## 15. Phonosyntheses

15.1. This part of the *HPh* applies —to a fairly large number of languages— what has been presented in the previous chapters. In fact, as we have already said in § 1.9-10, the *phonosyntheses* provide synoptic indications about *V*, *C* and *T* (ie vowels & vocoids, consonants & contoids, and tonetics & tonemics [together with tones & tonemes, if any]), processed and achieved by the same person who prepared the first part (and the *HPr*), directly from recordings, *not* as second-hand materials (although, of course, the various scientific [and also less scientific] production by other people has been seen as well), also with the help of some friends who are indicated in the foreword.

This guarantees coherence and globality, although this information is provided in a concise way, also for reasons of space and time. Their style resembles that of *The Principles of the International Phonetic Association*, but they mainly rely on their precise vocograms, symbols and (in)tonograms (and orograms, or possibly contograms), cf (h 10), although no transcription of *The North Wind and the Sun* is provided (but it is given for the languages dealt with in the *HPr*, including intonation).

On the other hand, the function of the phonosyntheses does not end here. Indeed, it spreads to two important uses: to provide both *information* and *phonotone*(*ma*) *tic tools* too. It is of fundamental importance to reflect on structures, in order to make interesting comparisons between different languages, also to explore the richness of the various phonic systems for descriptive, comparative, contrastive, and teaching purposes.

The simple analysis of a given phonosynthesis already allows to reliably and confidently *predict* phonic *interference* about learning that language; or about the difficulties experienced by speakers of that language who want to learn another one.

15.2. It is important that the phonosyntheses (and the *HPr*) provide scholars and enthusiasts with reliable tools for the *description* of the pronunciation of about 350 languages, which thus far have been described in approximate, superficial or partial ways, when not plainly wrong. Among these 350 languages (including the 12 given in the *HPr*: English, Italian, French, German, Spanish, Portuguese, Russian, Arabic, Hindi, (Mandarin) Chinese, Japanese, Esperanto, and 30 variants), in the *HPh* we find 63 *traditional dialects* spoken in Italy (not only Romance ones: \$\mathbb{G}\$ 16), 79 *European* languages (and some local dialects too: \$\mathbb{G}\$ 17), 25 *African* languages (\$\mathbb{G}\$ 18), 58 *Asian* ones (\$\mathbb{G}\$ 19, and Arabic, Hindi, Mandarin Chinese, and Japanese in the *HPr*), 6 *Oceanian* ones (\$\mathbb{G}\$ 20, and the Australian and New Zealand pronunciations of English, with variants, again in the *HPr*), 31 *American* languages (\$\mathbb{G}\$ 21, and the American pronunciations of [both us and CDN] English and French, of Spanish, and of Brazilian Portuguese, again in the *HPr*). There are also 72 *dead* 

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languages (\$\text{G}\$ 22); finally, even an <a href="https://interlinguistic">interlinguistic</a> (and <a href="https://interlinguistic">panchronic</a>)... extraterrestrial pronunciation is given (\$\text{G}\$ 23)...

All this may be used to manage to prepare descriptions such as those given in the HPr, or even whole pronunciation handbooks (as, for instance, the  $M^aPI$ , for Italian), or pronouncing dictionaries as well (such as the  $D^iPI$ , for Italian again).

Otherwise, it would be possible to prepare some (concise, but accurate) descriptions of the pronunciation of certain languages, to be placed at the beginning of grammars or dictionaries, in order to be able –at last– to replace the messy and often confusingly misleading and disappointing (guides to pronunciation). Generally, these (guides) just try to give some vague (when not totally (mysterious)) phonic correspondents to the graphemes used in a language or a traditional dialect (with the disastrous results we all know).

The 72 dead languages given in 622 might be considered quite another matter, since —obviously— it was impossible to listen to them. We simply had to reconstruct them by relying on the works of the field specialists, with the addition however of the *direct experience*—both theoretical and practical—provided by all the other phonic systems dealt with in 616-21 and in the HPr.

In this way, we could actually touch –from the inside– the dynamics and mechanisms also of the systems of these languages, almost as if really (listening) to them.

15.3. As it is immediately apparent, the exposition is limited to the essentials, and often without examples. After all, certain concise descriptions, such as those in the HIPA (given in the bibliography: Handbook of the International Phonetic Association, which ought to be exactly the guide to the use of the official IPA), mainly just highlight the limitations of the system and of those who try to apply it. They still leave a considerable number of uncertainties and doubts about the precision of the notations and the placing of the vowels on the quadrilateral.

Among other things, those concise descriptions completely lack intonation, which is instead a fundamental component of languages – indeed the very first one to be learnt.

In our phonosyntheses, in spite of their conciseness, intonation *is* present. Indeed, it is represented in truly objective tonograms, as they can result from an accurate average of instrumental analyses of several utterances by many different speakers, using the same *neutral accent* for the languages and the same *common accent* for the dialects.

15.4. It is to be noted that, in these phonosyntheses, no attempt has been made to try to give indications about *word stress*. Indeed, this matter is too elusive and subject to variations (and to (surprises) as well). As a matter of fact, we did not want to perpetuate the situation found in too many grammars that pass off some objective –but not absolute– trends as if they were general rules!

Too often it is written (and taught) that in Turkish, for instance, stress is (always) on the last syllable of words. But it would be sufficient to actually listen to the language, to realize that such an indication is not at all reliable and assured, in every case. Readers should never be deceived by false rules. As in Turkish, and in

Czech and Hungarian, stress fluctuates considerably (although it is described –for these other languages– as always falling on the first syllable of words)...

There is also somebody who goes as far as stating that Italian words bear the stress on the last syllable but one. Actually, on average, this is true only half the time in text language (or two times out of three in lexical language). It is exactly these (rules) which make people produce (here the acute accent indicates stress): (stupido, gondóla, dolláro) (instead of /\$\$\$/, as in the Italian versions of Laurel and Hardy's famous and interesting films)... However, even if this rule were (corrected) adding something like (generally, the exceptions, ie words bearing the stress on the last but two syllable, are lofty words), another lie would be told, even more harmful than useful, since words such as scàtola, último, gómito, píccolo, stúpido (box, last, elbow, little, stupid) are certainly not lofty...

15.5. Apart from all that, as far as *vowels*, *consonants*, and *intonation* (including *tones*) are concerned, the indications provided in the phonosyntheses are the results of careful and meticulous analyses of what was sufficient to canvass, with calm and patience, using several recordings.

As we have already pointed out, the results provided also have the advantage of having been produced by *one person* only, contrary to the synthetic descriptions in the HIPA, which –at least– ought to be done again, by homologating and normalizing them. This could only be done by having all the other persons (who provided their single descriptions) to make their analyses of every language included in the HIPA, using the same recordings (perhaps after substituting several of them with others, which ought to be chosen better from a phonetic point of view). This could bring the HIPA to actually correspond to its original intentions: to be a real *guide*, not just wishful thinking, nor a bitter disappointment, nor even a resigned renunciation or a blind acceptance of a lesser evil.

The most important thing is to start with reliable elements, to begin to rigorously consider the phonic aspect of various languages. Using the phonosyntheses, people who know a given language (and also have good texts and dictionaries) will be able to find all the *examples* they need in order to write a description which can really be useful (not an approximate one, or a fantaphonetic) one, as one may happen to find!).

As we have explained in § 12.16, we want to reassert that our phonotonetics and phonotonemics as well regard words in connected speech, not words in isolation. Therefore, all that is provided is to be applied to oral texts, in rhythm and intonation groups (as we have already done in the chapters of the HPr), not to single words out of context, even for destressed V ([°V]), which can maintain clear and distinct timbres also in languages where unstressed V ([°V]) may have limited occurrences, as happens for instance in Catalan.

15.6. The exposition of the languages provided is subdivided by geographic areas, with no intention to group them genetically, although affiliations are indicated, for classificatory purposes.

For cross-reference purposes between this English version and the original Ital-

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ian one the order of chapters remains unaltered. Therefore, in our *journey*, we will start from Italy and, proceeding according to the criteria of geographic atlases, will continue through Europe; then from Africa to Asia; finally, from Oceania to America. Of course, there are also some unavoidable (leaps) (as a kind of (flight) or (ferrying)), as we proceed within countries where we have several languages.

In fact, there are six *maps* (although the map of Asia is divided into two parts, to guarantee clear visibility). Languages are marked upon them, giving special prominence (by using grey backgrounds too) to those that might result to be less known, or that do not present identity between the glottonym (ie the language name) and the country/region where they are spoken.

We have also drawn the *boundaries*, which apply exclusively to the analyzed varieties. These have to be interpreted –especially for the most extended zones– as *areas* where it is *likely* to find native speakers, who –usually– use also their national languages (which, when observing the maps, are thus not excluded from those areas).

For the dialects of Italy, the places indicated are quite small, since they only refer to the dialects of the towns where they are spoken, unless it is specified that they are koinés. In this case, also their geographical extensions are greater.

15.7. Instead, beyond Italy, the languages considered are always in their neutral variant or official koiné, even if this does not imply that all the speakers of those areas necessarily use the pronunciation given by us, as is obvious. This is the reason why the areas we have drawn are decidedly larger, even if the actual number of speakers may generally be rather limited.

Glottonyms are printed in *italics* for the Italian *dialects* and for *subnational* languages (or *heteronyms*, ie when there is a difference between the name of the country and that of the language). Any other name, instead, is printed in *roman* and (generally) on a white background – otherwise we would have had a uniform (and useless) grey almost everywhere. For Indonesian we have used a clearer shade of grey, to visually unify the area formed by many isles. For Greek we thought it unnecessary.

As we have said, in the *vocograms*, both phonemes and phones are indicated. The notation choices about vowel phonemes, in these phonosyntheses, follow either interlinguistic or intralinguistic criteria, according to provisional hypotheses. In fact, to provide systematic descriptions, the symbols of the phonemes might be changed. In any case, the most important indications, in the sense that they are newer, are the concrete –phonetic– ones.

The *tables of consonants*, which raise minor problems, present phonetic symbols, in order to be more precise, all the more so as no articulatory labels are indicated (for places and manners, which are given though in the general table, fig 10.1, or in the tables of the chapters in the *HPr*). Thus, we find phonetic symbols used however with phonemic value, even though, in phonemic transcriptions, it might be preferable (sometimes) to use more official and generic symbols. On the other hand, the symbols which, in the phonosynthesis tables, appear in *square brackets*, absolutely indicate taxophones.

Generally, these are briefly explained, even though almost always without examples, which however are not difficult to find if one knows the language (but are scarcely useful if one does not know it). Not to speak of all the space they would take up and that would lead to three volumes (instead of two: *HPh* and *HPr*), while initially only one was planned.

Symbols appearing in *round brackets*, unless there are specific observations, indicate phon(em)es with an uncertain or fluctuating status, since they are used in *loanwords*, or are *rare*, or are nearing elimination.

Usually, in these tables, trills (with taps and flaps) are written on the same row as laterals, to save space, but they are separated by a hyphen.

15.8. We make use of various (synthetic) symbols (already dealt with in the first part of this Handbook) which, ultimately, besides saving space, with practice, lead to useful iconic associations. The formula  $[n \equiv C]$  means that the phoneme /n/ phonetically assimilates to the C which follows, both within a word and in a sentence (whereas differences are explicitly indicated). This enables us not to fill the consonant tables with all possible nasal contoids; when this formula is not indicated, it means that this type of assimilation does not occur; generally, the same formula,  $[n \equiv C]$ , which implies [nt], also includes [t] and [t] (unless a given language has [t], [t], as in English [t], welch, [t]

To save space, in the consonant tables of the phonosyntheses (besides omitting *manners* and *places* of articulation, since the precise *canIPA* symbols are unambiguous), we use the formulae  $/\mathbb{Q}^h$ ,  $\mathbb{Q}^h$ /, as in  $/p^h$ ,  $t^h$ ;  $b^h$ ;  $m^h$ ;  $r^h$ ;  $h^m$ ;  $h^m$ /, to indicate phonemic opposition between /ph, p; th, t; bh, b; mh, m; rh, r; hm (or  $[h^m]$ ), m; hr (or [hr]), r/.

Therefore, this value is different from that in the offIPA chart (cf fig 7.1), limited to makeshift uses, in transcriptions which are bound to approximation right from the start. Indeed, they are phonemic indications, with some occasional additions, to try to hint at some taxophones without adding a phonetic transcription as well.

Therefore, in actual fact, what phonetically is [Ch], according to official indications, tends to be treated in two different ways, depending on whether it is —phonemically—/C/ or else /Ch/, that is (official) </C/>
and </Ch/>, respectively. All this as if <aspiration> really were a kind of phonatory mechanism (as the <delay> of the vot theory [cf § 1.13]), instead of natural phonetic % phonemic sequences, as [Ch] or /Ch/, respectively. As a matter of fact, the languages that present /Ch/ also have /h/, thus it is quite logical to have /Ch/, ie /C/ + /h/ (instead of /Ch/).

15.9. If the observations made in these chapters (\$\text{G}\$ 16-23) may seem to be few, it is important to remember —always— that the phonosyntheses speak for themselves. They must be analyzed very carefully (not simply looked at, perhaps fleetingly) and in relation to the others, belonging to different or similar languages.

Sometimes, when it can be significant, also phonemes which are peripheral in the phonemic system are given. They are *xenophonemes*, put in round brackets, and used for loanwords from other languages. For instance, Italian has a xenophoneme which is not possible to avoid: /ʒ/, mainly in French loans, as *stage* /s'taʒ/ (too of-

ten pronounced as if it were the English word *stage* /'stɛɪʤ/, wich has a different meaning).

Lastly, it is crucial to consider that, if the pronunciation of some native speakers seems not to coincide with what is provided in the corresponding phonosynthesis (beyond possible cryptical points, due to their concise treatments and to the almost general lack of examples), the most plausible hypothesis is that such (native) speakers do not actually use the pronunciation we have provided—ie the neutral one for official languages, and the predominant one for dialects—though they think (or are convinced) they pronounce in a normal way, even if they happen to be teachers, or language teachers too.

Experience shows that linguistic self-evaluations (and about pronunciation in particular) are really subjective and over-optimistic. Also the notion of what <neutral pronunciation > really is, often, is extremely personal and undefinable...

It is supposed that a serious program of natural phonetics is subdivided into three parts. 1: complete (ie slow and gradual) assimilation of the first 14 chapters of the HPh (obviously always looking for recordings for each language). 2: complete mastery of the HPr chapter on one's own language (if present), always with recordings, to be followed by Esperanto (as a very useful phonetic drill) and the other languages (leaving the less familiar ones for last). 3: careful analysis of the phonosyntheses (starting from the most familiar ones, always with recordings and other materials that can provide examples of words and sentences).

15.10. In conclusion, there are three ways to approach the Phonosyntheses.

1) If going through & 16-22 means nothing at all to someone (not even after reading & 1-14 well), might we make an impartial suggestion: let it be at that! After all, phonetics is not for everyone.

2) If somebody is disappointed, because they are accustomed to finding only a few things trivially and traditionalistically explained in many pages, they should perhaps try to find an excuse to be allowed to forget it (possibly by flipping a coin).

3) Instead, as soon as people look at the phonsynthesis of a language they are familiar with, it can happen that they mentally hear its sounds and spontaneously find examples of words, phrases, and sentences with their typical intonations (in spite of some initial uncertainty due to so many pleasantly unexpected phones).

Then, this means that they have fully understood the *method of natural phonetics*. And when they look at the phonosyntheses of some unknown languages, it is the same as when musicians or singers imagine the sounds while they are reading a score, in a state of great excitement and delight. Another frequent —and enjoyable— possible reaction consists in rushing out to get some recordings in order to be able to listen to all those sounds and intonations that they are reading in the book — directly and live!