

SPIRANTIZATION OCCURRENCES IN GERMAN AND PORTUGUESE¹

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RESUMO

Este artigo visa trazer à discussão, principalmente, traços fonológicos comuns ao Alemão e ao Português, os quais carecem de clarificação quanto à sua origem, como p. ex. a fricativação das oclusivas sonoras /b, d, g/, bem como, em certo grau, da vibrante uvular /R/. Contudo, outras semelhanças também serão abordadas.

ABSTRACT

The purpose of this paper is to bring up for discussion mainly phonological traits common to German and Portuguese requiring clarification as to their origin, like the spirantization of the voiced plosives /b,d,g/, and, to some extent, of the uvular vibrant /R/. However, further similarities will be approached as well.

1. Introduction

1.1. Linguistic and historical background

German Lusitanists in the late 19th and in the 20th century explored the Germanic (Suevish and Visigoth) loan lexemes and morphemes in Portuguese extensively and with utmost thoroughness, starting with the neogrammarians, from amongst which the name of Carolina Michaëlis de Vasconcellos stands out for absolute singularity and excellence, up to Joseph Piel and Dieter Kremer (the latter still with us), with Ernst Gamillscheg, Helmut Lüdtke, Harri Meier and many others in between, who left us the huge legacy of their minute work.

This invaluable legacy in the study of the Germanic loan lexemes and morphemes in Portuguese – which occurred in the course of the so-called ‘Barbaric Invasions’ in the 5th and 6th centuries – is not only

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fundamental to Portuguese and Hispanic studies, but also very useful to Germanic and German studies, *e.g.* in helping us to understand better and date more accurately and reliably the 2nd / High German Consonant Shift (what we Germanists call the “2. / Hochdeutsche Lautverschiebung”), which separates German from the other Germanic languages and varieties.

For instance, the Portuguese verb {brigar} ‘to fight’ derives directly from Visigoth {brekkjan} ‘to break’, which, in turn, is related to New High German {brechen} ‘to break’. Given that Gothic belongs to the Eastern Germanic dialects and, therefore, the pertinence to German may be, to some extent, questioned, another example can be used to strengthen our viewpoint. In the Galician *appellativum* {laverca} < Suevoish {lawerka} > New High German {Lerche} ‘lark’, the presence of the velar plosive /k/ shows that the loan must have occurred before the 2nd Consonant Shift (spirantization or affrication of the Germanic voiceless plosives /p, t, k/), which will, therefore, have started, as far as oral speech is concerned, no earlier than the late 6th or even early 7th century.²

1.2. Facts and questions

The purpose of this paper is to bring up for discussion spirantization occurrences in English, in Northern German varieties, and in Northern Germanic languages, on one side, and European Portuguese, on the other side, still requiring clarification as regards their origin, namely the spirantization of the voiced plosives /b, d, g/, as well as of the uvular vibrant /R/. Such similarity in phonetical and phonological terms can, at first sight, appear as surprising or even unlikely or strange, given the fact that we are dealing with languages belonging to different and ‘not so close’ branches of the Indo-European family. However, the study of the data at hand will show otherwise.

² But there is more to the lexeme {brekkjan} than meets the eye (Kluge, 1989:104). Its Indo-European root, *{bhreg-} ‘to break’, is very possibly an expansion of *{bher}, which will have designated several semantically related activities: *cf.* Old Nordic {berja} ‘to slay, to fight’, Old High German {berien, berren} ‘to slay, to disrupt’, Latin {ferire} > Portuguese {ferir} ‘to hurt, to injure’, Old Church Slavonic {brati} ‘to fight, to quarrel’.

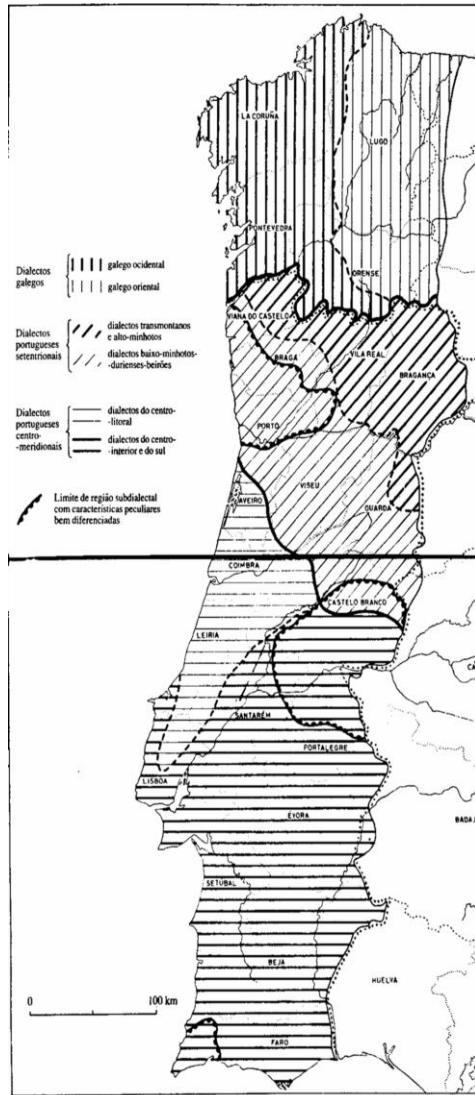
2. Phonological data

2.1. /b, d, g/ in Portuguese³ and Germanic

In standard European Portuguese,⁴ the voiced plosives /b, d, g/, whenever in intervocalic position or between oral vowel and the flapped apical vibrant /r/, and regardless of stress or other supra-segmental factors, must have spirantized realizations: [β, ð, γ]. This process occurs not only in isolated words, but also in idiomatic phrases, or merely linear word sequences (Cintra, 1995), because Portuguese – like English, Swedish or Norwegian – is uttered with word juncture, unlike German, which is known for its word onset or border marker for lexemes or morphemes with vowels in absolute or relative initial position, the glottal stop or, as Trubetzkoy defined it, “harter Vokaleinsatz”: [ʔ].

³ This also happens in Spanish (both in Peninsular Castilian and in the American varieties), but hardly ever in Brazilian Portuguese, where the plosive feature is always retained, accompanied, in the case of the /d/, by a more or less pronounced palatalization – respectively, [dʒ] and [dʲ], the former being clearly realized and perfectly audible as a full affricate (Castro, 2004).

⁴ European Portuguese, as opposed to Brazilian Portuguese, is understood as the standard language spoken in mainland Portugal, comprising two normatively accepted varieties, that of Coimbra (in the centre north) and that of Lisbon (centre south). With slight differences, this standard is used, as a functional *koiné*, in Portugal’s former overseas colonies. A large majority of Lusitanists consider Galician as belonging to the so-called Galician-Portuguese continental dialects (Castro, 2004), Lindley Cintra’s classification of which being provided on Fig. 1 (adapted from Cintra, 1995).



Mapa 2 — Classificação dos dialectos galego-portuguêses

Figure 1. Classification of the Galician-Portuguese Dialects (Cintra, 1995: 162-163).

2.1.1. Intervocalic context

- 2.1.1.1. V β V lobo / ‘wolf’; o bolo / ‘the cake’
 2.1.1.2. V ð V lado / ‘side’; Porto-de-Mós (toponym)
 2.1.1.3. V γ V lago / ‘lake’; o gato / ‘the cat’

2.1.2. Between oral vowel and /r/ and vice-versa

- 2.1.2.1. V β r V abrir / ‘to open’
 V β (V) r abertura / ‘opening’
 V r β V turbo / ‘turbo’
- 2.1.2.2. V ð r V ladrar / ‘to bark’, padre / ‘priest, father’
 V ð (V) r adereço / ‘prop’
 V r ð V árduo / ‘hard’
- 2.1.2.3. V γ r V sogro / ‘father-in-law’
 V r γ V largo / ‘wide’

2.1.3. Phonological status

The above briefly described spirantized realizations are contextual, positional, complementary distributional allophones ([β, ð, γ]), which, combined or added to their plosive counterparts ([b, d, g]), constitute the voiced plosive phonemes /b, d, g/. These are not in any way free variants. In other words, the phonetic variation is determined by the phonological environment of the phonemes.

2.1.4. Germanic: English and Danish

It must be noted, however, that native speakers (both of European and of overseas descent) of normative European Portuguese usually do not seem to perceive either one of the fricative realizations as such. For them (and, it goes without saying, even more so for the speakers of Brazilian Portuguese), only the plosive variants seem to exist, because they coincide, in terms of distinctively relevant features, with their respective phonemes.

This, in turn, will help to explain why these very native speakers of European Portuguese, even though absolutely capable of uttering the spirantized variants in their own language, do find them so very difficult to pronounce, when learning to speak any foreign language in which such segments are phonemes, not variants.

This occurs, for instance, in English and Danish, where interference from Portuguese leads to error utterances. Amongst such error utterances belong, for example, those of plosive instead of

fricative realizations, even if the phonemes are represented by specific graphemes: <th> in English words like {the}, {they}, {them}, {this}, {these}, {that}, {those}, {leather}; those represented either by <d> or by <t>, e.g. in Danish words like {kød} ‘meat’, {tidlig} ‘early’, {brød} ‘bread’, {hvid} ‘white’, {bad} ‘bath’, {stød} ‘shock’; or {noget} ‘something’, {optaget} ‘occupied’, {vasket} ‘washed’, {punkteret} ‘(a) puncture’, {repareret} ‘repaired’.

These errors must imply that the phonological opposition between, say, {they} and {day} (i.e. fricative ≠ plosive) is not understood and, therefore, not upheld at all.⁵ On the other hand, the interference from the European Portuguese standard may come from the other side of the coin, but that subject will be approached below (Espírito-Santo, 2001: 125; *vd. infra* Section 2.1.7.).

2.1.5. German(ic): German and Danish

The spirantization of the voiced plosives also occurs within the German diasystem, particularly (but not exclusively) in Western-Low-German, namely in Northern-Low-Saxon sub-varieties.

Unlike in neighbouring Danish, though, this spirantization only affects /b/ and /g/, as described in the following sections (Brinkmann, 2008; Kehrein, 2008; Kohler, 1995: 152-166; König, 1989: 87, 114; Meinhold, 1982: 79-170).



Figure 2. (Ⓛ). The Western-Low-German Dialects (Niebaum, 1980: 460).

⁵ Even broad phonetical transcriptions of error utterances produced by native speakers of Portuguese (and not only of the European variety) do show other types of error; among those generated through mother-tongue interference, of no specific interest, we will find the following error typologies: disregard of the Germanic phonological opposition between long and short vowels, non-existent in Portuguese; raising or lowering of the central, mid, unrounded /ə/ (*schwa*) to either central, close, unrounded [ɨ] or to central, open-mid [ɑ], respectively (Ternes, 1987: 28-109, 146-193; Tesch, 1978: 83-99).

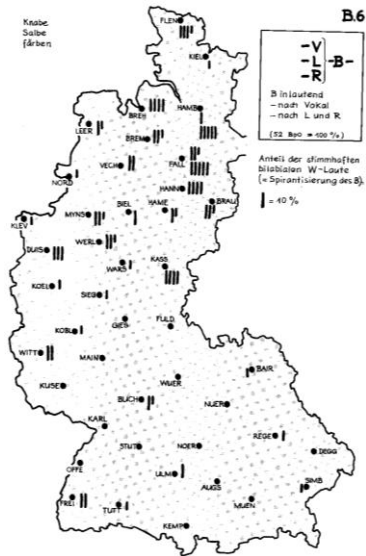


Figure 3. (B.6). Spirantized occurrences of post-vocalic and post-liquid /b/ (König, 1989, 2: 295).

2.1.5.1. Intervocalic position

- 2.1.5.1.1. V β V Knabe / ‘boy, lad’
- 2.1.5.1.2. V γ V Wagen / ‘car, waggon’

2.1.5.2. Between stressed oral vowel and /r
 V r β V färben / ‘to colour’

2.1.6. German: spoken by Germans vs. learnt by European Portuguese

These spirantized realizations in modern German’s diasystem are characterized by the renowned dialectologist Hermann Niebaum (1980: 463) as “beharrsam” (‘persistent, stubborn’) and “alt” (‘old’) utterances. He even goes as far as to describe them with the words: “steht im Lautsystem oft auf altem Standpunkt.”⁶

Interestingly, though, they replicate precisely typical, systemic errors made by native speakers of standard European Portuguese when learning standard modern German (Espírito-Santo, 2001).

⁶ This translates roughly into English as “stands in the sound system often upon old material.”

Let us have a look at the following, paradigmatic examples of such utterances, displaying various error typology, as described earlier on, but adding a further error in section 2.1.7.3., which is neither systemic nor due to mother-tongue interference, but rather to the recent change in terms of vocalization of the /r/ in post-vocalic, both stressed and unstressed contexts.

2.1.6.1.	V β V	Knabe	*[^h knaβ†]	instead	of
			[^h kna:bə]		
2.1.6.2.	V γ V	Wagen	*[^h vay†n]	instead	of
			[^h va:gən]		
2.1.6.3.	V r β V	färben	*[^h fɛrβ†n]	instead	of
			[^h fɛ:ɸbən]		

2.1.7. Phonological constraints

As explained above in section 2.1.5., this spirantization process does leave the voiced dental plosive /d/ unchanged in German.

And there is a similar systemic phonological constraint regarding this dental plosive in European Portuguese. It is not affected by the spirantization process whenever /r/ is replaced with /l/, or rather, to be more precise, with its contextual, post-vocalic, velarized allophone [ɾ]: {caldo} : [kaɾdu] ‘broth’; {soldado} : [soɾdaðu] ‘soldier’; {fralda} : [fraɾdɔ] ‘diaper’ (*vd.* Section 2.1.2.).

2.2. /r/ and /R/ in Portuguese and German(ic)

2.2.1. Vibrant allophones of /R/ in standard European Portuguese

/r/	→	[r] + [ɾ]
/R/	→	[ɾ] ~ [ɹ]

Standard European Portuguese displays two vibrant phonemes, namely, flapped /r/ (with two contextual allophones, which are of no special relevance in this case and will be only briefly described in this paper); and trilled /R/, the latter allowing two normative, but free variants: trilled apical [ɾ], the older, archaic form, but still enjoying a significant distribution; and trilled uvular [ɹ], which, having appeared in Portuguese almost as recently as in German, is the largely predominant allophone nowadays.

In spite of the free variation (even within the very same family members), the former occurs mainly in the northern and central eastern part of the mainland, whereas the latter is predominant throughout the whole country.

2.2.2. Spirantized variants of /R/

A third allophone of /R/, *[ʁ]~[x], localized and non-standard, is rising and spreading socially in a fashion rather similar to the recent diffusion of the glottal stop⁷ in British English (after having been adopted by the upper strata, the most prominent figure of all being the Prince of Wales).

It originated in and around the city of Setúbal (on the west coast about 50km south of Lisbon, on the north shore of the river Sado's bay), from where it was taken to Brazil by Portuguese emigrants and adopted by Brazilian Portuguese, mainly in the sub-variety in the Rio de Janeiro area. There, in a long confluence process of dialectal items of Portuguese origin and of interference and item transfer from native and immigrant populations, it has replaced not only the /R/, but also the uvular variant of /r/, especially in final, post-vocalic, mainly stressed position.

In European Portuguese, it occurs in different phonological environments, for it remains purely an allophone of /R/. In terms of social dialectology, it could be described as a 'social climber'. Lisbon's upper and upper middle classes, especially its 'nouveaux riches' (who, in many cases, own farms and holiday or weekend estates in the area around Setúbal), adopted it into their own 'chic' sociolect, from hence it can now spread due to its newly acquired prestige coinage. It has changed from being a diatopic variant into a diastratic one.⁸

It is phonetically almost identical to the post-vocalic, fricative realizations of the uvular vibrant in western, mainly Rhenish, sub-varieties, e.g. ['vaʁtən] for {warten} and {wachten} alike, in Ripuaric (in and around Cologne). In these cases, the opposition between

⁷ In Danish, where it is known as {stød} – [ʔ] –, it occurs in absolute and relative final position, a partly similar distribution to the one we find in British English (vd. *supra* Section 2.1.).

⁸ These two factors tend to contribute largely towards the lifting of the still heavy social stigma that dialect, i.e. non-normative speaking, is object of in Portugal. When it is not being frowned upon, it is part of some sort of joke. But there is a third possibility, in that it may also be used with the specific purpose of making a regionally marked political statement.

liquid/vibrant and fricative is neutralized, thus cancelling the existence of the minimal pairs. Even Theodor Siebs' Pronunciation Dictionary demands for "moderate" [ʁ] in post-vocalic position (Siebs, 1969: 85; but cf. Duden, 2005). R-Spirantization in modern German is very well documented (e.g. König, 1989, vol. 1: 83-87; vol. 2: 192-198, maps R.17 to R.23).

This by no means implies that a shift occurred from uvular to apical /r/ in German, even less so that it will have happened in Visigothic after the arrival, settlement and assimilation of the Visigoths in the northwestern and western Iberian península. Visigothic belongs to the East Germanic branch, relatively far from the epicentre of the uvularization, but Suevish will have been very close to latter-day High German or even Low German.

R.1

R vor betontem Vokal (ohne Varianten des vorderen R-Lauts. Vgl. Tabelle R.2.)

	Belege gesamt	[R]	[ʀ]	[ʁ]	[ʁ̥]	geriebene Variante	Beispiel
R-KV	(23) 4100	80 2,2%	76 1,9%	474 11,6%	17 0,4%	850 20,7%	Rind
R-LV -D	(44) 4934	128 2,6%	156 3,2%	286 5,8%	43 0,9%	1213 24,6%	Kad Käusch
P-R-V	(9) 296					85 28,7%	Probe
T-R-V	(6) 614	68 11,1%	57 9,3%	125 20,4%	19 3,1%	351 57,1%	Tracht
K-R-V	(21) 924					101 10,9%	Kreis
B-R-V	(8) 792	80 10,1%	86 10,9%	166 20,9%	14 1,8%	403 50,9%	Braut
D-R-V	(8) 552	40 7,3%	38 6,9%	78 14,1%	19 3,4%	413 74,3%	Drossel
G-R-V	(19) 856	40 4,7%	74 8,6%	146 17,1%	48 5,6%	395 46,0%	Grube
S-R-V	(7) 308	8 2,6%	24 7,8%	32 10,4%	5 1,6%	244 78,6%	Schrift
F-R-V	(9) 460	64 13,9%	65 14,1%	129 28,0%	18 3,9%	248 53,9%	Frost
SP-R-V	(4) 24	17 70,8%	54 22,5%	28 11,7%	15 6,3%	59 24,6%	Sprudel
ST-R-V	(14) 616	28 4,5%	80 13,0%	108 17,5%	40 6,5%	350 56,8%	StrabC
Insgesamt	(200) 8800	363 4,1%	726 8,3%	1287 14,6%	192 2,2%	6359 72,3%	4928

* geriebene Varianten: hier und in allen weiteren Tabellen und Karten gerieben die folgenden Transkriptionen zusammengefaßt: [x, ʁ̥, ʁ̥̥, ʁ̥̥̥, ʁ̥̥̥̥]

R.2

R-Laute vor betontem Vokal im Südosten (WUER, BAIR, NUER, NOER, REGG, BEGG, AUGS, MUEN, KEIMP)

Belege gesamt	[r]	[ʀ]	[ʁ]	[ʁ̥]	[ʁ̥̥]	[ʁ̥̥̥]	[ʁ̥̥̥̥]
1800	1928	42	44	13	1	1	1
100%	96,0%	2,5%	2,5%	0,8%	0,1%	0,1%	0,1%

R.3

Intervokalischer R-Laut

R nach	Belege gesamt	[R]	[ʀ]	[ʁ]	[ʁ̥]	[ʁ̥̥]	[ʁ̥̥̥]	fehlender R-Laut	geriebene Formen*	sonstige	Beispiel
LV D	(25) 4012	41 1,1%	154 3,9%	495 12,3%	600 15,0%	465 11,6%	31 0,8%			21	Rhre Heurig
KV	(8) 352	16 4,6%	70 19,9%	66 18,8%	186 52,8%	66 18,8%	4 1,1%			3	äbren
Insgesamt	(61) 4364	57 13,0%	224 51,3%	281 64,4%	786 18,0%	231 5,3%	36 0,8%			24	

* vgl. Tabelle R.1

Figure 4. /r/ in pre-vocalic position; only Southeastern occurrences (König 1989, 2: 30-31).

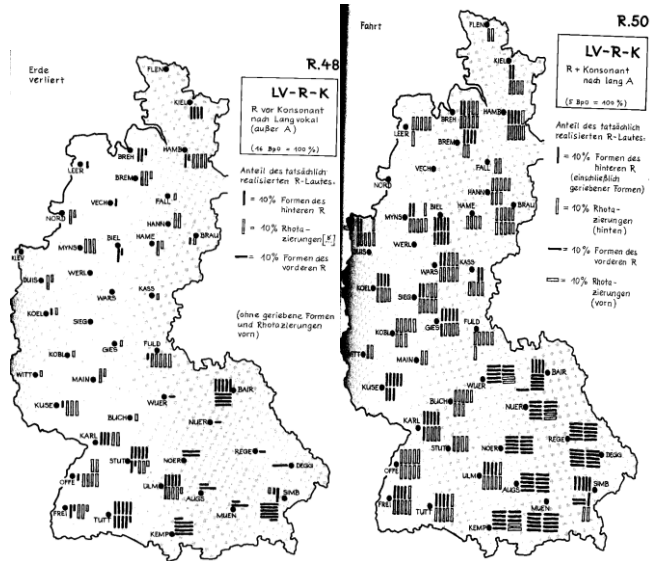


Figure 5. (R.48). Pre-consonantal, post-vocalic realizations of /r/ (König, 1989, 2: 223).

Figure 6. (R.50). Realizations of pre-consonantal /r/ after /a:/ (König, 1989, 2: 225).

3. Questions and Perspectives

Looking upon the historical contexts and the linguistic data available, several possibilities arise.

3.1. Arguments for the transfer view?

One might quite easily be led to speculate on the transfer view as “probable cause”⁹ for the observed ‘coincidences’. The thought that either or even both spirantization processes (of the voiced plosives and of the uvular vibrant) might have resulted from loan, *i.e.* from the Germanic Suevish and Visigoth or also from Arabic – three languages that played the role of linguistic superstrata in the west of the Iberian Peninsula between the fall of the Roman Empire in the 5th century and the emergence of the Christian states in the 10th century (Castro, 2004: 53-54) –, is rather tempting.

In fact, and supported by the historical relations, it is an attractive viewpoint, which could thus provide a simple and rapid explanation.

⁹ This is an expression commonly used by criminal police as means to justify searching premises without a search warrant previously issued by a criminal judge or public prosecutor.

Moreover, further similarities in other language sub-systems seem, at first sight, to strengthen the transfer view. Among such cases we find the extensive use of diminutive forms in Portuguese. Here some Mediaevalists, Germanists and Lusitanists see an affinity with southwest German, Swabian-Suevish varieties (*i.e.* from the Mainz area southwards into German-speaking Switzerland, where this phenomenon reaches a high peak (although by far still not to the same height as in northern and centre-northern Galician-Portuguese sub-varieties).

However, this case allows for an entirely different argumentation: considering the heavy use of diminutives in colloquial Latin (judging by such records as the works of Plautus), it could be also plausible that the use in southwestern German (with the most contact with Romance languages) will have spread from the latter to German instead.

An example on yet another level of grammar is the case of the verbs {ficar} in Portuguese and {blive} in Danish (*cf.* German {bleiben} ‘to stay’). The relationship between these verbs is twofold. From a strictly etymological point of view, Portuguese {ficar} derives from Classical Latin {figere}¹⁰ ‘to stick things closely together’, whilst Danish {blive} stems from Germanic *{bi-leib-a-}¹¹ ‘to stay’.

Their relationship *becomes*¹² a lot more revealing and fascinating when we compare their structural and functional uses in both languages. Portuguese {ficar} means ‘to stay’, but it is also used with the meaning of ‘to be, to become, to turn into, to get to be’:

Example A – “Estou muito cansado. Acho que vou ficar em casa.” (‘I’m very tired. I think I’m going to stay at home.’).

Example B – “Eles ficaram muito magoados por não terem sido convidados para a festa.” (‘They were deeply hurt for not having been invited to the party.’).

This second use of {ficar} can be interpreted as a kind of ‘Static Passive Voice’, which is one of the possible forms of the Passive Voice (not only) in German, called “Zustandspassiv” in German grammar. Actually, the English translation conveys that functional meaning perfectly, *i.e.* in that ‘they have been deeply hurt for not (...)’. It is just a tiny, small step to the assumption of close relatedness

¹⁰ *Vd.* Middle Latin {fixare} > Portuguese {fixar}, in both cases ‘to fix, to put something firmly in place’.

¹¹ *Vd.* Old Church Slavonic {prilěpiti} ‘to glue sth together’.

¹² The reason for using the italic font *ficar* apparent and obviously self-explanatory in the next sentences...

with {blive} in Danish (used with Past Participle, *e.g.* {blive købt} ‘to be bought’).

3.2. Typical language contact patterns?

One has to consider, nonetheless, other important, even decisive factors, such as language contact rules, inherent variability, language history, and the differences in the character of the occurrences approached. Superstratum influence (or loan) nearly always affects only the lexical and morphological sub-systems, whereas substratum languages influence and lead to deep changes at the phonetical and phonological levels, the influence upon syntax varying, as Coseriu (1975: 140-146) formulates, according to differences as to type, system and norm.

These ‘shared’ items and/or processes could very well be a constitutive part of a larger spectrum of phonetical and phonological changes underway. They can thus be explainable through language history (*e.g.* Indo-European traits as substratum influence on Latin in Lusitania¹³), and, last but not least, within the framework of language universal theory, which could, for instance, help to explain the spirantization of the /R/.

¹³ This issue will have be studied on a later occasion.

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