Discussion on Accent in Phonetics vs. Musicology

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Background

- Accent is a word being confused with stress in phonetics and musicology in China.
- In phonetics, stress has two different using cases in literatures and dictionaries.
  - On the one hand, stress, roughly speaking, it is sound intensity (Wu, 1992). This makes the stress equal to sound intensity.
  - On the other hand, stress is prominent syllable, such as high pitch (Zhao, 2006), the length of the sound and non-reduction of the sound quality (Wang, 2004).
- The above prominent phenomenon of a pronunciation syllable among adjacent syllables is accent (Chen, 1986). That is to say, the stress is embodied: “sound intensity” and “accent”.

However, most Chinese dictionaries define accent as stress, equal to sound intensity.

So we discriminated accent in different using cases:

1. to summarize the meaning of accent in dictionaries;
2. to analyze the using cases in phonetic literatures;
3. to analyze it in musical literatures.

Cluster and statistics analysis are main methods.
(1) Accent in Dictionaries

Accent n.

Prominence (stress)

mark

dialect
Stress n.

- beyond intensity
- intensity
  - pitch
  - more prominence
According to the desirable seven English dictionaries, the statistics of practical situations for each sense is as follows:

<table>
<thead>
<tr>
<th>Various Senses of Accent</th>
<th>Utilizing Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>a mark</td>
<td>7/7</td>
</tr>
<tr>
<td>the way someone pronounces the words of a language, showing which country or which part of a country they come from</td>
<td>7/7</td>
</tr>
<tr>
<td>the accent is on sth if the accent is on a particular quality, feeling etc, special importance is given to it</td>
<td>6/7</td>
</tr>
<tr>
<td><strong>Mus.</strong> Emphasis on a particular note or chord</td>
<td>2/7</td>
</tr>
<tr>
<td>prominence (specific usage see next page)</td>
<td>4/7</td>
</tr>
<tr>
<td>the part of a word that you should emphasize when you say it.=stress</td>
<td>1/7</td>
</tr>
</tbody>
</table>
prominence Includes:

① prominence given to a syllable by stress or pitch.
② an articulative effort giving prominence to one syllable over adjacent syllable.
③ a distinct emphasis given to a syllable or word in speech by stress or pitch.
④ the emphasis that you should give to part of a word when saying it.
In OED, accent (n.) is defined as:

I. A mark or sign.
II. An aspect of vocal or musical sound.
III. In contexts not relating to sound.

In II:
1. a. The way in which anything is said or sung; a style of pronunciation, a manner of utterance, a tone or quality of voice; a character of sound; a musical or quasi-musical intonation of the voice; a modulation or modification of the voice expressing feeling.

   b. *literary*. A significant tone or sound, esp. in speech; a spoken word.
2. A prominence given to one syllable in a word, or in a phrase, over the adjacent syllables, independently of the means by which this prominence is produced (as pitch, timbre, stress, or, less commonly, duration). Now often synonymous with stress.
3. Prosody. Stress laid at more or less fixed intervals on certain syllables of a line or verse, the succession of which constitutes its rhythm or metre. There is some disagreement among prosodists about whether accent and stress are synonymous.
4. a. A way of pronouncing a language that is distinctive to a country, area, social class, or individual.

b. Without possessive or defining word or words: a regional or foreign accent. Not in technical use.
5. *Music.* A prominence given to a note or chord over adjacent ones, by means of stress, duration or pitch. Also: stress recurring at intervals of time which are generally fixed, but may be varied by syncopation and cross-accentuation
According to the desirable eleven English-Chinese Dictionaries, the statistics of practical situations for each sense is as follows:

<table>
<thead>
<tr>
<th>Various Senses of Accent (n.)</th>
<th>Utilizing Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>importance given to a word or part of a word (vowel or SYLLABLE) by saying it with more force or on a different musical note (2)</td>
<td>10/11</td>
</tr>
<tr>
<td>the stronger tone or stress you give to part of a word or a musical note, to make it stand out from the rest (2)</td>
<td>重音</td>
</tr>
<tr>
<td>the part of a word that you should emphasize when you say it. —see also stress (2)</td>
<td>11/11</td>
</tr>
<tr>
<td>an emphasis given to a syllable, word, or note in speech or music (2)</td>
<td></td>
</tr>
<tr>
<td>the stress on a syllable (1)</td>
<td>口音,腔调</td>
</tr>
<tr>
<td>emphasis given to a syllable or word by means of stress or pitch (1)</td>
<td>11/11</td>
</tr>
<tr>
<td>the way someone pronounces the words of a language, showing which country or which part of a country they come from</td>
<td>11/11</td>
</tr>
<tr>
<td>a mark</td>
<td>重音符号</td>
</tr>
<tr>
<td>a special emphasis (6)</td>
<td>着眼点在...上；强调</td>
</tr>
<tr>
<td>stress; importance (1)</td>
<td>7/11</td>
</tr>
</tbody>
</table>
What is the explanation of “重音” that in Chinese dictionaries? The research made a statistics of practical situations for each sense from desirable seven Chinese dictionaries:

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>指一个词、词组或句子里重读的音。参见“重读”（把一个词或一个词组里的某个音节或语句里的某几个音节读得重些、强些。）</td>
<td>7/7</td>
</tr>
<tr>
<td>乐曲中强度较大的音，是构成节奏的主要因素</td>
<td>7/7</td>
</tr>
<tr>
<td>发音上的用力（如加强重音或改变音高），使一个词或一组词的一个音节比邻近音节显得突出</td>
<td>1/7</td>
</tr>
</tbody>
</table>
* From what has been discussed above, generalized accent should contain mark and prominence (stress); also means dialect.
(2) Accent in Phonetic Literatures

Accent

- Stress
- Sentence accent
- Pitch
- Combination (static description)
- Prominence phenomenon
<table>
<thead>
<tr>
<th>Various Senses of Accent</th>
<th>Original text</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stress</td>
<td>Accent stress, refers to a syllable in a speech sequence, the pronunciation organic is relatively tensed, the intensity of the sound is huge</td>
</tr>
<tr>
<td>Sentence accent</td>
<td>In Chinese, the emphasis on a word in a sentence is called sentence accent</td>
</tr>
<tr>
<td>Pitch</td>
<td>Pitch-accent, which refers to the pitch playing the first role in an accent position, specifically refers to a higher scale</td>
</tr>
<tr>
<td>Combination (static description)</td>
<td>Accent, it is always a combination of sound duration, loudness and pitch</td>
</tr>
</tbody>
</table>

Continued on Next Page
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<thead>
<tr>
<th>Various Senses of Accent</th>
<th>Original text</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prominence phenomenon</strong></td>
<td>The main meaning of accent is the prominent phenomenon of a pronunciation syllable among syllables. The prominent phenomenon of a pronunciation can be expressed by using the method of changing sound pitch, increasing sound intensity, extending sound length and purifying sound quality, and also can be displayed by these methods comprehensively.</td>
</tr>
<tr>
<td></td>
<td>Accent generally refers to the prominence of some components in words, phrases and even sentences. Accent related to sound intensity, pitch and duration, and sometimes also link to the vowel quality.</td>
</tr>
<tr>
<td></td>
<td>Accent refers to the prominence on the rhythm, this the definition from perception, the corresponding acoustic performance could be varied, for instance, the intensity of sound, the duration of sound, the non-reduction of the sound quality and so on.</td>
</tr>
</tbody>
</table>
It is worth mentioning that in Chinese, it is syllable-timed rhythm rather than stress-timed rhythm.
(3) Accent in Musical Literatures

Accent

Tendentiousness

The stimulating events that are perceptive

Prominence

On several layers of accents, prominence on structure

The type of prominence

The production of prominence
<table>
<thead>
<tr>
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<th>Original text</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tendentiousness</td>
<td>John Graziano speaks of the accentual tendencies of melodic intervals</td>
</tr>
<tr>
<td></td>
<td>By structural accent we mean an accent caused by the melodic/harmonic points of gravity in a phrase—especially by the cadence, the goal of tonal motion</td>
</tr>
<tr>
<td>The stimulating events that are perceptive</td>
<td>Accent is a stimulus which is a <em>marked for</em> consciousness in some way</td>
</tr>
<tr>
<td></td>
<td>Accent is an event that stands out and captures a listener’s attention</td>
</tr>
</tbody>
</table>

Continued on Next Page
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</thead>
<tbody>
<tr>
<td>in several layers of accents, prominence on structure</td>
<td>Accent is a point of emphasis; accents are points of initiation. Accents may also serve as initiation points for groups. Existence of an accent structure used to shape music over time.</td>
</tr>
<tr>
<td>The type of prominence</td>
<td>Accent-types covered a change to a faster tempo, approach by leaps in lines, and a change to more intense timbre.</td>
</tr>
</tbody>
</table>
From the research of music literature, it is obvious that accent not only refers to static state but also dynamic process.
Conclusions

* In the context of Chinese, accent is mark and prominence (stress); also means dialect.
* In the context of aesthetic music, accent includes tendentiousness, the stimulating events that are perceptive and prominence.
Further study

This study defined *accent* in Chinese context. It is also the first step to prove that Chinese accents, as a syllable-timed rhythm, tightly relate to eathetical principle of looseness.
Thank you!

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