The Standard of Speech Sounds - On a Reform for International Phonetic Alphabet

Hans Gua

Yeda Village, Xiyu Town, Xihe County, Longnan, Gansu 742100, P. R. China

Tel: 86-180-9391-7242   E-mail: hansgua@yahoo.com

Abstract

Elements and structures of the International Phonetic Alphabet (IPA) are imperfect and far from the standard. The IPA is too complex to learn and use directly for the most people. Few linguists can master the current IPA completely. The fatal shortcomings are that phonemes or symbols are too many, but syllables aren't defined or counted in the IPA. The standard speech sounds or new IPA will be made according to the information theory. There are not only phonemes, but also syllables in the new IPA. The standard phonemes and syllables are the best codes of human speech sounds. The broad transcriptions are the standard sounds in the new IPA. The standard sounds and new IPA must become a production which can be learned and used by the global citizens directly and frequently.

Keywords: Standard Sound, Phoneme, Syllable

1. Introduction

The International Phonetic Alphabet (IPA) is complicated and confused generally. Most phonemes are difficult to recognize, identify and distinguish, and their error rates are high. The whole speech sound system isn't defined or transcribed in the IPA. The elements and structures of IPA are imperfect. Although some English and French persons wanted to standardize representation of speech sounds when and since its creation, the current IPA is far from the requirement of standard. 163 symbols which are included 107 letters or broad transcriptions, 52 diacritics and 4 prosodic marks are transcribed phonemes, but not syllables in the revision of IPA 2005 usually. The fatal defects are that the broad transcriptions aren't broad, and the narrow transcriptions aren't narrow in the IPA generally. That is, symbols are too many, but number of sounds is too small in the IPA. The dream of standardized sound representations of some English and French linguists can't become the reality until today because of English phonetics and linguistics. Numerous aspects of Chinese and English phonetic notations are much better than the IPA. Simply, the IPA doesn't tell which and how many sounds are the best in the language. Most IPA phonemes are null and false hypotheses or entities. The IPA or its chart has almost nothing to do with the most ordinary speakers and hearers. The complex IPA is almost unusable for the most ordinary people. Few linguists can master the current IPA completely. The syllables will be more concern than phonemes in the standard sounds and new IPA.

The IPA is based primarily on some European languages such as English and French, neglected or even without considered about other languages such as Chinese and Japanese. [a] [ʌ] [s] and [θ] are the letters, but 4 Chinese tones are represented by diacritics in the IPA. The sounds of language such as English or French ones are the criteria or norms of IPA usually. The English and French phonetics must be negated or reformed. Numerous aspects of English phonetics or phonology can be replaced by the Chinese phonetics, though the scheme for the Chinese phonetic alphabet had been strongly influenced by the IPA in 1958. The fatal defect of English phonetics is its some phonetic prescriptions or patterns. The fatal English shortcomings are that its sounds are codes of unequal length; phonemes are random variables in its meaningful units and most syllables; some combinations of syllables are restricted. English sounds are too many and complex according to its criteria. Simply, English phonetics is being complicated its sounds or speech sounds of the other languages. English sounds are difficult to learn and use generally and far from standard. French and German sounds are more amount and complex than English according to their criteria respectively. Some aspects of Chinese and Japanese phonetics are superior to English, for an example, the classification of Chinese initials and finals is wider generalization than English vowels and consonants. The classification of initials and finals is more closed to the symbolization of speech. The standard speech sounds must absorb phonetic advantages of almost every living language.

2. Method

Any speech sound is a complicated continuous entity, liked the binary signal or code of computer. The distinction of English phonetics and phonology loses the base of existence after the IPA appeared. 2 English words of phonetics and phonology are 1 Chinese word or

meaning. Some Englishmen are often proud of knowing the exact differences between phonetics and phonology. In fact, one English term of phonetics and phonology is an unusable word according to Chinese. Certain problem must be appeared that English phonetics cannot suit Chinese or Japanese sounds, or Chinese and Japanese phonetics cannot explain and define some English sounds. Such problem cannot be solved by the IPA. Any phonetics can be tested in the actual oral communication. The empirical test is one way of the measurement and evaluation of speech sounds. The more samples tests are, the more reliable results are according to the statistics. Any speech sound is included infinite features or variants. For examples, long and short, strong and weak, round and unround, qualities of sounds, positions and shapes of speech organs, and etc. Sounds of any language are often unstable in the actual communications. You often can perceive the difference of 2 same syllables between 2 persons or 2 times of a person in any language. People have to focus or express 1 or some features of 1 sound at a time. There are intonations in almost every language. Any definition or explanation of certain phonetic term is liked as the approximate value in the Mathematics. The definition or explanation can approach infinitely to its term. Whether or not a definition is accurate is decided by the condition or precision generally. The language is a man-made tool. The problem is always being solved by human that the language especially the sound is as easy to learn and use as possible, as small cost as possible, as large scope as possible, and etc. Theory and practice can develop with each other. It is customary to assume that a phoneme is the smallest unit and syllables are the biggest units in the speech sounds. In fact, any smallest unit, that is, any phoneme can be divided forever. The biggest units such as syllables may group forever. For examples, an English vowel has 2 variables, long and short in general. A Lahnda consonant has 3 variables, 3 tones. A Chinese vowel has 4 variables, 4 tones. A Vietnamese vowel has 6 variables, 6 tones. British English has 24 consonants and 20 vowels. The current IPA has 39 vowels. In fact, vowels can be classified into 2, 3, 4, more and even infinite according to the current IPA chart. Any speech sound often has a theoretical ideal point or value and n related actual pronunciations or approximate phonetic values. The speech sounds are social statistical results usually. That is, the speech sounds are public productions which cannot be decided by one or some people. Any sound is allowed the very extensive scope in order to fit that the language is used as more people as possible. Any sound requirement or claim of individuals must be obeyed the social behave or requirement unconditional. That is, the standard sounds must be ignored some requirements and claims of individual person or language. For example, the standard British English or its sounds must be negated or ignored some requirements or claims of the educated people and royal family in the England. Simply, any human claim, requirement or meaning must be become some voices or sounds in the language.

The sounds of a language can be improved according to the information theory (IT), especially, the coding theory. Certain meaning is certain numeral value. Any meaning of language is the approximate value of real world. The best algorithm of computer is the best grammar of language generally. The numerous Chinese grammars are much better than English, German, French, Spanish, Arabic, Hindi, Bengali, Portuguese, and Russian generally. Simplifying grammar such as morphology and syntax can be referred Boolean calculations. At least half of frequently English words are redundant and can be removed from English

according to Chinese grammar or mathematical logic. The human united standard official or common language must be reduced and even avoided complex grammars, that is, used the best algorithm or grammar. Although the meanings can be expressed unclear or confusion, there are few and even no grammar errors in the human common language. [ʌ] is longer and stronger than [a] in the English sometimes, which can be tested by listening to native English speakers. [ʌ] and [a] must be eliminated one of them. [ʌ] and [a] will be coalesced into a same phoneme in the standard sounds or broad transcriptions of new IPA. The most Chinese, even educated people often confuse 4 tones of the same Chinese initial and final. Simply, the human standard sounds are no longer coded according to any current phonetics or linguistics.

A language is a complex entity, likes any other thing. A sound, a word, a language and a meaning can be dealt with the same ways according to problem size, accurate degree, system theory, mathematics and etc. Any meaning or thing must be expressed by limited sounds in the language. The language is very important for human, but we cannot aggrandize its function and property. The fatal shortcoming is that any language is some human sounds only. The language must be served the human as large as possible according to its features. The standard sounds must be dealt with the basic mathematical or philosophic problems first, for examples, simple and complex, finite and infinite, discrete and continuous, and etc.

Almost any human sound has meaning. A large number of human sounds are often excluded from the language, such as crying and singing. Speech is the small part of human sounds. On the other hand, the range of a speech sound is very wide generally. It is impossible to produce exactly the same sound twice. Whether or not 2 human sounds are same is decided by condition or precision generally. The standard sounds and new IPA will be restarted to classify and define the speech sounds, referred mathematical classification. We must define that the syllable is the largest sound unit and the smallest random variable of meaningful unit. Any living natural language is a man-made system or tool. The description and prescription of language especially speech sound must be defined according to the requirement of certain whole community. A vowel can be much longer than a consonant generally. The sounds such as vowel, consonant and syllable must be defined equal long in the standard sounds.

The standard sounds or new IPA will be ignored or improved any current phonetics and linguistics, especially English phonetics and linguistics. That is to say, the standard sounds and new IPA cannot be made if the English phonetics and linguistics weren't denied. The language can use uniform or universal grammar if the standard sounds were produced. In fact, Chinese, English and any other language can use the same rule or grammar according to IT. A computer has already represented or unified most of the world's living writings.

The standard speech sounds are eliminated sounds which are used by few people, using rate is very low or error rate is very high according to the statistical principles. For examples, shouting, crying, coughing, laughing, singing, tooth gnashing, lisping, whishing, whistling and etc. They can be represented by the narrow transcriptions if need be. In fact, any language can be shouted, sung, whispered and etc.

For theory, the standard sounds are selected in all existing languages. In accordance with the statistics, the raw materials of standard sounds are strongly dependent upon the

pronunciations of 12 world's top official standard languages which are 6 working languages of the UN and 10 most spoken languages with population estimates from the Ethnologue (2015,18th edition) in the world. The 12 world's top official standard languages are Chinese, Spanish, English, Arabic, Hindi, Bengali, Portuguese, Russian, Japanese, Lahnda, German, and French. Simply, the standard sounds are selected from 12 top official standard languages in the world.

The living languages especially the official standard languages are often eliminated or defeated many other languages or dialects in a country or region. Numerous languages appeared and disappeared in the human history. The 12 world's top official standard languages are often considered the best and most competitive languages in the world, and can reflect the level of whole human civilizations in general. Of course, the 12 world's top official standard languages are being used by the most populations.

The standard sounds are ignored any requirement or claim of individual persons and languages, or decided according to statistical results. On the other hand, the standard sounds and new IPA can and must satisfy to transcribe any sound how precise one wishes to be. The current IPA is based primarily on the English or French phonetics and linguistics. English phonetics and linguistics must be negated or improved.

The 107 letters, phonemes or broad phonetic transcriptions are too many in the current IPA. Some English phonemes [ʌ] [j] [w] [ai] [au] [eə] [aiə] [dl] [pl] [sp] [ts] [nst] [kst] and etc are removed or broken down in the standard of speech sounds. [n] and [l] are deleted one of them. That is, [n] and [l] will be become 2 variables of a same phoneme in the standard sounds. For example, [na] and [la] are often confused with each other in English and Chinese. [n] and [l] has already been incorporated or [l] has been deleted in Japanese. That is, irrespective of whether the standard [n] is nasalized in the standard sounds. It doesn't matter if the Russian people prefer to nasalize [l] in the standard sounds or human common language. In other words, we are no longer needed how to pronounce and distinguish some sounds such as [na] and [la] in the actual oral communication.

Some Chinese finals such as [ang] [an] [en] [in] and etc will be become the vowels or nasal vowels of IPA. The nasal cavity must be closed when English pure vowels are produced. The nasal cavity is often opened when [æ] [ɔ] and etc are uttered in the actual English communication. We often don't sure whether the nasal cavity is closed when some English pure vowels are pronounced. The current prescriptions of English phonemic classification such as vowels must be modified or improved. The broad transcriptions of new IPA will allow to open the nasal cavity when pure or single vowels are pronounced. Some English consonants are vowels in the Chinese, for an example, Chinese [en] which is corresponded to English [ŋ] is a vowel. English [ŋ] is a Chinese and Japanese syllable. The consonant [ŋ] is the Chinese final in the syllable [tŋ]. Chinese [an] is corresponded to English [æ]. Chinese [in] is English [iŋ], and etc. Simply, most IPA letters are removed or become diacritics. Some phonemes of English and IPA such as [a] [ʌ] [s] [θ] [n] and [l] are no longer letters, but become diacritics, liked 4 Chinese tones.

The vowel [i] is a starting sound in the syllable [ia]. English semi-vowels [j] and [w] will be

removed in the standard sounds. Chinese or Japanese phonetics can avoid the theoretical confusion that semi-vowels become consonants if semi-vowels were existed really. A vowel can be classified 3 levels, long, short and semi-vowel according to English phonetics, e.g., [u:] [u] and [w]. Semi-vowels mean that a consonant is half length of a vowel. A vowel and a consonant are unequal length in the English phonetic alphabet. It seems that 1 [u:] is 2 [u]s or 4 [w]s in the English. English prescribes its long vowels can become syllables, but a semi-vowel cannot be allowed. Obviously, a semi-vowel does form a syllable. Simply, numerous English phonemes are confused to classify or prescribe at random. English phonemes are classified according to different criterion or base actually. The pronunciations of English [u:] [u] and [w] are opposed and confused its intonations directly. English prescribes that its consonants can be existed as phonemes, not as syllables. Even some vowels cannot become syllables, such as semi-vowels. Most IPA and some English phonemes are false entities.

English [ai] cannot be allowed to form a syllable or diphthong in the standard sounds and broad transcriptions of new IPA. There is a break or split between [a] and [i] when [a] glides or spells [i] in [ai], unlike [ia] or [uə]. [ai] must be considered as 2 separated phonemes or syllables. [ia] or [uə] may spell or form a diphthong or syllable. A glide from [i] to [a] is smooth in the [ia]. The time of pronouncing [ai] is longer than [a] or [i]. The time of pronouncing [ia] is same as [i] or [a] usually. Of course, [ia] can form 2 syllables [i] and [a] if the organs of speech are changed with intent suddenly or jumped when [i] glides or spells [a] in the [ia]. Any sound or combination of sounds is produced and restricted by the organs of speech. That is, the analysis and synthesis of a syllable is restricted by human speech organs actually. In accordance with the human behavior or statistical result, it is impossible to form 1 syllable or diphthong [ai]. It is possible to form 1 syllable or diphthong [ia] or [uə]. The English diphthong [ai] is held for a longer time than [ia] usually. English [ia] is a syllable or diphthong in the Chinese. Chinese [ai] is corresponded to the English [e]. Only [uə] can form a diphthong among English 8 diphthongs. The other diphthongs [ai] [ei] [ɔi] [əu] [au] [iə] and [eə] are removed or broken down in the standard sounds or broad transcriptions of new IPA. English triphthongs are deleted or broken too, such as [aiə] [eiə] [əuə] [auə] [ɔiə] and etc.

Although an English consonant cannot be allowed to become a syllable, its consonants may form consonant clusters, like its diphthong or triphthong. For instance, there is a break or split between [s] and [p] when [s] glides or spells [p] in [sp], unlike [tŋ]. The pronouncing time of [sp] is longer than [s] or [p]. The pronouncing time of [tŋ] is same as [t] or [ŋ] usually. The most English consonant clusters are removed or broken down in the standard sounds, such as [pl] [pr] [bl] [br] [tw] [dr] [dl] [kl] [kr] [kw] [ks] [gl] [gr] [fl] [fr] [ft] [tl] [sp] [st] [sk] [kt] [ns] [nt] [nd] [nst] [kst] and etc.

The duration of the most English vowel and consonant clusters exceeds the normal duration of a phoneme, e.g., [ei] is longer than [e] or [i], [st] is longer than [s] or [t]. In other words, most English vowel and consonant clusters are random and confused.

[if] is 1 syllable in the English. [if] must be thought as 2 syllables in the standard sounds or

new IPA, that is, 1 vowel syllable and 1 consonant syllable. [fi] may form 1 syllable. Some people who accustomed to alphabetic writing systems negated Chinese syllables. For instance, they thought that a Chinese word of 2 syllables 'youai' (friend, love) might sound like a cat making a noisy protest. The part of a syllable which is often called coda by English is superfluous and should be cut off. If the coda was deleted, the English syllables are more similar Chinese and Japanese ones. The word 'cat' is 1 syllable in the English. The pronouncing time of 1 syllable word 'cat' [kæt] is longer than [k] [æ] [kæ] or [t]. [kæ] and [t] cannot form a syllable, unlike a syllable [huŋ]. The pronouncing time of [huŋ] is the same as [h] [u] [ŋ] [hu] or [uŋ] usually. The fatal shortcoming of coda is that it makes the syllables are too many and a consonant can become a syllable actually. All languages allow open syllables which are called by English. The standard sounds or broad transcriptions of new IPA must be some open syllables and based primarily on IT, ignored English or French phonetics. The sound norms of native English speakers are no longer the standard models of sounds, especially for the English sounds such as the pronunciation of BBC and voice of America. English [a] and [ʌ] are same sound, syllable or phoneme according to the new prescription of speech sounds. English sounds must be internationalized at least if English is wanted to compete with the other languages and popularize in the world.

Any phonetic or grammatical prescription which is opposed to the general principles of IT must be removed or corrected. For examples, the first element of an English diphthong is strong, clear and distinct. The second element is rather weak and unclear. The first consonant must be said very gently and quickly, and the second one is very often formed while the first one is being pronounced. Letters or phonemes are silent. A consonant can't become a syllable. Sentences must be written with capital initials, and etc.

An apostrophe is used to separate the syllables in the Chinese alphabet. On the contrary, the English liaison links sounds or phonemes which had already been become syllables within their words respectively. The liaison is against to the general principles of IT and one of English fatal shortcomings. For example, the syllable [i] cannot appear before the syllable [a] in the English, Russian and French. The separation of words is become futile and redundant in a written English sentence because of English phonetics generally. Words are not separated in the written Chinese sentences. Of course, it seems that separation of words are better in the written sentences.

One of the fatal shortcomings is that English sounds are unequal long in its standard sounds; the long and stress sounds are excluded from standard Chinese and Japanese sounds; Chinese and Japanese sounds are codes of equal length. According to English criterion, a consonant is long as a semi-vowel or half length of a vowel, i.e., a phoneme [u] is longer than [w]. A phoneme or syllable [u:] is longer than [u]. [a] is longer than [ʌ]. [ai] is longer than [ia] [a] or [i]; [a] or [i] within [ai] is shorter than a single vowel if a diphthong [ai] is pronounced same long as a single vowel. [if] is longer than [i] or [f]. [aiə] is longer than [ai] [iə] [a] [i] or [ə]. [st] is longer than [s] or [t]; [s] and [t] of [st] are shorter than a single consonant respectively if a consonant cluster [st] is long as a single consonant. [kst] is longer than [ks] [st] [k] [s] or [t]. [best] is longer than [bes] [st] [be] [es] [b] [e] [s] or [t]. Most English syllables are false hypotheses or entities.

Syllables are the random variables within a meaningful unit and phonemes are restricted within a syllable in some languages such as Chinese and Japanese. Syllables are not random variables in the meaningful units such as English, Spanish, French, German and Russian. English syllable theory is often complicated and confused. The phonemes are the random variables in the most English syllables, but the combinations or appearances of some syllables are restricted. [ai] is a syllable or diphthong. The syllable [a] can't appear after syllable [i]. A syllable [ia] cannot be existed in the English. The essential of English phonetics or an English fatal weakness is that the phonemes are random variables in a syllable or meaningful unit. Many aspects of Chinese and Japanese phonetics are simpler and more reasonable than English ones. The patterns of English syllables have negated its own prescription that a consonant cannot be allowed to become a syllable actually. Of course, Chinese characters and syllables are too many and complex too. Compared between English and Chinese phonetic notations, some shortcomings of each are obvious. The syllable [i] must be spelled [yi], the syllable [u] must be [wu], and etc in the Chinese. Chinese character and Japanese kana don't need any other symbol to separate sounds, but are too many and complex. Although English letters are simple and convenient, some syllables or sounds are awkward to separate and identify. Some English syllables must be separated by an other symbol at least. In other words, phonemes or letters are random variables of syllables or meaningful units in English and Russian. The fatal shortcoming of English and Russian is that combinations of some syllables are limited. An English letter is corresponded to a phoneme usually. A Chinese character or Japanese kana is a syllable generally. Chinese, Arab, Hindi, Bengali and Lahnda writings are integrated with some shortcomings of English and Japanese, and much worse than Spanish, English, Portuguese, Russian, Japanese, German and French writings. But Hindi and Bengal are much better than Chinese, Arab and Lahnda writings. This is one of challenges for the human common language. The human common writing must concentrate advantages of each such as letters, Chinese characters, Japanese kana and etc respectively, overcome their shortcomings. The problem is how sound and writing are the optimal matched each other according to human requirements. In fact, most IPA letters have already united by the binary letters.

52 diacritics and 4 prosodic marks are too many and complex in the current IPA, e.g., the diacritics of stress and long of THE POCKET OXFORD DICTIONARY OF CURRENT ENGLISH (R. E. Allen. 7th edition. 1984. ISBN7-5600-0487-3 H.229) are superfluous and unuseful in the actual English communication. Few English speakers concern or mark accurately which sound must be stress or long in a word or sentence. The stress, length, intonation and etc are often uncertain features of sounds and difficult to control or transcribe in almost every language generally. The shortcomings of some diacritics are obvious. Many diacritics are added difficult to learn and use language. 1 stress are divided into 4 or more variables by some people, for examples, very strong, less strong, weak, very weak, and etc. The more variables of a diacritic or diacritics are in the dictionary or pronunciation, the worse English is in general. English stress, length, intonation and etc are often contradicted and confused from theory and practice. Simply, stress, length, intonation and etc are random and unexpectedly features of sounds in the actual communications. English communications are difficult and even failed if it is followed accurately the diacritic prescriptions of English

dictionary. The most diacritics are added the cost of learned and used English, deteriorated the performance of English. The diacritics should be removed from the phonetic notations of words in the English dictionary at first. British English is based primarily on the educated people in London or southern England. The reasons and motivations of using language are enormous. A language is identical to serve its every speaker normally. The claim of American English often confuses the different levels of sound distinction. This is the same shortcoming of IPA. Simply, American English often focuses or aggrandizes few differences but ignores most sameness with British English. American English is almost not existed at all according to few new or different English sounds and words. For example, English can be transcribed according to the IPA, General American, Cockney, Southern US English and etc. The fatal shortcoming is that the standard official British language is decided by few people, educated people and royal family in southern England. Some educated people and royal family must change the stupid or extreme notion that their pronunciations were the best or standard. If British English ignored educated people and royal family or every English speaker was a same sample, perhaps the difference of American, Australian, British and many other Englishes could disappear. English standard sounds can be decided according to mathematical theory of scale types. The human common language or standard sounds must be reduced maximally and even avoided the complex sound prescriptions of the existing languages. The diacritics of 3 Lahnda, 4 Chinese and 6 Vietnamese tones reflect certain theoretic claims only. In fact, the most native speakers of the 3 languages often confused their tones respectively. The theories of tone, intonation, stress, length and etc are often contradicted and confused. Few Chinese know or mark accurately their 4 tones. The diacritics of IPA must be simplified and standardized. For instance, music symbols can be used if someone wants to complicate the sounds such as intonation, stress, tone, prosodic and satisfied the sound requirements and claims of singers and poets. Although there aren't voices of illiterates in scientific fields usually, the standard sounds must be ignored some sound requirements and claims of singers and poets. That is, any sound requirement and claim such as singing and reading must be obeyed the principles of speaking unconditionally. The classical singing must be removed from the IPA. Simply, the language does and even cannot concern how to sing usually. The language must be focused how to speak. For example, most consonants cannot be satisfied some sound requirements of songs and poems at all. A great deal of detail features, especially suprasegmental and even more detail features of sounds are difficult to identify and have almost nothing to do with the most ordinary speakers and listeners. Extensions to the IPA for speech pathology and spectrographs are almost redundant and unuseful in everyday dialogues of the most normal people. The standard sounds have almost nothing to do with the clinical phonetics and linguistics. Although our ancestors didn't have modern medical knowledge, they could communicate with the language. The current clinical phonetics and linguistics make you can see trees and sticks merely, but not forests in the IPA generally. The clinical phonetics and linguistics have some theoretic values but few practical values. For example, it can classify and prove the different sound precision or complexity, but almost have nothing to do with the ordinary people. The current clinical phonetics and linguistics are opposed to the requirement and behavioral habit of ordinary speakers and listeners, and being stopped to standardize sounds. The fatal shortcoming of

clinical phonetics and linguistics is the wrong direction that far from ordinary people, but focus on few stammerers. The IPA is made more complex by the international clinical phonetics and linguistics association. Chinese and English pronunciations are no longer the standard forms. Japanese pronunciations are almost the standard models of speech sounds. Japanese pronunciations are much better than Korean and Vietnamese ones though they have changed or negated the Chinese respectively. Japanese, Korean and Vietnamese are the failed or imperfect examples of language evolution. For examples, the Japanese simplified Chinese sounds too much. Vietnamese has complicated the Chinese tones and English letters. Vietnamese are over 4500 syllables according to English or its own criterion. Japanese and Korean are not removed the (Chinese) characters completely. The human common language must be reduced maximally and even avoided the current social phenomena that the teachers or linguists often teach and correct pronunciations of students or other people, though their own pronunciations are often not standard according to the criteria of their native languages respectively. That is, the cost/performance of learned and used sounds must be optimized in the human common language. 52 diacritics and 4 prosodic marks are removed in the standard sounds or new IPA. The current IPA chart will be deleted in the new IPA.

3. Results

The current IPA is much worse than Chinese or English phonetic notations, and ignored the most normal people such as illiterates, but concentrated on the few people such as singers, stammerers, poets and etc. The sound requirements or claims of poets and singers have almost nothing to do with the other ordinary speakers and hearers. Communications of deaf, dumb, blind and other few people can be solved by the other ways. The most ordinary people are often difficult to recognize and identify the most phonemes of IPA, and can't learn and use the IPA directly. The IPA must be satisfied the requirement of standard at least and transcribed the whole speech sound system. The current IPA can be revised and developed by the new IPA or standard sounds. For example, English stresses and Chinese tones can be transcribed without the current marks in the new IPA. The IPA or standard sounds must be simplified and systematized. That is, the various precise levels of sounds are sufficiently transcribed by the standard phonemes, referred mathematical representation. For example, the

decimal representations of π, e and etc. Simply, the narrow transcriptions are represented by

broad transcriptions only in the new IPA. IPA can and must be satisfied not only requirements and claims of individuals such as singers, stammerers, poets, royal family and etc, but also the requirements of standard and other most ordinary people. The new IPA can transcribe any sound of the current IPA at least.

The human speech sounds must be transcribed or classified with different levels of precision or complexity. The current broad and narrow transcriptions are improved or extended. The features of sound can be analyzed time and space functions or variables. IPA must be better than American English phonetic notations at least. Chinese, Japanese or English pronunciations are the subset of standard sounds. Any phoneme can become a syllable, such as [a] [s] and [ŋ]. [a] [a:] [ʌ] and [ʌ:] are 4 variables of 1 standard or broad phoneme or syllable. [s] [z] [θ]and [ð̃] are 4 variables of 1 phoneme or syllable. Each of [ai] [st] [it] and

etc is 2 phonemes or syllables. [ia] [tŋ] [ki] and etc are 1 syllable of each. [s] and [si], [t] and [tə] and etc are 2 variables of 1 syllable respectively. The word 'if' is made up of 2 phonemes or 2 syllables. The word 'cat' is 3 phonemes or 2 syllables. The word 'desk' consists of 4 phonemes or 3 syllables. The word 'next' has 5 phonemes or 4 syllables according to the new IPA. The words 'if, cat, desk, next' are 1 syllable of each according to English. A vowel can have 2 variables according to English, 4 variables according to Chinese, 6 variables according to Vietnamese. A consonant can divide 3 variables according to Lahnda, and etc. Simply, the speech sounds are classified or managed by various levels as certain computer or social system. [a] and [ʌ] are 2 phonemes according to English, but are no longer the standard or broad phonemes and syllables in the new IPA. English phonetics merely fits its sounds, Chinese phonetics accommodates its pronunciations mainly. The IPA must be transcribed or adapted sounds of any language directly. The new IPA is an opened system. Any language can use and enlarge the IPA according to certain situation or theoretical claim. The new IPA can and must be satisfied the requirement of sounds how precise one wishes to be with few symbols or letters. That is, the sound requirements of individuals and languages can and must be satisfied by few phonemes or letters in the new IPA. Not only the Chinese and English phonetic transcriptions are used the simple letters, without many diacritics, but also the IPA must be transcribed by the few letters, without any diacritic and prosodic mark.

The phonemes of standard sounds are no longer classified vowels and consonants. For instances, [u] is a syllable of one phoneme. [u] is the initial and [a] is the finial in a syllable [ua]. [h] is the initial and [ua] is the compound finals in a syllable [hua]. Simply, the standard sounds and new IPA are treated and defined human sounds according to IT. The standard syllables are the smallest random variables of meaningful units in the language.

It is often not affected the actual pronunciations of certain units such as desk, though desk is spoken 1 syllable by English, 3 syllables by Chinese. [s] and [si], [a] and [ʌ] are no longer the different syllables respectively in the standard sounds. That is, Chinese or English phonetics is no longer affected the standard of speech sounds. Chinese and English sounds can be classified according to the uniform or universal criteria. The new IPA can solve the problem of English spelling reform. For instance, English means a nation or language at same time. Right, rite, wright and write will be become same writing or word in the English. Such problem is much bigger than English in the Chinese. A Chinese syllable is often represented by some and even over 100 characters, words, items or meanings. The human common language will face the same problem, refer the numerical expressions. The French, German, Spanish, Portuguese and Russian are much worse than English because of letters, sounds, morphology and syntax. The French should be removed from 6 working languages of UN at first according to their elements, structures and speaker totals now. In fact, the French and German are 2 dialects of English according to the Chinese criterion. But some western scholars insisted on some Chinese dialects were different languages in the China.

A language is a social tool or production. Creating the human common language is united or standardized the existing languages. Not only syllables are random variables within the meaningful units such as Chinese, but also the writing is simpler than current alphabets such as English and Russian ones in the human common language. The human common language

must be concentrated the advantages of almost each language. The human common language is derived by not only linguists, but also almost every global citizen. Simply, the human common language can use Chinese grammar and English alphabet. Of course, its grammar and alphabet are much simpler than English and Chinese. The cost and performance of the human common language will be much better than any existing language. In other words, the existing languages are no longer adapted human development. The symbols of Unicode such as ASCII are too many and complex. We must improve or change our language so as to meet and promote the whole human developments. The human common language is almost same the digital object identifier system (DOI). Meaning or information about a digital object may change over time, including where to find it, but its word or DOI name will not change.

In accordance with the models of new IPA, there are less 1000 syllables in each of Spanish, English, Arabic, Hindi, Bengali, Portuguese, Russian, German and French. English are over 3000 syllables according its own criterion. The newspaper *CHINA DAILY* is often adopted the British English as criterion. The new IPA will offer an opportunity to establish the global standard official English. The standard English must be negated or destroyed the authority and prerogative of some native English speakers, especially for the educated people and royal family in the England.

The general principle of the standard sounds is that the amount of sounds are many as possible, the distinctions of sounds are large as possible. 2 aspects are often opposed according to IT. The human must seek to balance between them. In accordance with the criteria of new IPA, the gaps of Japanese sounds are the largest. Few Japanese sounds are confused usually. But the number of Japanese sounds is too small, no more than 113 syllables. Although the total Chinese syllables are the largest, about 1332 syllables, the distinctions of Chinese pronunciations are the smallest because of its 4 tones mainly among 12 top standard official languages. The actual total Chinese and English syllables are uncertain until today because their some sounds are awkward to distinguish and identify respectively.

There are no more than 50 letters or phonemes, certain between 200 and 400 syllables in the standard speech sounds according to the world's 12 top standard official languages.

How to transcribe speech sounds with written symbols is another matter. In linguistic evolution, the speech is prior to writing. The writing is scratched, drawn, written and typed through a long history generally. People must go to school when they want to master certain writing in modern era. Any existing writing can be improved according to the phonetic principle first. Although speech sounds almost have nothing to do with the writing, the best pronunciations must be expressed by the best writing. That is, a man-made visual symbol system must be matched with the speech sounds maximally. The English writing is much worse than the ideal, standard or future human common writing though English typewriter is the cheapest and best in the world nowadays. That is, the Latin and Greek alphabet are no longer satisfied the requirement of modern human writing though they are the most popular and best alphabet or writing in the world today. For instance, the shape and number of Latin and Greek letters are far from the requirement of standard. English writing is being become more complex, but not simpler. For examples, @, &, the mark of case grammar ' and etc are

being become letters in the English actually. French, German, Spanish, Portuguese and etc are being improved their writings according to English writing or criterion respectively. Numerous mechanical and electronic products and social managements of Chinese, Arabic, Hindi, Bengali, Japanese, Lahnda and etc are much more expensive and difficult than English letters. English letters are occupied the keyboard of computer because other writings such as Russian letters are more and worse than English. In facts, the human writings have already been united by the computer. But the binary letters of a word are too long to learn and use for the ordinary people. The oral language, gesture language, visual writing, braille writing and etc are different meaningful systems. How to correspond and unify them each other is depended on the level of human linguistics. The human common language concerns the oral language and visual writing which are used by the most normal people at first. Of course, the oral language is the most important.

The standard of speech sounds will reform or delete the Latin or current IPA letters. The new letters will be used primarily in the standard sounds. The optimal visual symbol design of the standard sounds is the base of human common writing. The alphabet of human common language is about 30 letters in order to meet the requirements of typewriting, typesetting and etc. The handwriting can be fitted almost any writing in existence. The cost and performance of English and Russian typewriters are much better than Chinese, Japanese, Hindi, Bengali, Arabic and Lahnda ones. Typewriters cannot popular until today because most of the world's writings are too complex. Easier Learned and used the writing are, more restrictions the condition or technology of writing is. The current Latin or Greek scientific terms will be replaced by the human common writing first. The meaningful units of a language are too many and complex generally. Merely one, some people and even all linguists cannot finish to create the human common language. For theory, almost everyone is an expert who can use, develop, test and optimize the human common language if the standard sounds were made. For instance, population is 7.4 billion in the world now. A person must have a name at least. Certain naming custom such as Chinese or English one is no longer the norm. We must build a new naming tradition or standard. That is, the human names will be used according to the international standard in the human common language. Chinese and English are written from left to right. Arabic is written from right to left. Whether the human common language will be written from left to right or from right to left is decided by all global citizens. The human common writing will have an sole order though the computer has bidirectional or multiple ones. Because spoken messages have the sole order. Simply, the human common language must be matched the standard sounds, the easiest for antiilliteracy, and used the cheapest and best typewriter, especially for the mechanical typewriter at first and foremost.

The standard speech sounds are the broad transcriptions of new IPA, that is, the best codes of human speech sounds and the concrete realization of IT. Any existing language cannot be satisfied the requirement of the standard sounds. The standard sounds are the pronunciations of the human common language in the future.

There are about 30, certain between 20 and 40 letters or standard phonemes, certain from 200 to 400 standard syllables. Any narrow phonetic transcription can be represented by the broad transcriptions or standard phonemes in the new IPA. Chinese and English punctuation marks

are too many and complex. The punctuation is separated the meaningful units mainly. In fact, the spoken message doesn't need any punctuation to separate meaningful units. There will be no more than 5 punctuation marks in the human common language.

The human sounds are coded according to semiotics, IT and relevant sciences, denied and improved any current phonetics and linguistics. The living language especially 12 top official standard languages are the experimental or raw materials of the standard sounds and human common language. The human common language will be expressed the fact or reality according to modern human requirements and civilizations.

The making of standard sounds will be organized and led by the UN. The linguists of any language can participate to design the new IPA.

4. Discussion

Whether or not you agree my argument or opinion is not important. The standard of speech sounds or IPA must be become a social production which can be learned and used by the most ordinary persons directly and frequently in the world, without any reason or theory. The IPA must be provided the most adequate, economical and effective method of transcribing any language. The IPA must be accurate, complete, simple, convenient and satisfied the requirement of standard first.

References

Eugene A. N. (1993). *Language, Culture, and Translating*. First edition. Shanghai Foreign Language Education Press. ISBN7-81009-722-9/H·364.

Gui Cankun. (1985). *Applied Phonology of American English*. Shanghai Foreign Language Education Press. No: 7218.072

He Shanfen. (1985). *Practical English Phonetics*. Beijing Normal University Press. Beijing. ISBN7-303-00142-5/H·2.

He Zh. X., & Mei D. M. (1999). *Modern Linguistics*. Foreign Language Teaching and Research Press. Beijing. ISBN7-5600-1523-9/G.654.

Huang B. R., & Liao X. D. (1991). *Modern Mandarin*. Higher Education Press. Beijing. ISBN7-04-010638-8.

Information on the Internet, such as w*ikipedia.org, omniglot.com* and etc.

Jiang Y. J. (2003). English as a Chinese language. In Tom McArthur (Ed.), *English Today 74, 19*(2). Cambridge University Press.

Liu R. Q., Stephen, R. M., Zhao T., & Yan X. T. (1988). *Readings in Linguistics: Seventy-five Years since Saussure*. Mapping Press. Beijing. ISBN7-5030-0193-3/H·4

Liu Z. Y., Pen X. D., & Liu W. L. (1993). *Computer English*. Tsinghua University Press. Beijing. ISBN7-302-01089-7/TP·408

Lu Guoqang. (1983). *Modern English Lexicology*. Shanghai Foreign Language Education

Press. ISBN7-81009-029-1/H·019.

M. Lynne Murphy. (2016). (Un)separated by a common language? Are American/British differences unimportant? In Clive Upton (Ed.), *English Today 125, 32*(1). Cambridge University Press.

Raimo A. (1989). *Historical and Comparative Linguistics*. University of California, Los Angeles. John Benjamins Publishing Company. Amsterdam/Philadelphia. ISBN 90-272-3557-0(pb).

Rodney H. (1988). *English grammar: An outline*. Cambridge University Press. ISBN0-521-31152-7.

S. H. Burton. First published (1984). Reprinted in Hong Kong (1985). *Mastering English Grammar*. Macmillan Publishers Ltd. ISBN0-333-36368-X.

Wang D. X. (1992). *An Introduction to Sociolinguistics*. First edition. Beijing Language and Culture University Press. ISBN7-5619-0159-3/G·45.

Ye Baokui. (1992). *General Linguistics: A Survey*. Xiamen University Press. Xiamen. ISBN7-5615-0443-8/H·32

Yin Binying, & John S. R. (1997). First edition. *Modern Chinese Characters*. Sinolingua. Beijing. ISBN7-80052-167-2.

Zhou K. CH. (1984). *An Introduction to English Phonetics*. Shanghai Foreign Language Education Press. Shanghai. ISBN7-81009-030-5.

Zhou L. (1995). *Arabic Linguistics*. First edition. Foreign Language Teaching and Research Press. Beijing. ISBN7-5600-1018-0/H·553.

Zhu M. X. (1992). *The Speech Sound Technology of Computer*. Beihang University Press. Beijing. ISBN7-81012-321-1/TP·067

Copyrights