The Motive for Stress Assignment Rule in the Positional Function Theory

LIU Sha
Fukuoka University

The Positional Function Theory (Yamada 2010a, 2010b, 2012) consists of two sets of stress assignment rule, the primary stress assignment rule (hereafter, PSAR) and the subsidiary stress assignment rule (hereafter, SSAR), where PSAR is composed of three "Positional Functions"[1] and SSAR sixteen "Positional Functions."[2] This paper, based on British English data, presents motives for PSAR and SSAR in terms of the parameters of English stress assignment and English data.

1. The Parameters of English Stress Assignment

The parameters of English stress assignment include weight-sensitivity, left foot head, right end stress, cycle, and so on.

1.1. Weight-Sensitivity

Weight-sensitivity means that stresses tend to fall on heavy syllables in English, which is stated in the Positional Function *Heaviness* (*H*). This Positional Function is not only part of PSAR but also SSAR. For example, for the primary stress assignment, *Heaviness* (*H*) can be applied to the syllable "gen" in "agenda," because "gen" is a heavy syllable; similarly, for the subsidiary stress assignment, *Heaviness* (*H*) can be applied to heavy syllables "ex" and "pec" in "expectation."

1.2. Left Foot Head

Left foot head means: (1) each foot encompasses two syllables; (2) the foot head is on the left syllable. In other words, in each foot, the stress is on the left syllable.

For PSAR, this parameter is stated in the Positional Function *Bounded Binarity* (*BB*). For example, in the word "Canada," syllables "Ca" and "na" can form one foot (Cana). Thus, *Bounded Binarity* (*BB*) can be applied to the syllable "Ca," which is the foot head in the foot (Cana).

For SSAR, this parameter is stated in Positional Functions of *Binarity* (*B*), *Edge Exemption I* (*EEI*), *Edge Exemption II* (*EEII*), *Farness* (*F*), *Free Binarity* (*FB*), *Rhythmic Adjustment* (*RA*), *Sole Stress Resistance* (*SSR*), and *Stress Reduction* (*SR*). Take the Positional Function *Binarity* (*B*) as an example. In simple terms, it states that for the foot (XY), *Binarity* (*B*) puts stress on the left syllable X, when X and Y meet certain requirements respectively; as a result, the Positional Function *Binarity* (*B*) is in line with the left foot head parameter. For example, in the word "memorabilia," "me" and "mo" can form one foot "(memo)"; the Positional Function *Binarity* (*B*) can be applied to the left syllable "me" in the foot "(memo)."

1.3. Right End Stress

Right end stress means that primary stress in English tends to be on the right part of words, which is stated in the Positional Function *Rhythmic Adjustment* (*RA*) of PSAR. For example, in the word "complaisant," *Rhythmic Adjustment* (*RA*) can be

[1] The 3 Positional Functions of PSAR are "*Bounded Binarity* (*BB*)," "*Heaviness* (*H*)," and "*Rhythmic Adjustment* (*RA*)."
[2] The 16 Positional Functions of SSAR are "*Alveolar Consonant Sequence* (*ACS*)," "*Bare Nucleus Avoidance* (*BNA*)," "*Binarity* (*B*)," "*Category Selection* (*CS*)," "*Double Stop* (*DS*)," "*Edge Exemption I* (*EEI*)," "*Edge Exemption II* (*EEII*)," "*Farness* (*F*)," "*Free Binarity* (*FB*)," "*Heaviness* (*H*)," "*Rhythm* (*R*)," "*Rhythmic Adjustment* (*RA*)," "*Sole Stress Resistance* (*SSR*)," "*Stress Reduction* (*SR*)," "*Trace* (*T*)," and "*Velar-Alveolar Sequence* (*VAS*)."

applied to the syllable “plai,” because “plai” is the rightmost of the relevant syllables.

1.4. Cycle

Cycle in phonology means that English preserves a phonological “trace” of the stress given on an earlier cycle, which is stated in the Positional Function *Trace* (*T*)[3] of SSAR. For example, *Trace* (*T*) can be applied to the syllable “ge” in “degeneration,” because of the trace from the primary stress on “ge” in the base form “degénerate.”

2. English Data

Positional Functions of *Alveolar Consonant Sequence* (*ACS*), *Bare Nucleus Avoidance* (*BNA*), *Double Stop* (*DS*), *Rhythm* (*R*), *and Velar-Alveolar Sequence* (*VAS*), all of which belong to SSAR, are in line with English data.

Take the Positional Function *Bare Nucleus Avoidance* (*BNA*) as an example. This paper examined all words starting with “a,” “e,” “i,” “o,” and “u” in dictionaries[4] and found out that 88% of words initiating with those letters do not bear subsidiary stress on initial short-vowel syllables when those syllables do not meet requirements for the application of intrinsic Positional Functions of *Trace* (*T*), *Binarity* (*B*), or *Free Binarity* (*FB*). This tendency is stated in the Positional Function *Bare Nucleus Avoidance* (*BNA*). For example, *Bare Nucleus Avoidance* (*BNA*) can be applied to the syllable “e” in “elèctrícian,” because “e” is an initial short-vowel syllable and does not meet the requirement for the application of *Trace* (*T*), *Binarity* (*B*), or *Free Binarity* (*FB*).

3. Conclusion

In conclusion, this paper gives a presentation on the motive for the primary stress assignment rule and the subsidiary stress assignment rule and supports further the validity of the Positional Function Theory.

References

Halle, Morris and Jean-Roger Vergnaud (1990) *An Essay on Stress*, MIT Press, Cambridge, MA.

Jones, Daniel (2011) *Cambridge English Pronouncing Dictionary*, Cambridge University Press, Cambridge.

Roca, Iggy and Wyn Johnson (2000) *A Course in Phonology*, Blackwell, Malden, MA.

Wells, John (2000) *Longman Pronunciation Dictionary*, Pearson Education, Essex.

Yamada, Eiji (2010a) *Subsidiary Stresses in English*, Kaitakusha, Tokyo.

Yamada, Eiji (2010b) “Optionality in English Subsidiary Stress Assignment,” *Studies in English Literature (Regional Branches Combined Issue)* 3, 543-556.

Yamada, Eiji (2012) “Main Stress Assignment in English Words,” paper presented in the 30th Conference of the English Linguistics Society of Japan, held at Keio University, November 11, 2012.

[3] For the original statement of all Positional Functions, refer to *Subsidiary Stresses in English* (Yamada 2010).

[4] Here, dictionaries refer to *Cambridge English Pronouncing Dictionary* (2011) and *Longman Pronunciation Dictionary* (2000).