1. What is prosody?

(1) Prosody describes all the acoustic properties of speech that cannot be predicted from a local window on the orthographic (or similar) transcription. Qualitatively, one can understand prosody as the difference between a well-performed play, and one on first reading.

(2) Prosody in general covers intonation, rhythm, and focus in speech. Acoustically, prosody describes changes in the syllable length, loudness, pitch, and formant structure of speech sounds. Phonologically, prosody is described by tone, intonation, rhythm, and stress. The prosodic features of a unit of speech, whether a syllable, word, phrase, or clause, are typically called suprasegmental features because they typically affect all the segments of the unit.
2. Why is prosody important?

(1) The formant structure of vowels seems primarily determined by a phonological or orthographic transcription, but not entirely. Vowels are generally more completely realized in accented or focused syllables. From an acoustic point of view, it means that the formant structure is farther from the structure of a neutral vowel (typically the schwa), and closer to the vowels that one might see in the stressed syllables of a carefully spoken word. Thus, the precise formant structure of vowels normally contains a mixture of prosodic and lexical information.

(2) Prosodic units do not always correspond to grammatical units, although both may reflect how the brain processes speech. Phrases and clauses are grammatical concepts, but they may have prosodic equivalents, commonly called prosodic units, intonation units, or declination units, which are the actual phonetic spurts or chunks of speech. These are often believed to exist as a hierarchy of levels. Such units are characterized by several phonetic cues, such as a coherent pitch contour, and the gradual decline in pitch and lengthening of vowels over the duration of the unit, until the pitch and speed are reset to begin the next unit. Breathing, both inhalation and exhalation, only seems to occur at these boundaries.

2.1 What have we found in our study?

(1) Native speakers of English may have very different “concepts” or “habits” of where to put their pitch accents when they speak English.

(2) Results of the study: AESs and MSs differ significantly in putting their pitch accents on different parts of the words (t = -5.37, p < 0.01).

<table>
<thead>
<tr>
<th></th>
<th>AESs</th>
<th>MSs</th>
</tr>
</thead>
<tbody>
<tr>
<td>article</td>
<td>0</td>
<td>0.12</td>
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<tr>
<td>infinitive</td>
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<td>0.20</td>
</tr>
<tr>
<td>conj</td>
<td>0.03</td>
<td>conj</td>
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<tr>
<td>prep</td>
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<td>prep</td>
</tr>
<tr>
<td>auxiliary</td>
<td>0.33</td>
<td>v</td>
</tr>
<tr>
<td>v</td>
<td>0.63</td>
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</tr>
<tr>
<td>n</td>
<td>0.64</td>
<td>n</td>
</tr>
<tr>
<td>adv</td>
<td>0.78</td>
<td>adv</td>
</tr>
<tr>
<td>adj</td>
<td>0.90</td>
<td>adj</td>
</tr>
</tbody>
</table>
2.2 Where do they differ?

This figure shows a clear discrepancy between American English speakers and Mandarin speakers in where to put pitch accents.

3. Traditional frameworks of prosody

A. Stress (words and phrases)
   a. primary stresses
   b. secondary stresses, etc.
   c. other subtle things about stress

B. Rhythm (suprasegmental stress patterns)
   a. the relationship between stressed and unstressed syllables
   b. patterns of combination of stressed and unstressed syllables
   c. the liaison or other phonological structures like assimilation and deletion phenomena

C. Intonation (suprasegmental melody)
   a. the patterns of pitch contours
   b. The rise and fall of the pitch contour
   c. The tonal stress and intonation units, etc. (see below)
3.1 What do traditional intonational frameworks look like?

1. Are you living here? (Petrarca, 1985, etc.)

2. WHAT'S he LOOKing for? (Targeting Pronunciation; Focus on Pronunciation, etc.)

3. The combination of 1 and 2. (Cece Mecia, et al.)

4. Highlighting important words (Focus on Pronunciation)

   My name isn't TAM MY ... it's SAF DYN.

5. Thought groups (Focus on Pronunciation)

   My flight is arriving at nine o'clock I'll call you from the airport
   hold hold hold

(Pronunciation by Christina Dalton & Barbara Saidikofer)

6. I

   (Pronunciation by Christina Dalton & Barbara Saidikofer)

7. out,

   Let's go For a change.

   (Selinger, 1986, p. 6)
3.1 What do traditional intonational frameworks look like?

8.

4 - extra high  Normal conversation moves between middle and high pitch, with low pitch typically signaling the end of an utterance. The extra high level is generally used to express a strong emotion such as surprise, great enthusiasm, or disbelief, and is the pitch level often used in contrastive or emphatic stress.

3 - high
2 - middle
1 - low

3.2 What do traditional frameworks of intonation provide?

1. Pitch contours
2. Generalized patterns
3. Possible sample presentations of different patterns

(16 patterns with all possible varieties in utterances: http://mail.ntpu.edu.tw/~ckliu/pronunciation/intonation2/intonation2.htm)

(Celce Mercia, et. al., 1996. Teaching Pronunciation)
3.3 Examples

A. The traditional approach

John's sick.

He's taken an aspirin

Have you got a minute?

Can I ask you a question?

Who will help?

What about Jonathan?

B.1 The acoustic Approach (sample 1)
B.1 The acoustic Approach (sample 1)

John's sick.

B.2 The acoustic Approach (sample 2)
B.2 The acoustic Approach (sample 2)

What about Jonathan?

B.3 The acoustic Approach (sample 3)
B.3 The acoustic Approach (sample 3)

4. What should we know?

1. Can we really rely on the “natural approach”, that is, “acquiring” the English prosody by picking it up through “natural environments” without overt instruction?

2. Can we do something else other than that?
   What about the following info:
   a. What is the intonation unit?
   b. How can we distinguish the intonation unit in different contexts?
   c. What is the pitch accent?
   d. How can we locate the pitch accent?
   e. What’s the invariable quality of a stressed syllable/sound?
   f. What’s the relation between the adjacent syllables?
   g. What about the break index?

   The concepts of ToBI (M. Beckman) and RaP (L. Dilley)
4.1 What's the intonation unit?

An intonation unit (IU) is a “thought group” or “intonation group” or “tone unit.”

The most prominent criteria suggested for the delimitation of an IU are:

1. pause;
2. final syllable lengthening or slow speech rate at the end of an IU, and
3. a following fast speech rate at the beginning of the next IU;
4. pitch reset.

According to Hirschberg & Pierrehumbert (1986), systematic variation in pitch range can be used to signal a hierarchical segmentation of discourse: larger increases in pitch range mark major boundaries, whereas smaller increases indicate sub-segment boundaries. Therefore, while an increase in pitch range indicates discourse boundaries, a reduction in the amount of final lowering at a potential boundary can indicate that no such boundary in fact exists (see also Avesani & Vayra 1988 and Ayers 1992).

4.2 The examples of Intonation Units (1)

```
131.39 131.59 LENOIRE: yeah,
131.39 131.59 [i bet],
131.59 131.56 LYNNE: [H] and [X] then [X],
131.39 131.19 so we had to know these tendons,
131.19 133.07 and ligaments,
133.07 134.56 [H] and then,
134.56 135.75 all the bones,
135.75 136.80 ... and,
136.80 137.41 ... you know,
137.41 138.09 all the way up from the shoulder down,
138.09 140.31 and then from the hip down.
140.31 140.81 ... You know,
140.81 141.36 all the way down to the heel,
141.36 142.51 [H] and then,
142.51 143.93 % the bone in the heel,
143.93 144.09 and,
144.09 145.87 [H] = then all the ... wall,
145.87 146.09 and,
146.09 146.70 % you know,
146.70 147.42 of the heel,
147.42 147.50 and,
147.50 149.00 what everything was called there,
149.00 149.30 and then,
149.30 151.51 [H] he went over on how to trim it,
151.51 152.07 and where you --
152.07 153.27 th: [H] there's a white line,
153.27 153.83 that you go by,
153.83 155.47 and a horse ... has this little white line,
155.47 157.12 [H] and you clean it out with the --
```
4.3 The examples of Intonation Units (2)

The manager was ill so I took her place.

5. The examples of break indexes (1)

This is a fatal mistake.
5.1 The examples of break indexes (2)

5.2 The examples of pitch reset
6. How to locate a pitch accent?

Speakers of English produce certain words in an utterance with special intonational prominence. These *pitch-accented* words typically are realized with increased duration, intensity, and/or fundamental frequency ($F_0$).

Duration > intensity / fundamental frequency

6.1 The locations where pitch accents fall (1)
6.2 The locations where pitch accents fall (2)

6.3 The locations where pitch accents fall (3)
6.4 The locations where pitch accents fall (4)

6.5.1 The locations where pitch accents fall (park1)
6.5.2 The locations where pitch accents fall (park2)

6.5.3 The locations where pitch accents fall (park3)
6.5.4 The locations where pitch accents fall (park4)

6.5.5 The locations where pitch accents fall (park5)
7. The adjacent syllables?

7.1 The adjacent syllables?
7.2 The adjacent syllables?

7.3 The adjacent syllables?
7.4 The adjacent syllables?

7.5 The adjacent syllables?
7.6 The adjacent syllables?

8.1 The adjacent syllables: more examples
8.2 The adjacent syllables: more examples

8.3 The adjacent syllables: more examples
8.4 The adjacent syllables: more examples

9. The summary of prosodic features of English

a. Can I demarcate an intonation unit?

(1) pause;
(2) final syllable lengthening / slow speech rate at the end of an IU, and
(3) a following fast speech rate at the beginning of the next IU;
(4) pitch reset.

b. Can I locate the pitch accent?

Duration > intensity / fundamental frequency

c. What about the break index?

d. Do I notice the relation between the adjacent syllables?
Declination (Slopes)

Declination is the tendency of fundamental frequency to gradually fall over the course of an utterance.

The $F_0$ declination line created by American English speakers is consistently steeper than that created by Mandarin speakers in every declarative utterance.

10.1 Statistics (1)

Five expressions to serve as testing materials

1. The temperature is very low today.

2. Finally he feels sure of himself.

3. That' what I want to see.

4. At first it is not easy for him to be casual in dress, informal in manner, and confident in speech.

5. Little by little he learns what kind of clothing is usually worn here to be casually dressed for classes.
10.1 Statistics (2)

<table>
<thead>
<tr>
<th>Sentences</th>
<th>MSs</th>
<th>ESs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-0.19579</td>
<td>-0.6782</td>
</tr>
<tr>
<td>2</td>
<td>-0.11613</td>
<td>-0.47597</td>
</tr>
<tr>
<td>3</td>
<td>-0.3436</td>
<td>-0.54088</td>
</tr>
<tr>
<td>4</td>
<td>-0.0219</td>
<td>-0.0704</td>
</tr>
<tr>
<td>5</td>
<td>-0.04087</td>
<td>-0.08836</td>
</tr>
</tbody>
</table>

10.2.1 Declination: example 1

An utterance “The temperature is very low today” pronounced by different subjects
10.2.2 Declination: example 2

An utterance “The temperature is very low today” pronounced by different subjects

10.2.3 Declination: two samples together (1)

An utterance “The temperature is very low today” pronounced by different subjects
10.2.4 Declination: two samples together (2)

An utterance “The temperature is very low today” pronounced by different subjects

\[
y = -0.3705x + 277
\]

\[R^2 = 0.6219 \text{ (MS)}\]

\[
y = -0.532x + 254.69
\]

\[R^2 = 0.4997 \text{ (ES)}\]

10.2.5 Declination: two samples together (3)

An utterance “The temperature is very low today” pronounced by different subjects

\[
y = -0.3705x + 277
\]

\[R^2 = 0.6219 \text{ (MS)}\]

\[
y = -0.532x + 254.69
\]

\[R^2 = 0.4997 \text{ (ES)}\]
10.2.6 Declination: another set of example

An utterance “The temperature is very low today” pronounced by different subjects

\[
\begin{align*}
y &= -0.1442x + 202.48 \\
R^2 &= 0.3157 \text{(MS)} \\
y &= -1.0021x + 298.03 \\
R^2 &= 0.8761 \text{(ES)}
\end{align*}
\]

10.2.7 Declination: the concepts of downsteps

“For one thing, we could make our own cleaning solutions from baking soda, lemon, and vinegar.” pronounced by different subjects:

Native speaker of American English #1
10.2.8 Declination: the concepts of downsteps

“For one thing, we could make our own cleaning solutions from baking soda, lemon, and vinegar.” pronounced by different subjects:

Native speaker of American English #2

10.2.9 Declination: the concepts of downsteps

“For one thing, we could make our own cleaning solutions from baking soda, lemon, and vinegar.” pronounced by different subjects:

Non-native speaker of English #1
10.2.10 Declination: the concepts of downsteps

“For one thing, we could make our own cleaning solutions from baking soda, lemon, and vinegar.” pronounced by different subjects:

Non-native speaker of English #2

10.2.11 Declination: the concepts of downsteps

“For one thing, we could make our own cleaning solutions from baking soda, lemon, and vinegar.” pronounced by different subjects:

Native speaker of American English #3
10.2.12 Declination: the concepts of downsteps

“For one thing, we could make our own cleaning solutions from baking soda, lemon, and vinegar.” pronounced by different subjects:

Non-native speaker of English #3

10.2.13 Declination: What about other accents?

“For one thing, we could make our own cleaning solutions from baking soda, lemon, and vinegar.” pronounced by different subjects:

A native speaker of British English
10.2.14 Declination: What about other accents?

“For one thing, we could make our own cleaning solutions from baking soda, lemon, and vinegar.”
pronounced by different subjects:

A native speaker of Australian English 🎧

10.2.15 Declination: What about other accents?

“For one thing, we could make our own cleaning solutions from baking soda, lemon, and vinegar.”
pronounced by different subjects:

A native speaker of New Zealand English 🎧
10.3 Declination: be careful with exceptions
An utterance “It’s on the Eve of Christmas” pronounced by different subjects

\[ y = -0.013x + 96.74 \]
\[ R^2 = 0.3516 \] (MS)

10.3.1 Declination: be careful with exceptions
An utterance “It’s on the Eve of Christmas” pronounced by different subjects

\[ y = -0.013x + 96.74 \]
\[ R^2 = 0.3516 \] (MS)
10.3.2 Declination: be careful with exceptions
An utterance “It’s on the Eve of Christmas” pronounced by different subjects

\[ y = -0.013x + 96.74 \]
\[ R^2 = 0.3516 \text{ (MS)} \]
\[ y = 0.0166x + 94.447 \]
\[ R^2 = 0.1573 \text{ (ES)} \]

10.4 Interpretations?

1. Length/Time differences
2. Pitch accents are located at different places
3. The focus of meaning is different
4. The syntactic structure is different, etc.
10.4 Interpretations?

1. Length/Time differences
2. Pitch accents are located at different places
3. The focus of meaning is different
4. The syntactic structure is different, etc.
10.4 Interpretations?

1. Length/Time differences
2. Pitch accents are located at different places
3. The focus of meaning is different
4. The syntactic structure is different, etc.

10.5 Declination: example for a longer sentence

An utterance “At first it is not easy for him to be casual in dress, informal in manner, and confident in speech” pronounced by different subjects (03-15)
10.5 Declination: example for a longer sentence

At first, it is not easy for him to be casual in dress and confident in speech.

10.6 What about yes-no questions?

An utterance “Can you do that?” pronounced by different subjects
10.6.1 What about yes-no questions?
An utterance “Can you do that?” pronounced by different subjects

10.6.2 What about yes-no questions?
An utterance “Can you do that?” pronounced by different subjects
10.6.3 What about yes-no questions?

An utterance “Can you do that?” pronounced by different subjects

\[ y = 0.0022x + 91.905 \]
\[ R^2 = 0.0075 \text{ (Ms)} \]

10.6.4 What about yes-no questions?

An utterance “Can you do that?” pronounced by different subjects

\[ y = 0.0038x + 86.995 \]
\[ R^2 = 0.5493 \text{ (Es)} \]
10.6.5 What about another yes-no question?
An utterance “Do you want a coke?” pronounced by different subjects

10.6.7 What about another yes-no question?
An utterance “Do you want a coke?” pronounced by different subjects
10.6.8 What about another yes-no question?
An utterance “Do you want a coke?” pronounced by different subjects

10.6.9 What about another yes-no question?
An utterance “Do you want a coke?” pronounced by different subjects
10.6.10 What about another yes-no question?

An utterance “Do you want a coke?” pronounced by different subjects

\[ y = 0.006x + 91.001 \]
\[ R^2 = 0.0159 \text{ (Ms)} \]

\[ y = 0.0676x + 91.641 \]
\[ R^2 = 0.6302 \text{ (Es)} \]

10.7 Statistics (3)

<table>
<thead>
<tr>
<th>Utterances</th>
<th>MSs</th>
<th>ESs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Can he do that?</td>
<td>0.011029</td>
<td>0.063067</td>
</tr>
<tr>
<td>2. Do you want a coke?</td>
<td>-0.00214</td>
<td>0.037469</td>
</tr>
<tr>
<td>3. Can he follow us?</td>
<td>0.003914</td>
<td>0.01183</td>
</tr>
</tbody>
</table>
10.8 Conclusion/discussion?

1. Physiological constraints
   How much the speech organs can hold for one breath of utterance?
   If this is true, should there be language-specific? What about Mandarin Chinese or other dialects in this area?

2. One prosodic feature specific to certain languages, e.g., English, German, etc.

3. To know this should be helpful in determining whether our students pick up the prosody of English.

11. The length of the oral production

The length of the averaged time for reading each of the following sentences (in seconds)

1. The temperature is very low today.
2. Finally he begins to make sure of himself.
3. At first it is not easy for him to be casual in dress, informal in manner, and confident in speech.
4. That's what I want to see.
5. Little by little he learns what kind of clothing is usually worn here to be casually dressed for classes.

<table>
<thead>
<tr>
<th>Sentences</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSs</td>
<td>2.646</td>
<td>3.194</td>
<td>6.634</td>
<td>1.728</td>
<td>6.618</td>
</tr>
<tr>
<td>AESs</td>
<td>1.847</td>
<td>2.339</td>
<td>5.616</td>
<td>1.147</td>
<td>5.42</td>
</tr>
<tr>
<td>Difference</td>
<td>0.799</td>
<td>0.845</td>
<td>1.018</td>
<td>0.581</td>
<td>1.198</td>
</tr>
</tbody>
</table>
11.1 The length: example

The chart shows that MSs spent longer time to complete reading every word in sentence (1).

```
the temperature is very low today
```

12. Dialogues and intonation (1)

A: Have you seen my camera?
B: What camera?
A: It's a digital camera.
B: Is it the one you put on the bookshelf?
A: No. That's not digital; it's just regular.
B: Well, what color is it?
A: It's black, with a gold chain on it.
B: Hunnn! I think I saw one like that somewhere.
A: Where did you see it?
B: It was on the dining room table.
12.1 Dialogues and intonation (2)

A: Did you like that movie?
B: Yeah, I thought it was really good. What about you?
A: Yeah, it was good. But it was a bit too long.

12.2 Dialogues and intonation (3)

A: Excuse me. How much is this?
B: It’s sixteen dollars.
A: Sixteen? I thought it’s ten. Isn’t it 40 percent off today?
B: The big sale starts on Tuesday. That’s tomorrow.
A: What? Today is Monday, not Tuesday?
B: Yeah. Sorry about that. Do you want me to keep this for you?
12.3 Dialogues and intonation (4)

A: Who’s gonna help us today?
B: Well, Mary said she’d help, but
A: Good. Where is she?
B: She is in her room,
A: If she’s in her room, ask her to get ready. We’re leaving in two minutes.
B: Ok. But you know, she has to leave early, though.
A: No. She can’t. She has to be with us until the work is done.

13. The intonation of a monologue

“OK, today we’ll continue our discussion of pollution…
Yesterday we defined pollution….Today we’ll talk about the impact of pollution…its far-reaching effects. Many people think pollution is just a problem for scientists…but it’s not just a problem for scientists. It’s a problem that affects everyone…since it affects human lives, it’s a health problem…since it affects property, it’s an economic problem…and since it affects our appreciation of nature, it’s an aesthetic problem.”
14. Prosody in different accents

Good evening, ladies and gentlemen, and welcome. I’m sure we have all heard the expression, “Think Green.” Tonight we are going to talk about ways that we can “Act Green” in our everyday lives.

The best place to start, of course, is in the home. Every day, people all over the world are hurting the environment without even knowing it. For example, busy families buy paper napkins and plastic food wrap at the supermarket. This helps them save time on housework, but after these things have been used, what happens to them? They go in the trash. In many places, especially in North America, big cities are running out of places to throw their trash. Shouldn’t we do something about this before it’s too late?

American English
British English
Australian English
South African English
New Zealand English
Irish English
Saint Kitts
NTPU

How to use PRAAT

1. Download the package here: www.praat.org

2. Click the downloaded file, and it will be unzipped into an executive file.

3. Click this symbol

4. Use it as you are using an MS sound file. It’s very user friendly.
A1. The basic concepts of prosody

Prosody is the intonation, rhythm, and lexical stress in speech.

Lexical stress can be easily found in any dictionary right now. But lexical stress can be very complicated if a word is used in different speech contexts. For example,

1. Fourteen people were killed last night.
2. The number of the victims is fourteen.
3. I have sixteen patients waiting for me.
4. The last patient is only sixteen.

Most of the time, the lexical stress serves as different “accented stresses” in an utterance. For instance,

1. Armani knew the millionaire.
A2.1 Basic concepts of the rhythm of English

1. We have to focus on stressed vowels and unstressed vowels in English. Mandarin focuses more on tones rather than stress.

2. We have to know the relationship between the local stress and the global stress in a discourse.
A2.2 The stressed and the unstressed sounds

Example: rejected he wrecked it

<table>
<thead>
<tr>
<th>Words</th>
<th>Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. engineer</td>
<td>he was here</td>
</tr>
<tr>
<td>2. overthrow</td>
<td>in a row</td>
</tr>
<tr>
<td>3. himself</td>
<td>an elf</td>
</tr>
<tr>
<td>4. convert (v)</td>
<td>he’s hurt</td>
</tr>
<tr>
<td>5. presented</td>
<td>she sent it</td>
</tr>
<tr>
<td>6. progressed</td>
<td>the best</td>
</tr>
<tr>
<td>7. permit (n)</td>
<td>learn it</td>
</tr>
<tr>
<td>8. volunteer</td>
<td>she can hear</td>
</tr>
</tbody>
</table>

A2.3 Time and rhythm

Read the following expressions (containing different number of syllables) in about the same length of time

1. broad view
   broad review
   broader review

2. strong taste
   stronger taste
   strongest distaste

3. slow turn
   slowly turn
   slowly return

4. quick call
   quick recall
   quickly recall

5. new device
   new device
   newest device
A2.3.1 More complicated situations

Read the following expressions (containing different number of syllables) in about the same length of time

1. fire kitchen
   fire in kitchen
   fire in the kitchen
   a fire in the kitchen
   It's a fire in the kitchen

A2.3.2 More complicated situations

2. snow expected Friday
   snow is expected Friday
   snow is expected on Friday
   some snow is expected on Friday

Practice:
   a. I can understand.
   b. Give me the book.
   c. He wants to leave.
   d. I did it as quickly as possible.
   e. He was sick.
A2.3.3 More complicated situations

MAN leaves HOME.
The MAN leaves his HOME.
The MAN will LEAVE his HOME.
The MAN’s gonna LEAVE his HOME.

This is the way I wash my face
Wash my face
Wash my face
This is the way I wash my face
So early in the morning.

A2.3.3.1 Now, try to tap out the beat
A2.3.4  Time and rhythm in a longer expressions

2.3.4.1  StressStressStress

Three blind mice.
Please sit down.
Come back soon.
John can’t go.
Don’t drive fast.

A2.3.4.2  StressWeakWeakStressWeakWeakStress / wSwSwS

Hickory dickory dock.
Do it according to plan.
Give me a burger with cheese.
Who is the man I should see.

The mouse ran up the clock.
I’d like to cash a check.
He’d rather take the bus.
I’ll have her call you back.
A2.3.4.3 SwSwSwS

Twinkle, twinkle little star.
Let me help you find your keys.
Don’t forget the bread and milk.
Tell me why you don’t agree.
How I wonder what you are.
Find a space and park your car.
Thanks a lot for all your help.
Don’t forget to leave a tip.

A3. How do I know where the stresses are?

Rule 1: Compound nouns—AIRport
- deadline
- classroom
- software
- steakhouse

establish a deadline
a noisy classroom
software packages
a Japanese steakhouse

Rule 2: Noun-noun combinations—TOOTH decay
- air conditioner
- shoe polish
- convention center

repair the air conditioner
some brown shoe polish
the downtown convention center
Rule 3: Reflexive pronouns—herSELF

myself  went by myself
themselves finished it themselves

Rule 4: -teen and -ty—eighTEEN vs. EIGHty

thirteen years old vs. thirty years old
sixteen dollars vs. sixty dollars

Rule 5: Verbs consisting of a prefix (one-syllable base)—

underSTAND
outrun overrun his teammate
look overlook the error
withdraw withdrew fifty dollars
overhear overheard the argument

Rule 6: Two-word verbs—give UP

print out print out the document
shut down shut down the factory
put off put off the meeting

Rule 7: Compound adverbs indicating location or direction—

outSIDE
overseas go overseas
downtown drove downtown
northeast in the northeast

Rule 8: Two-syllable words used as both nouns and verbs—INsult / inSULT

Noun Verb
conduct conduct
present present
project project
rebel rebel

Practice:
1. Can you project our profits for the next quarter?
2. You will need a permit to do the construction.
3. She is going to present the speaker.
4. I'll pay you back after my next paycheck.
5. Hand in your homework at the end of class.
A4  Linking between vowels & consonants

1. -cv- or –ccv-
   - look at me
   - pick it up
   - I couldn’t figure it out.
   - I wouldn’t accept it.
   - He looked at me.

2. -cc-
   - a big girl
   - walks slowly
   - Kiss me.
   - It’s a great book.

A4.1 More practice

<table>
<thead>
<tr>
<th>hand it in</th>
<th>figure it out</th>
</tr>
</thead>
<tbody>
<tr>
<td>hand them in now</td>
<td>clean it up</td>
</tr>
<tr>
<td>throw them out</td>
<td>pick her up</td>
</tr>
<tr>
<td>throw it away</td>
<td>look them up</td>
</tr>
<tr>
<td>call him up</td>
<td>turn them off</td>
</tr>
</tbody>
</table>
A4.2 Linking (Liaison) between vowels

1. Vowels that follow /i/  
   Chart 1; Chart 2  
   reality be active  
   playoff pay off  
   triangle my ankle  
   annoyance the boy and me

2. Vowels that follow /u/  
   Chart 1; Chart 2; Chart 3  
   fluid do it  
   snowy go out  
   flour how is it  
   newest a few apples

A4.3 More practice

1. I can't see it  
   three others  
   stay awake  
   pay everything  
   tea and coffee

2. toooften  
   there is now  
   answer  
   Who is it?  
   two apples  
   let's go out  
   so easy

3. 1. He's studying with the radio on.  
   2. This section of town was previously an industrial area.  
   3. His experience in politics makes him a superior negotiator.  
   4. The pianist quickly realized the piano needed tuning.  
   5. He's obviously a creative person.
A5. Assimilation

1. Progressive assimilation
   look  looks
   love  loves
   like  liked
   love  loved

2. Regressive assimilation
   input  have to

3. Complete assimilation
   cupboard

4. Coalescent assimilation
   this year; would you…; set you up

A5.1 When “s” and “es” are suffixes (1)

1. a rose /z/          two roses /row-zaz/ or /row-ziz/
2. Josh /ʃ/           Josh’s brother /dʒɔ-ʃaz/
3. The judge /dʒ/     the judge’s decision /dʒə-dʒaz/
4. they watch TV /tʃ/  he watches TV /wa-tʃəz/
5. the boss /s/        The boss’s been here /bo-səz/.

Try to read the following expression:

   Someone else’s book
A5.2 When “s” and “es” are suffixes

1. When voiceless consonants are followed by “s” or “es”
   - a ship /p/
   - they visit /t/
   - Dick /k/
   - clock /k/
   - two ships /ps/
   - he visits /ts/
   - Dick’s house /ks/
   - The clock’s broken /ks/.

2. When voiced consonants are followed by “s” or “es”
   - a job /b/
   - Sam /m/
   - Buy the book /bay/.
   - He /hiy/
   - good jobs /bz/
   - Sam’s friend /mz/
   - He buys books /bayz/.
   - He’s here /hiyz/.

3. When /s/ is clustered with other sibilants:
   - one month  two months
   - the earth  the earth’s circumference

A5.3 When “d” and “ed” are suffixes

1. construct  constructed
   - decide  decided
   - graduate  graduated

2. install  installed
   - save  saved
   - delay  delayed

3. talk  talked
   - laugh  laughed
   - process  processed

4. Read the following expressions:
   a. He filled out the application
   b. I checked in this morning.
### A5.4 When fricatives are followed by /j/

<table>
<thead>
<tr>
<th>p₁</th>
<th>p₂</th>
<th>p₃</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>/s/</td>
<td>j</td>
<td>this year</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>miss you</td>
<td></td>
</tr>
<tr>
<td>/z/</td>
<td>s</td>
<td>How is your day?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>He loves you.</td>
<td></td>
</tr>
<tr>
<td>/ʃ/ or /ts/</td>
<td>/ʃ/</td>
<td>next year</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>last year</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Who set you up?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>That's your problem.</td>
<td></td>
</tr>
<tr>
<td>/d/ or /dz/</td>
<td>/dʒ/</td>
<td>Did you do that?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>What would you do?</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>My dad's your partner.</td>
<td></td>
</tr>
</tbody>
</table>

### A5.5 More examples in single words

1. In the near future
2. The next century
3. I assure you
4. blood pressure
5. a precise measurement
6. Leisure-time activities
7. individual rights
8. A recent graduate
A6. Deletion

1. Loss of /h/ sound
   ask him
   did he
2. Loss of /ə/ sound
   tell them
   something
3. Loss of /t/ or /d/ before /ən/
   sudden
   sentences
4. Loss of a syllable
   family; temperature; camera; potato; etc.

Schwa

(Celce Mercia, et. al., 1996. Teaching Pronunciation)
Thank you!