; and final: starve, pave.

3.2.2 /θ ŏ/: Dental Fricative

The first of this pair is voiceless and fortis while the other of the pair is voiced and lenis. They are dental sounds because the main organ in their production (apart from the tongue) is the upper teeth. The tongue and the upper teeth path ways very slightly allowing the passage of the air-stream with just little friction, in order to produce the fricative sounds.

 θ occurs as: th as in: thin, think

When initial: thorough; medial: orphan; and final: blacksmith.

/ð/ occurs as: th, as in: then, them.

When initial: then, them; medial: father, within; and final: with.

3.2.3 /s z/: Alveolar Fricatives

Like the pairs before, the first of this pair is voiceless and fortis while the other is voiced and lenis. They are produced with blade of the tongue stuck to the alveolar region living a partial space for the air-stream to force out. This is the reason the pair is described as "alveolar fricative".

/s/ occurs as: s, ss, c, sc, x(+k) as in: site, miss, cite, science, lax; when initial: sink, sing; when medial: respond, decide; when final: loose, lights;

z/occurs as: s, ss, z, zz, x(g+) as in: rise, scissors zinc, frizzle, example;

when initial: zinc, zing; when medial: lazy, excite; when final: lose, lies

3.2.4 /ʃ ʒ/: Palato-alveolar Fricatives

The first of this pair is voiceless and fortis while the other is voiced and lenis. Also, the sounds are palato-alveolar because there is an articulatory glide from the palatal to the alveolar region made by the tongue. While the tongue sweeps through these regions, it leaves a tiny space for the air to escape causing a little friction that gives rise to the sounds.

/ʃ/ occurs as: s, ss, sh, sch, sc, c, ch, t as in: sure, mission, shell, schedule, conscience, oceanic, charade, nation;

when initial: shout, sugar; medial: brochure, assure; final: fish, wish.

/ʒ/ occurs as: s, z, g as in: pleasure, seizure, genre; when initial: genre, gigue; medial: visual, measurement; final: does not occur in most English words.

3.2.5 /h/: Glottal Fricative

This sound is produced at the glottal region with the characteristics of the fricative sounds. It is a voiceless fortis sound which occurs as: h and wh as in: how, he, who, whose. When in the initial position, it occurs as: hell, his; at the medial position as: perhaps, behind; it does not appear at the final position in English.

4 EXERCISE

With the aid of 2 consonant sounds, distinguish between affricate and fricative sounds.