

## A short critical survey of N. S. Trubetzkoy's theory of neutralization and the archiphoneme

Tsutomu Akamatsu<sup>1,a</sup> 

<sup>1</sup> Leeds, England

 [akamatsutsutomu@btinternet.com](mailto:akamatsutsutomu@btinternet.com)

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### Abstract

The purpose of this paper is to attempt a short critical survey of the theory of neutralization and the archiphoneme which N. S. Trubetzkoy progressively developed from roughly the late 1920's to 1938. His magnum opus, *Grundzüge der Phonologie*, saw the light of day the year after his decease in 1938. I have spread the net wider than just *Grundzüge* by studying a number of available pre-*Grundzüge* writings on the theory. Many aspects of the theory seem to have been unproblematically accepted by subsequent phonologists without critically discussing certain of the key points in the theory. It seems to me that the all-important notion of 'neutralization' suffers from certain aspects of the notion of 'archiphoneme' that Trubetzkoy presents which in turn suffers from his introduction of the notion of 'archiphoneme representative' whose nature remains obscure. The involvement of the concepts of 'mark', 'marked' and 'unmarked' creates further complications. Within the confines of the present paper, I have deliberately concentrated on Trubetzkoy's writings only and left untouched what other interested linguists have had to say about Trubetzkoy's theory of neutralization and the archiphoneme. The present work consists of first, my critical discussions of certain points in Trubetzkoy's theory of neutralization and the archiphoneme and second, my own version of the theory by citing actual examples of my analyses of a few cases of neutralization in some languages.

**Keywords:** neutralization; archiphoneme; archiphoneme representative; exclusive relation; exclusive opposition; neutralizable opposition; common base; mark (of correlation); quality of correlation; relevant feature.



## I. INTRODUCTORY REMARKS

The best known theory of neutralization and the archiphoneme is the one progressively developed by the Russian N. S. Trubetzkoy during the inter-war period of the Prague Linguistic Circle. Although he lived in Vienna rather than Prague itself where Prague School flourished, his contribution to phonology was immense and his colossal correspondence with R. Jakobson eloquently shows us how the two Russian giants brought forward in a spirit of co-operation various aspects of this theory based on the principles of functionalism and structuralism.

## II. SOME PRINCIPAL CONCEPTS AND TERMS UNDERPINNING TRUBETZKOY'S THEORY OF NEUTRALIZATION AND THE ARCHIPHONEME

In the domain of phonology, among other concepts whose genesis is attributed to the interwar Prague School (1926-1939),<sup>1</sup> the concept of 'neutralization' is unequivocally congruous with the basic principles of functional and structural linguistics. So are also the concept of 'opposition' (which logically precedes that of 'neutralization') and that of 'phoneme' (which itself is logically preceded by that of 'opposition').

The concept of 'neutralization' was adumbrated in 1929, in the following lines by [Mathesius \(1929: 81\)](#).

Les deux langues [Czech and German] concordent en ce que la différence dans la sonorité des consonnes n'a pas dans ces langues de valeur phonologique à la fin des mots. Ceci signifie qu'à la fin du mot dans l'une et l'autre langues, on trouve confondus en un phonème unique les couples de consonnes b/p, d/t, v/f, z/s, h/x, et en outre en tchèque d'/t', ž/š, en allemand g/k.

Mathesius's expression 'un phonème unique' foreshadows what will at a later date be known as 'an archiphoneme' which is intimately linked to neutralization.

The term 'archiphonème' (Archiphonem. Archifonéma. Архифонема)<sup>2</sup> is defined in 'Projet de terminologie phonologique standardisée' [[hereafter 'Projet'](#)] (1931: 315) as follows.

Élément commun de deux ou plusieurs phonèmes corrélatifs, qu'on peut concevoir abstraction faite des propriétés de corrélation. [Ex: L'a latin abstraction faite de la longueur et de la brièveté (ā/a).]

The term 'propriété de corrélation' (Korrelationseigenschaft. Korelační vlastnost) is defined as follows (['Projet': 313](#)).

Opposition de la présence et de l'absence d'un certain caractère phonique qui différencie plusieurs couples d'unités phonologiques et qui, dans le système phonologique donné, peut être conçue abstraction faite de couples particuliers en opposition.

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<sup>1</sup> The Circle was dissolved in 1949 but was revived in 1989.

<sup>2</sup> As [Trubetzkoy \(1929: 133 fn 1\)](#) says, the term 'Archiphonem' was proposed by Jakobson. As access to this source may be somewhat difficult for many readers, I will copy the whole footnote here: "Hinter einem solchen Phonemenneste steht immer eine ziemlich verschwommene, von allen korrelativen Eigenschaften freie Lautvorstellung, für die Roman Jakobson in seiner schönen, gedankenreichen Arbeit, 'Remarques sur l'évolution phonologique du russe' [= [Jakobson 1929](#)] (*Travaux du Cercle Linguistique de Prague* II, p. 8) den Ausdruck 'Archiphonem' vorschlägt."

It may be noted that ‘Projet’ was largely drafted by Jakobson (cf [Jakobson \(1985\)](#) = [Jakobson \(2006\)](#)): Lettre 64, Note 3, where we read ‘... « Projet de terminologie phonologique standardisée » élaboré dans ses grandes lignes par RJ’.

The definition of ‘archiphoneme’ seen above is inadequate because it recognizes *only* such archiphonemes associated with ‘correlative oppositions’ (e.g. /p/ vs /b/ in English, /t/ vs /t’/, /d/ vs /d’/ and /t/ vs /t’/ vs /d/ vs /d’/ in Russian). These correlative oppositions can be associated with the archiphonemes /p-b/, /t-t’/, /d-d’/ and /t-t’-d-d’/.<sup>3</sup> The above definition of the term ‘archiphonème’ does not apply to what may be called ‘disjunct opposition’<sup>4</sup> formed by ‘unités disjointes’ or ‘unités phonologiques appartenant à un système, sans former entre eux un couple de corrélation’.<sup>5</sup> Examples of disjunct oppositions in English would be e.g. /m/ vs /n/, or /n/ vs /ŋ/, or /m/ vs /n/ vs /ŋ/ (my examples), none of which would be considered correlative pairs. Consequently, the archiphonemes /m-n/, /n-ŋ/ and /m-n-ŋ/ could not be recognized as archiphonemes<sup>6</sup> as defined in ‘Projet’.

Whereas Trubetzkoy approved of ‘correlative opposition’, his reservations about ‘disjunct opposition’ and his disagreement with Jakobson on this subject ‘persisted even during their very last discussions that took place on 12 and 13 February 1938, just a few months before Trubetzkoy’s decease on June 25, aged 48. Trubetzkoy also remained unconvinced of Jakobson’s total binarism till his last days’ ([Akamatsu 2013: 147-148](#)).

The definition, if not the term, of ‘propriété de corrélation’ is interesting in that ‘un certain caractère phonique’ would correspond to ‘mark’, and opposition between ‘la présence du caractère phonique’ and ‘l’absence du caractère phonique’ – which opposition is none other than ‘propriété de corrélation’ – would give rise, when phonologically evaluated, to two opposing phonological values, i.e. two opposing relevant features. According to this interpretation of mine, ‘mark’ which corresponds to ‘caractère phonique’ is literally a phonic entity, not a phonological one, and therefore ‘mark’ should not be confused with ‘presence of the mark’ (‘mark’ ≠ ‘presence of the mark’). In this connection it would be useful to quote further the term and definition of ‘marque de corrélation’ found in ‘Projet’ (313) which runs as follows.

<sup>3</sup> Notice my own way of notating archiphonemes whereby the symbols of the member phonemes of neutralizable oppositions are joined by hyphens. See in this connection [Akamatsu \(2019: 433\)](#) where I explain my way of notating archiphonemes. Also in this connection, see what [Martinet \(1976\)](#) said in the following words in his intervention after the oral presentation of [Akamatsu \(1976\)](#), which seems to support my way of notating archiphonemes: ‘... Je suggère donc qu’on écarte délibérément la notation au moyen de capitales et qu’on la remplace par une notation où figurent les phonèmes neutralisés, notation plus compliquée certes mais moins susceptible de bloquer la compréhension des phénomènes.’ In this suggestion of his, Martinet rightly warns against miscomprehending neutralization in terms of morphological alternation. For instance, he prefers notating /berk/g/ *Berg* and /bergə/ *Berge* in German rather than /berK/ and /bergə/. My own notation for Martinet’s /berk/g/ will be /ber k-g/.

<sup>4</sup> The term ‘opposition disjointe’ (Disjunct opposition, Disjunkter Gegensatz, Disjunktni protiklad) is used and exemplified by e.g. /t/ – /ð/ and /p/ – /m/ in English in [Vachek \(1966a: 54\)](#) = *Dictionnaire de linguistique de l’École de Prague*. Neither /t/ – /ð/ nor /p/ – /m/ in English is neutralizable. As for a term corresponding to ‘correlative opposition’ which I have employed, no term like ‘opposition correlative’ (korrélativer Gegensatz, korelace protiklad) appears in ‘Projet’. For an extensive discussion about correlation vs disjunction, see [Martinet \(1965: 77-83\)](#). [Trubetzkoy \(1933: 235-236\)](#) supports the dichotomy of phonological oppositions into correlations and disjunctions. However, subsequently, [Trubetzkoy \(1939: 77\)](#) (= [Trubetzkoy 1949: 89](#) = [Trubetzkoy 1969: 85](#)) expresses his misgivings about the original strict distinction between ‘correlation’ and ‘disjunction’.

<sup>5</sup> ‘Projet’ (314).

<sup>6</sup> In reality, all of /m/ vs /n/, /n/ vs /ŋ/, and /m/ vs /n/ vs /ŋ/ in English are neutralizable oppositions and consequently all of /m-n/, /n-ŋ/ and /m-n-ŋ/ are archiphonemes associated with the respective neutralizations. See [Akamatsu \(2017: 48-49\)](#).

**Marque de corrélation** (Korrelationsmerkmal. Korelační příznak. Корреляционный признак) 'Caractère phonique qui, opposé à l'absence de ce caractère, forme une propriété de corrélation.' Exemple: La longueur des voyelles en latin ...

Vachek (1966a: 48) copies the definition from 'Projet' (133), and adds Trubetzkoy's (1939: 77) definition of 'Korrelationsmerkmal'<sup>7</sup> via the French translation in Trubetzkoy (1949: 89) which runs as follows:

Une *marque de corrélation* est une particularité *phonologique* [my emphasis] par l'existence ou non-existence de laquelle une série de paires corrélatives est caractérisée (par ex. la nasalité vocalique qui, en français, différencie les paires corrélatives *an – a, on – o, in – e, un – eu*).

The example 'nasalité (vocalique)' given above appropriately explains what is 'marque de corrélation'. Nasality in French vowels is a phonic feature (not a phonological feature). Presence of nasality in [ã] and its absence in [a] gives rise to two phonological values, i.e. two relevant features, "nasal" and "non-nasal" attributable to /ã/ and /a/, respectively. The same applies *mutatis mutandis* to other pertinent examples. What is said here is what I consider to be an important point to which I will return further below for discussion.

Trubetzkoy plentifully employs the concepts and terms 'marked' ('merkmalhaltige') and 'unmarked' ('merkmallose') in connection with the two phonemes of a correlative opposition and, of course, those of a neutralizable correlative opposition in particular. Such two terms are not defined in 'Projet' but they appear in part of the terms 'série corrélatif marquée' ('merkmalhaltige korrelative Reihe') and 'série corrélatif non-marquée' ('merkmallose korrelative Reihe') in 'Projet' (314). The distinction between 'marked (phoneme)' and 'unmarked (phoneme)' is important in Trubetzkoy's characterization of the two correlative phonemes of a neutralizable opposition, particularly in connection with the archiphoneme of a correlative opposition (see *infra* Fig 3 and Fig 4).

To judge from the definition of 'archiphonème' in 'Projet' (315) cited above, it is apparent that the archiphoneme is conceived of as a global phonological entity which is not analyzable into smaller phonological entities. This view is supported when we additionally confirm that the phoneme is defined as follows in 'Projet' (311): 'Unité phonologique non susceptible d'être dissociée en unités phonologiques plus petites et plus simples.' For the concept of 'archiphoneme' as a sum of relevant features, one has first to look for e.g. Trubetzkoy (1939: 35) (= 1949: 40 = 1969: 36) who writes: "Man darf sagen, daß *das Phonem die Gesamtheit der phonologisch relevanten Eigenschaften eines Lautgebildes ist* [Trubetzkoy's emphasis]."<sup>8</sup> Only if the phoneme is conceived of as a distinctive unit that consists of a sum of relevant features can the archiphoneme be likewise conceived.

As for the term 'archiphoneme', this occurs in Trubetzkoy's five letters sent to Jakobson in 1930, and another five letters subsequent to 1931. For details see *infra* fn 9.

<sup>7</sup> This runs as follows: "Ein *Korrelationsmerkmal* [Trubetzkoy's emphasis] ist ein *phonologisch* [my emphasis] Eigenschaft, durch deren Vorhandensein oder Nichvorhandensein eine Reihe von Korrelationspaaren gekennzeichnet ist ..."

<sup>8</sup> Trubetzkoy (1939: 35) himself adds in a footnote on the same page that an earlier formulation of the phoneme of a like tenor had been advanced by Jakobson in 1932 in the Czech encyclopedia *Ottův slovník naučný*, Dodatky II, I, 608 under the headword 'fonéma'. In Trubetzkoy (1969: 36), *Translator's note* (provided by A. M. Baltaxe) refers to Vachek (1966b: 46) who writes '[In translation] ... by this term [the phoneme] we designate a set of those concurrent sound properties which are used in a given language to distinguish words of unlike meaning.' I should further add the definition of the phoneme by Vachek (1936: 239) which runs: 'Partie d'un terme d'une opposition phonologique complexe, découppable parfois en unités phonologiques simultanées, mais jamais en unités phonologiques successives.'

The total absence, anywhere in 'Projet', of the term 'neutralisation' or any term that would correspond to it, let alone any related terms like 'neutralisable' and 'position de neutralisation', is both surprising and incomprehensible. It is not easy to pinpoint the date, either prior to or subsequent to 1931, at which the term 'neutralisation' may have been first launched by whichever member(s) of the Prague Linguistic Circle).<sup>9</sup> Predictably, it attracted criticisms from various quarters. One well-known criticism came from [Martinet \(1936: 46, 47\)](#) who pointed out that [Trubetzkoy \(1932: 19\)](#) did mention the terms 'Neutralisierung' / 'Aufhebung' and also define the concept of 'neutralisation'.<sup>10</sup> [Martinet \(1936: 47\)](#) does not fail to point out that [Trubetzkoy \(1932: 19\)](#) furthermore admits of neutralization of *disjunct* oppositions (as well as that of correlative oppositions).

Trubetzkoy's liberal use of both the terms 'neutralisation' and 'archiphonème' in his correspondence with Jakobson, especially in 1933 onward, is not surprising in view of the publication of Trubetzkoy's three articles, viz [Trubetzkoy \(1935<sup>11</sup>, 1936a, 1936b\)](#) as well as [Trubetzkoy \(1933\)](#) in which the subject of neutralization and the archiphoneme receives extensive discussions.

[Trubetzkoy \(1933: 233\)](#) provides the following definition of 'phonème'.

un phonème est un élément différentiel, une *valeur* linguistique au sens de F. de Saussure [Trubetzkoy's italics], il ne peut être défini que par ses rapports avec les autres phonèmes du même système<sup>12</sup>.

This is a functionalist stance which I for one completely agree with.

We note that, shortly afterwards, in [Trubetzkoy \(1935: § 1\)<sup>13</sup>](#), the same functionalist definition of the phoneme is given but, surprisingly, not in [Trubetzkoy \(1936a: 6-7\)<sup>14</sup>](#).

<sup>9</sup> I have checked, for what it is worth, how the terms 'neutralization' and 'archiphoneme' figured in Trubetzkoy's colossal correspondence with Jakobson (see [Jakobson 1985](#) or [Jakobson 2006](#)). The terms occurring in Trubetzkoy's letters and the dates of the relevant letters are as follows: 'neutralisés' and 'neutralisées' on 12 August 1932; 'neutralisé(s)', 'neutralisés' and 'neutralisation' on 10 May 1933; 'neutralisé' on 28 July 1933; 'neutralisé', 'neutralisation', 'opposition neutralisable', 'opposition non neutralisable' and 'position of neutralisation' on 26 November 1935; 'neutralisés' on 2 November 1936; and 'neutralisation' on 9 May 1938. As for the term 'archiphoneme', it appears in his letters dated 31 July 1930, 17 August 1930, 3 October 1930, 11 November 1930, 20 November 1930, 21 February 1931, 9 November 1932 (undated but postmarked), 10 May 1933, (undated) May 1934, and 9 May 1938. It is in his letters of 10 May 1933 and of 9 May 1938 that Trubetzkoy uses *both* 'neutralisation' and 'archiphoneme'. It remains to be seen – though it is impossible – when and where Jakobson himself employed the term 'neutralisation' in his letters to Trubetzkoy.

<sup>10</sup> Trubetzkoy's relevant lines are as follows: "... die Aufhebung eines phonologischen Gegensatzes in einer bestimmten Stellung verändert ... den *Gehalt der Phoneme* in der betreffenden Stellung [Trubetzkoy's emphasis]".

<sup>11</sup> The term 'Archiphonem' does not occur in [Trubetzkoy \(1935: §§ 21-23\)](#) contrary to our expectation, though he freely talks about 'aufhebbare Gegensatz', 'aufgehoben', etc.

<sup>12</sup> At this point, Trubetzkoy appropriately provides a footnote which it is worth quoting in full: 'Pour employer l'expression de F. DE SAUSSURE, « sa plus exacte caractéristique est d'être ce que les autres [phonèmes du même système] ne sont pas »; voir *Cours de ling. gén.*, p. 162.' Trubetzkoy does not specify which edition of *Cours...* he refers to. During his lifetime, *Cours...* ran through three editions, 1<sup>st</sup> ed. (1916), 2<sup>nd</sup> ed. (1922) and 3<sup>rd</sup> ed. (1931). All I can say is that Trubetzkoy must refer to one of these three editions, but which I cannot say. Only the 1<sup>st</sup> ed was published by Payot (Lausanne) and both the 2<sup>nd</sup> and 3<sup>rd</sup> eds were published by Payot (Paris). Pagination is not identical between the different editions.

<sup>13</sup> 'Ein Phonem ist ein phonologische Einheit, die in keine kleineren phonologischen Einheiten weiter zerlegt werden kann.'

<sup>14</sup> The definition of 'phoneme' given in [Trubetzkoy \(1936a: 6-7\)](#) runs as follows: 'Le phonème est le terme d'une opposition phonologique non susceptible d'être dissociée en unités phonologiques plus petites et plus simples.'



### III. TRUBETZKOY'S ANALYSIS OF NEUTRALIZATION OF CORRELATIVE OPPOSITIONS

In [Trubetzkoy \(1935: §§ 20-22\)](#), there appear the terms 'aufgehoben', 'neutralisiert' and 'aufhebbare Gegensätze'. Strangely, the term 'Archiphonem' does not appear.<sup>15</sup> As to what happens when a neutralizable opposition is actually neutralized in the position of neutralization, [Trubetzkoy \(1935: § 22\)](#) has the following to say.

Phonologische Gegensätze die in gewissen Stellungen aufgehoben werden, ("aufhebbare Gegensätze") bekommen in den übrigen Stellungen (d. i. dort, wo sie nicht aufgehoben sind) einen spezifischen Charakter ... Und wenn der aufhebbare Gegensatz sich als Gegensatz zwischen "Vorhandensein" und "Nichtvorhandensein" eines Merkmals denken läßt, so werden die betreffenden Phoneme als das "merkmaltragende" und das "merkmallose" gewertet. Merkmallos ist dabei immer dasjenige Phonem, welche bei der phonologischen Aufhebung des betreffenden Gegensatzes als einziger Vertreter des entsprechenden Phonempaares auftritt ...

What is characteristic throughout in all his writings on 'neutralization', Trubetzkoy's concept of 'neutralizable opposition' (nearly always between two, not more, phonemes) is that the two phonemes of the neutralizable opposition are the marked and the unmarked, respectively. Furthermore, the unmarked phoneme is that phoneme of the two which occurs in the position of neutralization in its capacity as what Trubetzkoy calls 'Archiphonemvertreter' (archiphoneme representative). According to Trubetzkoy, the archiphoneme itself does NOT occur in the position of neutralization. This is, as I have always argued in my relevant writings, very controversial.

One may wonder what prompts Trubetzkoy to conceive of the concept of 'archiphoneme representative'. Is it fundamentally due to his preoccupation with the distinction between 'marked phoneme' and 'unmarked phoneme' and, further, because the phonological content of the unmarked phoneme is equivalent to that of the archiphoneme? I shall have further occasion to mention this point later and suggest some other factor which has more to do with the status that Trubetzkoy accords to the archiphoneme itself.

In [Trubetzkoy \(1936a\)](#) we find the term 'opposition supprimable' ('opposition neutralisable') and related terms. In [Trubetzkoy \(1936a: 13\)](#), the term 'archi-phonème' ('archiphoneme') and 'opposition supprimable' itself occur where there is a difference between, on the one hand, one of the phonemes of a neutralizable opposition in the position of relevance, and on the other, the unmarked phoneme (not the archiphoneme) which is said to occur in the position of neutralization. What is interesting is that Trubetzkoy refers implicitly to the concept of 'phoneme' which differs from the one we already saw in '[Projet](#)' (311). The keyword here is 'traits'. Trubetzkoy (*loc cit*), refers to the archiphoneme by the expression 'un phonème' and says '... un phonème dont le contenu phonologique se réduit aux traits communs aux deux termes de l'opposition donnée.' In other words, the phoneme, and consequently the archiphoneme as well, are presented as NOT being global phonological entities which are unanalyzable into smaller phonological elements. The definition of 'phoneme' which is implicit in that of 'archiphoneme' here departs from that earlier given in '[Projet](#)' (311).

[Trubetzkoy \(1936a: 13\)](#) explains first what the phonological content of each of the two terms (i.e. the two phonemes) of a neutralizable opposition in the position of relevance are

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<sup>15</sup> However, as already noted in fn 9, the term 'archi-phonème' appeared several times well before 1935 in the course of Trubetzkoy's correspondence with Jakobson.

like and then what the phonological content of that phoneme which occurs in the position of neutralization is like.<sup>16</sup> He continues to say: ‘les termes d’une opposition supprimable se décomposent phonologiquement en « archiphonème + qualité spécifique ». As he refers to “les termes”, not ‘un des termes’, I understand that ‘qualité spécifique’ is possessed by *each* of the two phonemes, consequently two mutually different ‘qualités spécifiques’ are involved. The two phonemes (/A/ and /B/) of a neutralizable opposition (/A/ vs /B/) in the position of relevance are then understood to be as shown below.

**Fig 1**

/A/ = archiphonème + qualité spécifique 1  
/B/ = archiphonème + qualité spécifique 2

Trubetzkoy (1936a: 15) explains what happens in the position of neutralization to the two phonemes of a neutralizable opposition in terms of their phonological contents.

... dans les oppositions [*rechte* positions] où le terme d’une opposition supprimable est le seul admis, il est identifié avec l’archiphonème de cette opposition ... ses qualités spécifiques perdent leur valeur phonologique ... l’autre terme de la même opposition apparaît comme le seul porteur d’une qualité qui manque à son « partenaire » ...

The main difference between the passage quoted further above from Trubetzkoy (1935: 20) and the passage just quoted from Trubetzkoy (1936a: 15) is that the former includes clear references to the marked phoneme and the unmarked phoneme whereas this is not the case in the latter and also that the former does not mention ‘archiphoneme’ while the latter does. The terms ‘marqué and ‘non-marqué’ appeared earlier in ‘Projet’ (314) as part of the terms ‘Série corrélatrice marquée’ and ‘Série corrélatrice non-marquée’, respectively. The German terms ‘Merkmaltraged’ and ‘Merkmalllos’ (which correspond to ‘marqué’ and ‘non-marqué’ in French, and ‘marked’ and ‘unmarked’ in English, for example) which Trubetzkoy (1936b: 34 *et passim*) in his account of ‘neutralization’ employs are very important since they clearly show Trubetzkoy’s concepts of ‘neutralization’ and ‘archiphoneme’ (which I do not share, as will be shown further below).

What happens in the position of relevance is only implicit in Trubetzkoy’s words but need be clarified. Using the wording found in Trubetzkoy (1936a: 13), we can show what happens to /A/ and /B/ in the position of relevance as follows.

In the position of relevance

**Fig 1**

/A/ = archiphonème + qualité spécifique 1  
/B/ = archiphonème + qualité spécifique 2

In the position of neutralization

<sup>16</sup> Also in Trubetzkoy (1931: 97, 98; 1932: 19, 1935: §§ 21-22, 1936b: 31-32).

Fig 2

/A/ = archiphonème + zero (i.e. loss of qualité spécifique 1)

/B/ = archiphonème + qualité spécifique 2

Trubetzkoy (1936b: 33-34) writes about the two phonemes of a neutralizable correlative opposition as neutralization takes place.

... erscheint in der Aufhebungsstellung eines den Oppositionsgliedern ... eines von den Oppositionsgliedern in dieser Stellung [i.e. in the position of neutralization] als Stellvertreter des entsprechenden Archiphonems auftritt ... werden seine spezifischen Züge irrelevant, während die spezifischen Züge seines Partners volle phonologische Relevanz bekommen: somit wird das erste Oppositionsglied als »Archiphonem + Null«, das zweite dagegen als »Archiphonem + ein bestimmtes Merkmal« gewertet.

The passage quoted just above is the one that subsequently recurs in Trubetzkoy (1939: 73) except that the word 'bekommen' is replaced by 'erhalten'.<sup>17</sup> Thus, Trubetzkoy (1939: 73) reads as follows.

... eines von den Oppositionsgliedern in dieser Stellung als Stellvertreter des entsprechenden Archiphonems auftritt, werden seine spezifischen Züge irrelevant, während die spezifischen Züge seines Partners volle phonologische Relevanz erhalten: somit wird das erste Oppositionsglied als "Archiphonem + Null", das zweite dagegen als "Archiphonem + ein bestimmtes Merkmal" gewertet.

I believe we can understand what has just been quoted as the definitive statement by Trubetzkoy about what happens to the two terms of a neutralizable opposition in the position of neutralization (and, paradoxically, as we shall see later, what the two terms should be in the position of relevance).

It can safely be assumed that, in the passages quoted above, Trubetzkoy has pairs of *correlative* phonemes in mind. In other words, /A/ vs /B/ is a neutralizable phonological opposition whose two terms are a pair of correlative phonemes.

Trubetzkoy says that, in the position of neutralization, one of the two phonemes of a neutralizable opposition occurs. I do not understand this, and anyway I disagree. Trubetzkoy does not explain *why* and *why only one of the two phonemes* – but *which* one? (determined by *what criterion*?) – of the phonemes of a neutralizable correlative opposition occurs in the position of neutralization. I personally find it incomprehensible that one of the two phonemes in question occurs in the position of neutralization at all. Trubetzkoy does not explain *why* this phoneme, once it occurs in the position of neutralization, loses the validity of its mark. It is my view that when a neutralizable opposition is neutralized (dissolved) in the position of neutralization, neither one nor the other phoneme of the opposition occurs in that position. I will say that, on the other hand, both the marked phoneme and the unmarked phoneme occur in the position of relevance. Trubetzkoy says that one of the phonemes (the one that proves to be the unmarked phoneme) of a neutralizable opposition occurs to the exclusion of the other phoneme (the marked phoneme) in the position of neutralization.

I suspect that, for example, in the neutralization of /t/ vs /d/ in German which takes place moneme-finally and elsewhere, Trubetzkoy would choose /t/, not /d/, as the phoneme that occurs in the position of neutralization. I surmise that the basis for this choice is the *phonetic*

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<sup>17</sup> I am not certain if the replacement of these two words is by Trubetzkoy or by Jakobson.



*fact* that, in the position of relevance, /t/ and /d/ are realized voiceless and voiced, respectively. Trubetzkoy's intention is to seek the mark which is present in one of the phoneme, i.e. /d/, but absent in the other phoneme, i.e. /t/. Consequently voice is considered as the mark.

Trubetzkoy (1936b: 33-34; 1939: 73) shows /A/ and /B/ in the position of neutralization as follows.

**Fig 3**

/A/ = « Archiphonem + Null »  
/B/ = « Archiphonem + ein bestimmtes Merkmal »

'Merkmal' is short for 'Korrelationsmerkmal', i.e. 'mark'. 'Null' means literally 'absolutely nothing', hence « Archiphonem + Null » = « Archiphonem ». The two terms of a neutralizable opposition may therefore be tentatively conceived of as follows, though I will argue later that this is highly problematic.

**Fig 4**

/A/ = archiphoneme + zero  
/B/ = archiphoneme + mark

There are major problems with what Trubetzkoy presents as 'Merkmal' and 'Null' (mark and zero) in the well-known formulas shown in Fig 3 and Fig 4. We need to scrutinize this formulas.

There are two serious issues I wish to critically discuss which arise from the formulas shown in Fig 3 and Fig 4. One of the issues concerns the notion of what Trubetzkoy calls 'Archiphonemvertreter' (archiphoneme representative). This problem will be discussed in **V. THE ARCHIPHONEME REPRESENTATIVE**. The other issue arises from the fact that the formulas in Fig 3 and Fig 4 which are supposed to pertain to the neutralization of /A/ vs /B/ actually pertains to the position of *relevance* of /A/ vs /B/. This problem will be discussed in **IV** which immediately follows. I will discuss them in turn.

## IV. THE ARCHIPHONEME

1) The readers may be wondering why I have not properly defined the archiphoneme before. It is true that 'archiphoneme' was mentioned a number of times, but the main point in the previous sections concerned the question of the distinction between the marked and the unmarked, leaving the archiphoneme unaffected in one way or another, that is, irrespective of whether the archiphoneme is properly defined or not. However, in what follows, the proper definition of the archiphoneme is absolutely necessary.

Trubetzkoy (1936b: 32) defines the archiphoneme in the following words: '... wir unter Archiphonem die Gesamtheit der Züge verstehen, die zwei Phonemen gemein sind.'<sup>18</sup> This definition of the archiphoneme recurs almost verbatim in Trubetzkoy (1939: 71) except that

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<sup>18</sup> At this point Trubetzkoy places a footnote in which he refers to Jakobson (1929: 8ff), which reads in part: '... nous pouvons dégager une entité nouvelle, essentielle pour la phonologie, à savoir, l'archiphonème.' In Akamatsu (1988: n. 308) I said: 'Though published in 1929, this work had been written from 1927 to 1928.' For a discussion about the notion of 'archiphoneme' for Jakobson, see Akamatsu (1988: 224-230).

the word 'Züge' is amelioratively replaced by the wording 'distinktiven Eigenschaften' by the additional word *distinktiven*.<sup>19</sup>

2) Trubetzkoy (1936b: 33-34; 1939: 73) famously shows the two phonemes of a neutralizable correlative opposition in the position of neutralization as follows, as earlier shown.

Fig 3

/A/ = « Archiphonem + Null »

/B/ = « Archiphonem + ein bestimmtes Merkmal »

In this formula, /B/ as a whole is a distinctive unit whose phonological content consists in a sum of relevant features. Consequently, '[ein bestimmtes] Merkmal' should *not* be 'marque de corrélation' ('Korrelationsmerkmal', 'mark of correlation') because this would be a *phonic* feature. Instead, 'ein bestimmtes Merkmal' should be replaced by 'presence of the mark' ('mark' ≠ 'presence of the mark') and 'Null' by 'absence of the mark', which may conveniently be symbolized as '+m' and '-m', respectively, where the two 'm's are one and the same mark, so that 'presence of the mark' and 'absence of the mark' are opposed to each other (cf 'propriété de corrélation', 'Korrelationseigenschaft', 'quality of correlation') and neither exists without the other. For example, if 'mark' is 'voice', 'presence of the mark' (i.e. '+m') is the relevant feature "voiced" while 'absence of the mark' (i.e. '-mark') is the other relevant feature, "voiceless", so that "voiced" and "voiceless" are opposed to each other and neither is conceivable without the other. The idea comparable to 'presence of the mark' and 'absence of the mark', rather than just the mark, already appears in Trubetzkoy (1931: 97) where he writes:

*Die zwei Glieder eines korrelativen Gegensatzes sind nicht gleichberechtigt: das eine Glied besitzt das betreffende Merkmal (oder besitzt es in seiner positiven Form), das andere besitzt es nicht (oder besitzt es in seiner negativen Form). [Emphasis for the whole quotation is Trubetzkoy's, and the additional underlines are mine.]*

3) Trubetzkoy attaches great importance to the type of opposition which he calls 'privative opposition' in Trubetzkoy (1939: 67 = 1949: 77 = 1969: 75) in the passage quoted below.

Das Oppositionsglied, das durch das Vorhandensein des Merkmals gekennzeichnet ist, heißt "merkmaltragend", das durch das Fehlen des Merkmals gekennzeichnete Oppositionsglied "merkmallos" [Trubetzkoy's emphasis]. Diese Art von Oppositionen ist für die Phonologie außerordentlich wichtig.

My understanding is that what Trubetzkoy calls 'privative opposition' is a phonic difference in which the mark is a phonic entity, where 'the presence of the mark' and 'the absence of the mark' when viewed in opposition to each other (cf 'propriété de corrélation') are endowed with phonological values, i.e. relevant features. What are presented as "stimmhaft" – "stimmlos", "nasaliert" – "unnasaliert", "gerundet" – "ungerundet" (Trubetzkoy 1939: 67), or "sonore" – "sourd", "nasalisé" – "non nasalisé", "arrondi" – "non arrondi" (Trubetzkoy 1949: 77), or "voiced"/"voiceless", "nasalized"/"nonnasalized", "rounded"/

<sup>19</sup> It is difficult to see if the word 'distinktiven' here is Trubetzkoy's or Jakobson's. Trubetzkoy (1949: 81) translates *distinktiven Eigenschaften* as *particularités distinctives*, while Trubetzkoy (1969: 79) translates them as distinctive properties. Notice that *distinktiven Eigenschaften* is not translated as *traits pertinents* or *distinctive features*.

“unrounded” (Trubetzkoy 1969: 75), are in each case a pair of relevant features. What Trubetzkoy presents as a ‘privative opposition’ assumes its counterpart phonological opposition which is in fact a phonological opposition whose function is just like any other distinctive opposition, that is, to borrow Trubetzkoy’s word, an ‘equipollent’ phonological opposition. Thus, e.g. [p] vs [b] (privative (phonic) opposition) → /p/ vs /b/ (phonological opposition); there is no ‘privative’ relationship between /p/ vs /b/ because the phonological content of /p/ and that of /b/ consist of the same number of relevant features. The relevant feature “voiced” (in /b/) is not equal to the relevant feature “voiceless” + “?”.

4) Consequently, it is impossible for /A/ to possess ‘Null’. Instead of ‘Null’, /A/ should possess ‘absence of the ‘mark’ (i.e. ‘-m’). Therefore,

**Fig 3**

/A/ = « Archiphonem + Null »  
/B/ = « Archiphonem + ein bestimmtes Merkmal »

need to be replaced by

**Fig 5**

/A/ = ‘archiphoneme + absence of the mark’  
/B/ = ‘archiphoneme + presence of the mark’

or

**Fig 6**

/A/ = ‘archiphoneme + -m’  
/B/ = ‘archiphoneme + +m’

or

**Fig 7**

/A/ = ‘archiphoneme + relevant feature 1’  
/B/ = ‘archiphoneme + relevant feature 2’

or

**Fig 8**

/A/ = ‘archiphoneme + “voiceless”’  
/B/ = ‘archiphoneme + “voiced”’

What is variously indicated as ‘absence of the mark’ vs ‘presence of the mark (Fig 5), ‘-m’ vs ‘+m’ (Fig 6), relevant feature 1 vs relevant feature 2 (Fig 7) and “voiceless” vs “voiced” (Fig 8) are different manifestations of ‘propriété de corrélation’. For the neutralization of /A/ vs /B/ to take place, ‘propriété de corrélation’ is annulled, leaving the archiphoneme alone valid which thus occurs in the position of neutralization.

5) In connection with the impossibility of 'Null' appearing in the formula shown in Fig 3, we need to recall that Trubetzkoy (1933: 238) himself correctly and emphatically says that 'une qualité phonologique n'existe que comme terme d'une opposition phonologique' and that Trubetzkoy (1939: 85) repeats this important functional principle by saying: 'Es darf nicht vergessen werden, daß eine distinktive Eigenschaft nur als Glied einer distinktiven Opposition bestehen.<sup>20</sup> This same point is what I subsequently emphasized in Akamatsu (1988: 90-91) in terms of 'the relevant feature and its inherent opposability (the functional principle of the relevant feature)'.

6) Since the archiphoneme itself and alone occurs in the position of neutralization, it makes no sense to say, as does Trubetzkoy, that the archiphoneme is *represented* by one of the two phonemes of the neutralizable opposition. All this means that the well-known and time-honoured formula proposed by Trubetzkoy (1936b: 33-34, 1939: 73), as shown in Fig 3, is flawed.

7) The most serious flaw is that neutralization of the opposition /A/ vs /B/ does not in reality take place in the formula shown in Fig 3. Trubetzkoy says that the archiphoneme is identified, but he does not say that the archiphoneme itself occurs in the position of neutralization.

8) In denying 'mark (of correlation)', I am equally denying the status of 'phonological feature' to 'mark'. What, if it is not 'phonological feature', is the status of 'mark'? In my view, 'mark' is simply a 'phonic feature'. Tcheu (1969: 240, 241) writes as follows.

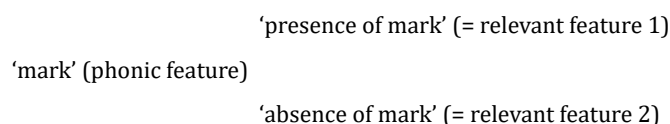
La **marque** est donc un caractère phonique qui oppose, par sa présence et son absence, deux phonèmes dont les traits pertinents sont par ailleurs identiques ... mais elle-même n'est qu'un caractère phonique particulier.

I have always been thoroughly in agreement with Tcheu on this point; see Akamatsu (1988: 408).

9) We need to pay particular attention to the definition of 'propriété de corrélation', which is 'opposition de la présence et de l'absence d'un certain caractère phonique' and opposition between 'la présence du caractère phonique' and 'l'absence du caractère phonique', which ultimately give rise to two opposing relevant features. We have already accepted that the mark (= correlative mark) is a *phonic* entity, not a phonological one.

10) Tcheu's understanding as well as mine of the concept of 'mark' may be illustrated as follows.

Fig 9



If we take the example of 'voice' as a mark, its relation to the two relevant features, "voiced" and "voiceless", can be shown below.

<sup>20</sup> Trubetzkoy (1949: 98): 'On ne doit pas oublier qu'une particularité distinctive n'existe que comme terme d'une opposition distinctive'; and Trubetzkoy (1969: 94): 'A distinctive property exists only by virtue of being a member of a distinctive opposition.' It is a pity that this all-important functional principle is presented in large print in Trubetzkoy (1969: 94) only, while both Trubetzkoy (1939: 85) and Trubetzkoy (1949: 98) present it in small print.

Fig 10

presence of 'voice' = "voiced" (relevant feature 1) in e.g. /b/  
 'mark' (phonic feature)  
 absence of 'voice' = "voiceless" (relevant feature 2) in e.g. /p/

11) It seems apposite to note here what [Martinet \(1964<sup>2</sup>: 4.15\)](#) = [Martinet \(2005<sup>3</sup>: 4.15\)](#) writes, which I will quote in full below.

Ce qu'on appelle absence de marque doit être ici compté comme une caractéristique positive puisque correspondant à un type articulatoire distinct: pour réaliser l'absence de voix, par exemple, il faut prendre garde à ne pas laisser le contexte imposer des vibrations glottales; l'absence de voix correspond à une organisation bien définie de la glotte.

What Martinet says so rightly here is directly relevant to Figs 7, 8, 9 & 10 (*supra*) and Figs 11, 12 & 13 (*infra*) while it is indirectly relevant to Figs 3, 4, 5 & 6 (*supra*). All this points to the functional principle whereby no relevant feature is conceivable without there being in the same phonological system another or other relevant features to which it is opposed; in other words, no relevant feature is opposed to zero. Inadmissibility of the formula shown in Fig 3 is obvious.

Likewise, if the mark is 'nasality', 'presence of nasality' will be phonologically conceived of as the relevant feature "nasal" while 'absence of nasality' will be phonologically conceived of as the relevant feature "non-nasal". And "nasal" and "non-nasal" are opposed to each other, and neither relevant feature is conceivable without the other. In terms of articulation, 'absence of nasality' requires total velic closure (i.e. closure between the velum and the back wall of the pharynx) while 'presence of nasality' requires velic opening (i.e. the velum is held free from the back wall of the pharynx).

12) One should be cautious in correctly understanding a statement like the one quoted below made in [Martinet \(1960: III-15\)](#).

Deux séries comme /p f t s š k/ et /b v d z ž g/... forment ce qu'on appelle une **corrélation** ... *Le trait pertinent* [my emphasis] qui distingue les deux séries s'appelle la marque. Ici la marque est la « sonorité ».

In the above quoted statement, the 'mark' is said to be a relevant feature ('trait pertinent'), which is then identified as « sonorité ». It is obvious that the 'mark' is not presented here as a phonic feature 'voice'. However, the presence of the mark should be "voiced" for /b v d z ž g/ and the absence of the mark should be "voiceless" for /p f t s š k/. The term 'sonorité' Martinet chooses is perfectly appropriate to designate the mark (a phonic feature 'voice').<sup>21</sup> However, what Martinet presents as « sonorité »<sup>22</sup> is evidently a relevant feature (*un trait pertinent*, as Martinet himself says), not a phonic feature. It would be unproblematic if 'voice' (i.e. 'sonorité') is understood as the mark, and « voiceless » (i.e. absence of 'voice') or « sourd » characterizes /p f t s š k/ and « voiced » (i.e. presence of 'voice') or « sonore » characterizes /b

<sup>21</sup> Provided that the term 'sonorité' is taken in the sense of the hypernymy (the superordinate) of 'sonore' and 'sourd', and not as 'sonorité' (< 'sonore' + ité'). In other words, the term 'sonorité' is neutral to the distinction between 'sonore' and 'sourd'.

<sup>22</sup> It is no surprise that Martinet employs « » (as in « sonorité ») in indicating a relevant feature. In French « » is the only type of 'guillemets'. Just to give another example, [Martinet \(1965: 138\)](#) writes: '... deux traits pertinents : la « bilabialité » et la « sonorité ».'



v d z ž g/. Retaining the term « sonorité » that Martinet uses, but understanding this term to mean the 'mark', I would then reformulate Fig 10 as follows.

**Fig 11**

presence of 'sonorité' = « sonore » (relevant feature 1) in e.g. /b/  
 'sonorité' (phonic feature)  
 absence of 'sonorité' = « sourd » (relevant feature 2) in e.g. /p/

or, for German

**Fig 12**

presence of 'Stimm' = "stimmhaltig" (relevant feature 1) in e.g. /b/  
 'Stimm' (phonic feature)  
 absence of 'Stimm' = "stimmlos" (relevant feature 2) in e.g. /p/

or, for Japanese

**Fig 13**

presence of '声' = "有声" = "voiced" (relevant feature 1) in e.g. /b/  
 '声'<sup>24</sup>  
 absence of '声' = "無声" = "voiceless" (relevant feature 2) in e.g. /p/

The task of choosing a nomenclature whereby to designate a 'mark' in different languages is not always an easy one, since such a nomenclature should be one which is, so to speak, a term of hypernym, e.g. 'voice', with two cohyponyms, 'voiced' and 'voiceless'. Another example of a designation of a 'mark' is 'nasality' which is a hypernym and 'nasal' and 'non-nasal' which are two cohyponyms. However, there is some difficulty in finding an appropriate French term to designate for a mark associated with 'sonore' and 'sourd'. We have seen 'sonorité' above but this term can also be comprehended as being opposed to 'sourdité' (of course, not 'surdité' = deafness).

13) I have so far deliberately refrained to designate the two phonemes of a neutralizable correlative opposition as 'marked phoneme' and 'unmarked phoneme' because I foresee some possible problem to crop up as to how to understand 'marked phoneme' and 'unmarked phoneme'. A phoneme characterized by the presence of a mark may be called 'marked phoneme', e.g. *b*, and a phoneme characterized by the absence of a mark may be called 'unmarked phoneme', e.g. *p*. As I understand, 'marked' and 'unmarked' mean, respectively, 'characterized by the presence of a mark' and 'characterized by the absence of a mark', the mark here being one and the same mark. But 'mark' is not a relevant feature, so that the marked phoneme and the unmarked phoneme should not be conceived of as follows.

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<sup>24</sup> The Chinese character, 声, pronounced [see] in Japanese here, means 'voice' in Japanese and is the hypernym of 有声 and 無声. The Chinese character, 有, pronounced [juu] in Japanese here, means 'existent/existence' and the Chinese character 無, pronounced [mw] in Japanese here, means 'non-existent / non-existence'.

Fig 14

A = archiphoneme + no mark

B = archiphoneme + mark

14) Trubetzkoy's statements about the archiphoneme, the archiphoneme representative, the mark, the marked and the unmarked as I have related above created in some quarters an explicatory account as the following which I find bordering on gobbledegook.

*Marque.* C'est ce dernier type de neutralisation qui a donné naissance à la notion de marque. Comme c'est toujours le même élément qui apparaît dans les positions où un seul des deux peut apparaître, on l'appelle **non marqué**, ou encore **extensif** (l'autre, d'usage plus limité, étant **intensif** ou **marqué**). Dans les contextes où seul l'élément non marqué est possible, on dit qu'il représente l'opposition toute entière, ou encore qu'il représente l'**archiphonème**, c'est-à-dire ce qui est commun aux deux phonèmes de l'opposition. On peut aller plus loin et postuler que le non-marqué représente toujours l'archiphonème — même dans les contextes où il s'oppose au marqué. Leur opposition peut alors, selon le terme de Troubetzkoy, être appelée **privative**, en ce sens que l'un des deux termes, le marqué, possède des traits distinctifs [394]<sup>25</sup> dont l'autre est privé. Ducrot & Schaeffer (1995: 276-277).

It is difficult to know which individual writer(s) for this collaborative work to attribute the above quoted view to — I am not interested to do so — but the view expressed above does not seem correct to me, nor does it seem to elucidate the phenomenon of neutralization and the archiphoneme.

Given a number of problems arising from the notion of 'mark', I expressed my view held in the late 1970's in Akamatsu (1978) which contained my total agreement with Tcheu (1969) about the status of 'mark' as a phonic entity and about the phonological value which the presence and absence of a mark are endowed with, i.e. relevant features. My paper brought forth a sympathetic reaction from Vion (1978) from the floor who said in agreement with me (and also indirectly with Tcheu) that "... dès qu'un phonème est défini par l'absence de marque. Cette absence lui confère un trait distinctif ...". Vion went farther by saying "Comme la tentation est grande, même en dehors de la phonologie, de n'attribuer de valeur linguistique qu'au seul terme marqué, il conviendrait peut-être d'abandonner cette notion."

There exists an excellent huge work on the concept of 'mark' and related concepts in Prague school phonology written from a historical point of view, and from a neutral standpoint without being polemic, namely, Viel (1984). In Akamatsu (1986), a review of Viel (1984), among other not a few points I discussed, I mention critically the view of the mark held by Viel that a mark is a phonological, not a phonic, entity, which probably leads to the idea that a mark is a relevant feature. I take exception to the idea of the two terms of a neutralizable opposition /A/ and /B/ being as

/A/ "a b c"  
/B/ "a b c d"

and instead I believe in

<sup>25</sup> On this page, i.e. p. 394, the authors talk about **traits distinctifs**, explaining the fundamental differences between those proposed by Martinet and those proposed by Jakobson. I personally operate with the former and reject the latter.

Fig 15

/A/ "a b c e"  
/B/ "a b c d"

This rounds up my critical discussions of one of the two major issues arising from what is shown in Fig 3 and Fig 4. I will continue below to discuss other major issues in Trubetzkoy's concepts of neutralization, the archiphoneme, the archiphoneme representative, the mark, the marked phoneme and the unmarked phoneme.

## V. THE ARCHIPHONEME REPRESENTATIVE

1) Trubetzkoy (1936b: 31-32, 1939: 70-71) writes: "In der Aufhebungsstellung wird somit ein Oppositionsglied zum Stellvertreter des »Archiphonems [Trubetzkoy's emphasis] « des betreffenden Gegensatzes ..." Any statement made along this line does not seem to occur in Trubetzkoy (1936a) or other writings by Trubetzkoy of earlier dates. Since /A/ (»Archiphonem + Null«) which Trubetzkoy says occurs in the position of neutralization with the phonological content that is identical with that of »Archiphonem« which itself does not occur in that position, Trubetzkoy is led to believe that /A/ represents »Archiphonem«, hence the concept of 'Archiphonemvertreter' ('archiphoneme representative'). I have always and totally opposed to the concept and intervention of 'archiphoneme representative' and discussed deleterious aspects of 'archiphoneme representative' on a few occasions (see e.g. Akamatsu (1972, 1975, 1976)). Incidentally, it is important to stress here that '-vertreter' in 'Archiphonemvertreter' or 'representative' in 'archiphoneme representative' does not mean 'realization'.<sup>26</sup> In this connection, it is also important to heed a caution sounded by Mounin (1976). This is recorded in Akamatsu (1976: 101) where it reads: '... il convient surtout de ne pas comprendre «représentation» comme «réalisation».' In other words, 'archiphoneme representative' should be understood as 'the phoneme which represents (not realizes) the archiphoneme in the position of neutralization.' All functionalists are agreed that a phoneme is realized (by sounds); so is an archiphoneme. They are not represented.

2) Allowing for the concept of 'archiphoneme representative' nullifies effectively the concept of the archiphoneme itself. The entity 'archiphoneme representative' is inadmissible as it vitiates the very concept of 'archiphoneme'.<sup>27</sup> I have long argued against the notion of 'archiphoneme representative' in the past. Among other writers who completely agree with me by rejecting 'archiphoneme representative' is Davidsen-Nielsen (1978: 52-53). He too emphasizes that accepting 'archiphoneme representative' results in negating neutralization and, he adds, pave the way to misrepresenting neutralization as if it were 'defective distribution'.

3) According to Trubetzkoy, even if the phoneme that represents the archiphoneme is objectively (i.e. phonetically?) identified as marked, this phoneme should be identified as the

<sup>26</sup> I find it unfortunate that Martinet (1949: 4) resorts to the wording '... the second *p* of [pɔp] is not to be considered as a realization of the *p*-phoneme, but as a *representative* [my emphasis] of a phonological unit which is characterized by the relevant features common to Russian *b* [i.e. /b/] and *p* [i.e. /p/] ...', in which the word 'representative' is used, unfortunately, in the sense of 'realization'.

<sup>27</sup> Buysens (1980: 67) says: 'Akamatsu (1975) a très bien vu que l'introduction du représentant de l'archiphonème ôte toute fonction à l'archiphonème et ruine donc cette théorie.'

unmarked. This shows Trubetzkoy's insistent view that the archiphoneme is represented by the unmarked, not the marked, phoneme. In this connection [Vachek \(1966a: 18\)](#), who abandons the term (and the concept) 'archiphoneme representative', quotes from [Trubetzkoy \(1931: 98\)](#) as follows.

*In den Stellungen wo die korrelative Eigenschaft eines Phonems seine phonologische Gültigkeit verliert, wird dieses Phonem mit dem merkmallösen Korrelationsglied identifiziert, selbst wenn es objektiv mit dem merkmalthaltigen Korrelationsglied identisch ist.* [The entire passage quoted is italicized by Trubetzkoy. The additional emphasis by a single underline is mine.]

4) One particular ambiguity that persists about 'archiphoneme representative' concerns the question of whether the archiphoneme representative is a phonic entity (sound) or a phonological entity (phoneme). This question may surprise the majority of scholars who take it granted that the archiphoneme representative is a phonic entity. Nevertheless, this is a serious question that need to be answered. My own answer is that it is a phoneme, a phonological entity. On this question of the archiphoneme representative being either a phonic entity or a phonological entity, see [Akamatsu \(1988: 368-376\)](#).

5) Trubetzkoy's introduction of 'archiphoneme representative' (both the concept and the term) and his employing it throughout his descriptions of neutralization is very unfortunate. In my considered view, recourse to 'archiphoneme' is necessary and sufficient in the description of every case of neutralization. According to Trubetzkoy, the archiphoneme itself, and as such, does not seem to occur in the position of neutralization. This is, in my view, unacceptable because both the archiphoneme and the phoneme are phonematic units which inherently occur sequentially as the distinctive units of the second articulation.<sup>28</sup>

6) It is significant that Trubetzkoy *never speaks of realizations of archiphonemes*, whereas he always speaks of realizations of phonemes. Both the phoneme and the archiphoneme are phonematic units and consequently both are realized by sounds. One wonders if, for Trubetzkoy the status of what he calls the archiphoneme is different from that of the phoneme and this is why the archiphoneme needs the phoneme which 'represents' it since the archiphoneme is not, according to Trubetzkoy, realized. It seems that 'representative' ('represent') and 'realization' ('realize') are two distinct notions and too heterogeneous ever to be interchangeable.

7) In connection with the fact that Trubetzkoy needs the notion and term 'archiphoneme representative', I wish to quote two statements I made in [Akamatsu \(1988: 378\)](#). They are as follows.

*... he [Trubetzkoy] rarely presents the archiphoneme as a distinct unit which the phoneme doubtlessly is, and seldom, if ever, presents the archiphoneme itself as actually occurring in the position of neutralization.* [The italics are in the original.]

Should Trubetzkoy be ... of the view that the archiphoneme is a distinctive unit which itself occurs in the position of neutralization, there would be no need for him to speak of the archiphoneme being 'represented' by a distinctive unit, the phoneme.

8) For an extensive discussion by me on various aspects of 'archiphoneme representative', see [Akamatsu \(1988: 367-398\)](#).

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<sup>28</sup> For 'first articulation' and 'second articulation' as well as 'double articulation', see [Martinet \(1960: I-8, I-11, II-10\)](#). [Akamatsu \(1992a: 4-10\)](#) may also be consulted.

## VI. ABANDONMENT OF 'ARCHIPHONEME'

It would not be surprising if not a few of the readers who are interested in the activities of the Prague Linguistic Circle believe that the concept and term of 'archiphoneme' continue to be indisputably one of the prominent features of Prague School phonology. The readers could be forgiven to assume that the theory of neutralization and the archiphoneme as seen in Trubetzkoy's writings on phonology culminating in his magnum opus, *Grundzüge der Phonologie*, is here to stay in our days. The reality is as follows. During the so-called 'interwar period', i.e. 1926 to 1939, during which Prague School phonology enjoyed steady and fruitful development, the concepts of neutralization and the archiphoneme were the joint and pivotal notions in the formulation of the theory of neutralization and the archiphoneme. However, immediately following the publication of *Grundzüge der Phonologie* in 1939, the term (with the concept) 'archiphoneme' was abandoned by the Prague School, though they most probably continue to subscribe to the term (and the concept?) of 'neutralization'. The predominant majority of non-Pragueans who have read up on Prague School phonology up to and including *Grundzüge der Phonologie* (or its translations) but not also Prague School's writings in the post-1939 period may well not be aware of the official abandonment of the term (and the concept) 'archiphoneme' and the inevitable consequence that this event has had in the post-1939 Prague phonology. I hasten to add that functional phonology being practised by what I personally call 'the Paris School' led by and associated with Martinet continues to adhere to the archiphoneme as well as neutralization, both of which are alive and well.

We read the following in [Vachek \(1966a: 18\)](#).

†**archiphonème** (Archiphoneme. Archiphonem. Archifoném/Archifonéma) Élément commun de deux ou plusieurs phonèmes corrélatifs, qu'on peut concevoir abstraction faite des propriétés de corrélation.' ... 'Par l'archiphonème nous entendons l'ensemble des particularités distinctives qui sont communs aux deux' [= aux deux termes d'une opposition phonologique neutralisable]. Tb39c.71 = TC49.81<sup>29</sup> [Terme abandonné après 1939]

The term 'archiphoneme' is said to be abandoned but the *concept* itself is assumed to be also abandoned. Logically, any concept precedes the corresponding term.

The abandonment of the term and concept of 'archiphoneme' is unambiguously mentioned by Vachek (1959: 110) who says that "... the idea of 'archiphoneme' which has by now been wholly abandoned by the Prague phonemicists ..."

The direct consequence of the demise of 'archiphoneme' is the demise of 'archiphoneme representative' ('Archiphonemvertreter'). It stands to reason that if 'archiphoneme' is rejected, an entity which is supposed to represent the archiphoneme becomes unnecessary. It is no surprise that, having abandoned the term (and the concept) of 'archiphoneme', the post-1939 Prague School also abandoned the term (and the concept) of 'archiphoneme representative'. That this is so is proven when we see [Vachek \(1966a: 18\)](#) writing as follows.

†**archiphoneme représenté par le phonème non-marqué** (Archiphonem durch merkmalloses Phonem symbolisiert. Archifoném zastoupen bezpříznakovým fonémem)

<sup>29</sup> Where Tb39c.71 = [Trubetzkoy \(1939: 71\)](#) and TC49.81 = *N S Trubetzkoy* (traduit par J CANTINEAU, *Principes de phonologie* (Paris 1949). To this I wish to add Tb69.79 = *N S Trubetzkoy* (transl. by CAM BALTAXE, *Principles of Phonology* (Berkeley & Los Angeles 1969).



This is explained in German and French, and is exemplified by *p* (for the correlation *p/b* or *p/p'*) and *s'* in *s'vèčka* (for the correlation *s/s'*) in Russian. References are made to Tb31a,98 (= Trubetzkoy, 'Die phonologischen Systeme' in *TCLP* 4.96-116 (1931)).

We have seen that the post-1939 Prague School has abandoned 'archiphoneme' and 'archiphoneme representative'. One is naturally curious to know *why* 'archiphoneme' has had to be abandoned. Vachek (1966b: 62) has this to say:

One cannot therefore posit the presence in this [spoken] chain of a unit placed on a *subphonemic* [my italics] level, if it should be placed on the level of the phoneme. To put the matter still differently, any simultaneous bundle of distinctive features must be evaluated, by definition, as a phoneme, not as a unit *subordinated to the phoneme* [my italics]. It appears thus, that in concrete phonological structures, implemented by spoken utterances, the concept of archiphoneme has no justification. And it is hardly chance that since Trubetzkoy's *Grundzüge* this term has been virtually abandoned in phonological books and papers by the Prague group—this has obviously been due to its unfruitfulness.

I disagree with Vachek in that I do not believe that the level at which the archiphoneme is posited is at a subphonemic level. I have in the past, in Akamatsu (1972: 1069, 1079), briefly succumbed to positing the archiphoneme at a hyperphonemic (or a supraphonemic) level.<sup>30</sup> However, I quickly dismissed this error when I realized that my reasoning was purely logical, not phonological. Since then, my view has been that the archiphoneme is posited at the same level as is the phoneme. I believe that the archiphoneme and the phoneme are both minimum distinctive units of the second articulation and consequently they are at an equivalent level. In other words, both the phoneme and the archiphoneme are the minimum phonematic units<sup>31</sup> which are at the level of the second articulation. This can be clearly seen in syntagmatics. For example, in the case of the neutralization of /s/ vs /z/ in English, the archiphoneme associated therewith is /s-z/, as in *cats* /kat s-z/ (or /katS/ as many writers would notate). /k/, /a/, /t/ and /s-z/ (or /S/) are all posited at the same level, the archiphoneme being at neither a higher nor a lower level than the phoneme. Another reason for which I disagree with Vachek's rejection of 'archiphoneme' is that the list of the phonematic units of a language should consist of both phonemes and archiphonemes. Martinet (1949: 7) correctly says that '... the phoneme list should include archiphonemes ...', though I would personally say 'the phonematic list' instead of 'the phoneme list' as 'phonematic entities' in my parlance are both phonemes and archiphonemes. It seems to me that Vachek's objection to 'archiphoneme' is neither convincing nor well founded.

Vachek might object to 'archiphoneme' for another reason, though he does not mention this. Trubetzkoy's notions of 'archiphoneme' and 'neutralization' are such that 'archiphoneme' *itself does not occur* in the position of neutralization.

Fig 16

/A/ = archiphoneme + zero (unmarked phoneme)  
/B/ = archiphoneme + mark (marked phoneme)

<sup>30</sup> See in this connection Martinet (1936: 46, 53).

<sup>31</sup> The term 'phonematic' is not directly associated with 'phoneme' only but refers to both 'phoneme' and 'archiphoneme'. This term is not synonymous with 'phonemic' (< 'phoneme') but is associated with 'phonematics' which, in turn, is differentiated from 'prosody'.

Fig 16 shows the two terms, /A/ and /B/, are in opposition to each other and form a neutralizable correlative opposition, /A/ vs /B/.<sup>32</sup> According to Trubetzkoy, the phonological entity that occurs in the position of neutralization is the unmarked phoneme (which is said to represent the archiphoneme.) In Fig 16 above, /A/ should not be taken as the 'archiphoneme' but as the unmarked phoneme. In this sense 'archiphoneme' enjoys no status as a phonological (phonematic, to be precise) entity. Such an entity will have no *raison d'être*. It is effectively a non-entity. Even in /B/, the archiphoneme is *contained in* the marked phoneme and has no independent status as a phonological entity. Vachek could object to 'archiphoneme' for this reason.

Had Trubetzkoy survived beyond 1938, he would have continued to preserve 'archiphoneme' and 'archiphoneme representative'. He would have continued to hold that the archiphoneme representative is always the unmarked phoneme. However, in the phonological practice of all those like me who operate with 'archiphoneme' as well as 'neutralization' but not with 'archiphoneme representative', the concept of 'archiphoneme representative' is a deleterious one in the theory of neutralization and the archiphoneme, and the demise of 'archiphoneme representative', whilst 'neutralization' is maintained, is welcome.

We have seen that Prague School has abandoned both 'archiphoneme' and 'archiphoneme representative' since 1939. How about neutralization? Vachek (1966b: 62) mentions the terms 'neutralisation', *Aufhebung/Neutralisation*, and *Neutralisace/rušení*, and regards 'neutralisation' as 'Terme fondamental de la phonologie'. Furthermore, Vachek (1966b: 61) positively retains the term 'neutralisation'. We presume that the concept as well as the term of 'neutralization' is retained. Vachek (1966b: 55) refers us to 'opposition neutralisable' where we are shown the example which is earlier given by Trubetzkoy (1939: 70).<sup>33</sup> The example runs as follows: [e] and [ɛ] in French function phonologically as /e/ vs /ɛ/ in final open syllable but in all other positions the occurrence of [e] and that of [ɛ] are mechanically controlled<sup>34</sup> in that [e] occurs in non-final open syllable and [ɛ] in closed syllable so that [e] and [ɛ] are combinatory variants of *a single phoneme* in all positions except in final open syllable, and /e/ vs /ɛ/ is neutralized in all positions except in final open syllable. Trubetzkoy's (1939: 70) words 'ein[es] einzig[en] Phonem[s]', and Trubetzkoy's (1949: 80) words 'un même phonème' or Trubetzkoy's (1968: 78) words 'a single phoneme' refer of course to 'an archiphoneme, i.e. /e-ɛ/'. My disagreement with Trubetzkoy's description of the occurrences of [e] and [ɛ] is that, unlike him, I would say that, in non-final open syllable, not only [e] but also [ɛ] occurs (as in e.g. *maison* [me-] ~ [mɛ -]), in which case [e] and [ɛ] are in free variation. To be precise, I should add that, in non-final open syllable, not only [e] and [ɛ] but any vowels positable between them also occur in free variation, so that /e/ vs /ɛ/ is neutralized. My conclusion is that /e/ vs /ɛ/ is valid in final open syllable but is neutralized in the other positions, i.e. in closed syllable and in non-final open syllable. For these reasons I would not talk about there being free variation of just [e] and [ɛ] (as Trubetzkoy means) in positions other than final open syllable.

It is significant that the date of the abandonment of the term (as well as that of the concept of) 'archiphoneme' as noted in Vachek (1959: 110, 1966a: 18) is presumably just after the year 1939. The year 1939 is the year in which *Grundzüge der Phonologie* posthumously

<sup>32</sup> See in this connection Trubetzkoy (1936a: 15; 1936b: 33, 34; 1939: 73).

<sup>33</sup> Trubetzkoy (1939: 70 = 1949: 80 = 1969: 78).

<sup>34</sup> Trubetzkoy (1969: 78) translates 'ist ... mechanisch gereglt' as 'is predictable', which I do not think is an appropriate translation. Trubetzkoy (1949: 80) translates it as 'est réglée mécaniquement', which I prefer.

saw the light of day. The year 1939 postdates 25 June 1938 when Trubetzkoy passed away. It can be presumed that the formal abandonment of ‘archiphoneme’ is ascribable to the Prague Linguistic Circle not long after Trubetzkoy’s decease. It is anybody’s guess how Trubetzkoy might have reacted to the abandonment of ‘archiphoneme’ by the Prague Linguistic Circle. All the same I am tempted to imagine that Trubetzkoy would not have been happy and most probably objected to the abandonment of the concept and term of ‘archiphoneme’.

In Akamatsu (1992b), I pointed out in detail detrimental consequences that the abandonment of (the concept and term of) ‘archiphoneme’ entails in the theory of neutralization and the archiphoneme.<sup>35</sup>

## VII. TRUBETZKOY’S ANALYSIS OF NEUTRALIZATION OF DISJUNCT OPPOSITIONS

We now turn our attention to Trubetzkoy’s analysis of neutralization of phonological oppositions other than what he would call bilateral privative correlative oppositions which each consists inevitably of two phonemes, in connection with which the notion of the mark and those of the marked and the unmarked are resorted to. However, in reality, neutralizable disjunct oppositions can each consists of more than two phonemes as well, as we shall see.

1) Trubetzkoy’s theory of neutralization and the archiphoneme is inadequate to account for neutralization of disjunct oppositions such as /e/ vs /ɛ/ in French, /m/ vs /n/ in English, /m/ vs /n/ vs /ɲ/ in Spanish, /t/ vs /d/ vs /tʰ/ vs /dʰ/ in Russian, and so on. The case of /e/ vs /ɛ/ in French is mentioned by Trubetzkoy (1936a: 12-13, 1936b: 30, 1939: 70), who notes that /e/ vs /ɛ/ is valid in final open syllable but is neutralized elsewhere, that is, in non-final open syllable and in closed syllable where a single phoneme occurs which represents the archiphoneme /e-ɛ/.

The case of e.g. /e/ vs /ɛ/ in French is mentioned by Trubetzkoy (1936a: 12-13, 1936b: 30, 1939: 70). As /e/ vs /ɛ/ in French is a disjunct opposition, what might be known as the mark is clearly inconceivable and unidentifiable. Trubetzkoy does not mention the mark, the marked phoneme, and the unmarked phoneme in connection with a neutralizable disjunct opposition such as /e/ vs /ɛ/. Instead, the following is what Trubetzkoy says about the neutralization of /e/ vs /ɛ/ in French. [ɛ] occurs in closed syllable (as in *fer*), while [e] occurs in open syllable (as in *maison*). (The examples, *fer* and *maison*, are mine). Trubetzkoy considers [e] and [ɛ] as combinatory variants of a ‘single phoneme’ which he calls an ‘archiphoneme’ in closed syllable and in open (correctly, non-final open) syllable.

2) In the case of the neutralization of /m/ vs /n/ in English before /f/ or /v/ (as in *comfort*, *canvas*), it would be impossible for Trubetzkoy to declare which, /m/? or /n?/, is the unmarked phoneme.

3) What about the neutralization of /m/ vs /n/ vs /ɲ/ in Spanish? The very fact that this neutralizable opposition consists of three phonemes makes it impossible to identify the mark(s), the marked and the unmarked. Anyhow Trubetzkoy does not show us in his writings *how* one could go about analyzing neutralization of disjunct oppositions, be they oppositions

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<sup>35</sup> Akamatsu (1992b) is an extended version of my paper entitled ‘Whither the archiphoneme?’ which was originally orally presented at the 18<sup>th</sup> colloquium of SILF (Société Internationale de Linguistique Fonctionnelle) held at Charles University, Prague, in (the then) Czechoslovakia, 12-17 July 1991. This paper was not retained for some reason or other for inclusion in the proceedings of the colloquium that appeared in 1992 in Prague. This is why I subsequently had it published in 1992 in Bucharest, Romania. During the colloquium, I received no feedback from the floor. I am not, so far, aware of any written feedback in the form of publications, either.

between two phonemes (e.g. /e/ vs /ɛ/) or more than two phonemes (e.g. /m/ vs /n/ vs /ŋ/, /m/ vs /n/ vs /ɲ/ vs /ŋ/).

4) Another interesting case is the neutralization of /r/ vs /r̄/ in Spanish. This neutralizable opposition consists of two phonemes, but is it amenable to the distinction between the marked phoneme and the unmarked phoneme? If it is, what is the mark? I have in the past discussed the neutralization of /r/ vs /r̄/ in Spanish in Akamatsu (2019: § 16.8 = 408-409) so will be brief here. /r/ will be defined as “multiple tap” and /r̄/ “single tap”. /r/ and /r̄/ are distinguished from each other in word-medial position through the opposition “multiple” vs “single” (as in *carro* vs *caro*) which is cancelled when the neutralization of /r/ vs /r̄/ takes place, and the archiphoneme /r-r̄/ “tap” occurs in the position of neutralization, i.e. in word-initial position (as in *rabo*) and word-final position (as in *bar*). The important point is that there is no question of talking about a mark, the marked phoneme, the unmarked phoneme, and certainly not a correlative opposition. /r/ vs /r̄/ in Spanish is evidently a disjunct opposition and what Trubetzkoy classifies as an ‘isolated opposition’.

5) In general, Trubetzkoy describes and discusses cases of neutralization of correlative oppositions<sup>36</sup> where correlative pairs of phonemes are characterized by the marked vs the unmarked distinction. Interestingly, however, Trubetzkoy also admits of neutralization of disjunct oppositions at an early stage of his discussions about neutralization without, however, naming individual languages in question. At a later date, Trubetzkoy (1939: 163-164 = 1949: 193-194 = 1969: 168) refers to neutralization of the opposition between all five nasal phonemes before vowels in Tamil, viz /m/ vs /n/ vs /ɳ/ vs /ɲ/ vs /ɳ̄/,<sup>37</sup> and the neutralization of /m/ vs /n/ vs /ŋ/ vs /ɲ/ in some central Chinese dialects<sup>38</sup> by saying that, in all such cases, there is neutralization of ‘multilateral’(?)<sup>39</sup> oppositions between *all* (the emphasis is Trubetzkoy’s) nasal phonemes and that there occur the archiphonemes, which I

<sup>36</sup> This is so in quasi-totality of his relevant writings, with a few exceptions. For example, Trubetzkoy (1932: 19) says: ‘Es handelt sich in solchen Fällen meistens um Aufhebung oder Neutralisierung von Korrelationsgegensätzen ... Auf dieselbe Weise können aber auch disjunkte Eigenschaften der Phoneme ausgeschaltet werden.’ This remark is followed by Trubetzkoy’s reference to neutralization of oppositions between nasal phonemes in many languages. His words in Trubetzkoy (1932: 19) are as follows. ‘In vielen Sprachen z.B. besitzen die Artikulationsstellen der Nasale (*m*, *n*, *ɳ*, *ɲ* usw.) nur vor Vokalen einen phonologischen Wert, während vor Konsonanten die Artikulationsstelle des Nasals sich mechanisch nach derjenigen des folgenden Lautes richtet — sodass in dieser Stellung der Nasal ohne jede eigene Lokalisierungsseigenschaft gedacht wird.’

<sup>37</sup> I have replaced by other symbols some of the phonetic symbols that Trubetzkoy employs in showing examples of the nasal consonants. The different places of articulation of the five nasals which Trubetzkoy specifies are as follows: /m/ ‘labial’, /n/ ‘alveolar’, /ɳ/ ‘dental’, /ɲ/ ‘retroflex’ and /ɳ̄/ ‘palatal’.

<sup>38</sup> I have been confronted with considerable problem in correctly identifying some of the phonetic symbols that Trubetzkoy employs in reference to the nasal phonemes in question. I have checked how Cantineau (Trubetzkoy 1949) and Baltaxe (Trubetzkoy 1969) ‘deciphered’ his phonetic symbols for the nasal phonemes, but this has proved less than completely helpful. In particular, the symbol ‘ɳ̄’ that I have chosen in connection with Tamil and Chinese corresponds to a different symbol Trubetzkoy uses which consists of ‘n’ + cedille, which I am unable to produce on my computer. Be that as it may, what is important is the information Trubetzkoy furnishes that there occurs neutralization of oppositions between five nasal phonemes in Tamil and four nasal phonemes in Chinese.

<sup>39</sup> Trubetzkoy refers to his examples of oppositions between several nasal phonemes as in Tamil or in some dialects of Central China he adduces as ‘multilateral’ oppositions. This seems to me to be an *ad hoc* use of his own concept and term ‘multilateral’ (see Trubetzkoy 1939: 61 = 1949: 70 = 1969: 68-69). Definitionally, the terms of a multilateral opposition are supposed to be two (just like those of a bilateral opposition). As is well known, Trubetzkoy himself explains the multilateral opposition by showing the Roman capital letters *P* and *R* (and *E* and *F* to explain the bilateral opposition) and mentions /b/ vs /d/ in German as a multilateral opposition. It is clear that Trubetzkoy’s use of the term ‘multilateral’ in connection with the oppositions between the nasal phonemes in Tamil and Chinese is an unexpected extension in the use of the notion and term of ‘multilateral opposition’. The fact is that the examples from Tamil and Chinese above are not multilateral oppositions. A potential danger for tyros in Prague School phonology might misunderstand ‘multilateral’ in the sense of ‘more than two’ as against ‘bilateral’. I myself shun the use of the terms ‘bilateral’ and ‘multilateral’ (as well as ‘privative’ and ‘gradual’). Anyhow I would describe the oppositions between the nasal phonemes in Tamil and Chinese in question ‘multiple opposition’ (as opposed to ‘simple opposition’).

would notate as /m-ŋ-n-ŋ/ and /m-n-ŋ-n/, respectively, or even better as /~/ for both. Trubetzkoy (*op cit loc cit*) appropriately refers to each of these archiphonemes as ‘Nasal-Archiphonem’ (‘archiphonème nasal’, ‘nasal archiphoneme’) which I will also call archiphonemes definable by the single relevant feature “nasal”. Recourse to the distinction between ‘marked’ and ‘unmarked’ would be totally impossible in analyzing neutralization of the above-mentioned disjunct oppositions even if Trubetzkoy resorted to a circuitous analysis where recourse is had to cumulative neutralizations.<sup>40</sup>

## VIII. AKAMATSU’S THEORY OF NEUTRALIZATION AND THE ARCHIPHONEME

In the foregoing parts of this paper, I have submitted to a brief critical survey the principal notions on which Trubetzkoy’s theory of neutralization and the archiphoneme is founded. In so doing, I critically discussed, among other notions, ‘neutralization’, ‘archiphoneme’, ‘archiphoneme representative’, ‘mark (of correlation)’, ‘quality of correlation’, ‘marked’ and ‘unmarked’, etc. I have not touched on *all* the pertinent notions. I could not have done so in this short survey, but I hope that what I have discussed will afford at least an adequate bird’s-eye view of Trubetzkoy’s theory of neutralization and the archiphoneme.

It is my intention to propose in the following lines the principal points of my own theory of neutralization and the archiphoneme. The readers will find that there exists substantial discrepancy between Trubetzkoy’s theory and mine. Interested readers may perhaps wish to consult [Akamatsu \(1988\)](#) which is devoted entirely to the subject of various aspects of the theory of neutralization and the archiphoneme as I conceive of. In spite of a fair measure of discordance between us on certain major issues, Trubetzkoy and I share the principles of functionalism and structuralism on which our theory of neutralization and the archiphoneme is fundamentally based.

### VIII-1. ‘Archiphoneme’ and ‘neutralization’ are ineluctably linked

It is my firm belief that neutralization and the archiphoneme are ineluctably linked, so that where neutralization of a phonological opposition takes place in the position of neutralization, there is bound to be the associated archiphoneme occurring in the same position. To put it the other way, wherever an archiphoneme occurs in the position of neutralization, there takes place neutralization associated with the archiphoneme.

### VIII-2. Definitions of ‘archiphoneme’ (Trubetzkoy, Akamatsu)

[Trubetzkoy \(1939: 71\)](#) defines ‘archiphoneme’ as follows: ‘... wir unter Archiphonem die Gesamtheit der distinktiven Eigenschaften verstehen, die zwei Phonemen gemeinsam sind’. We have also seen that another but fundamentally the same definition is found in [Trubetzkoy \(1936b: 32\)](#) which I have quoted in the second paragraph in **IV. THE ARCHIPHONEME**. Incidentally, it should be said once and for all that practically the whole of Trubetzkoy (1936b) is incorporated and expanded in [Trubetzkoy \(1939\)](#).

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<sup>40</sup> An example of what I call ‘a circuitous analysis where recourse is had to cumulative neutralizations’ in accounting for the neutralization of e.g. /m/ vs /n/ vs /ɲ/ in Spanish in terms of three neutralizations, that of /m/ vs /n/, that of /m/ vs /ɲ/ and that of /n/ vs /ɲ/. This is an analytical procedure I do not recommend.



Here next is my latest formal definition of 'archiphoneme', proposed anew for this paper:<sup>41</sup>

*An archiphoneme is a minimum distinctive unit of the second articulation whose phonological content is identical with the common base of the (two or more) member phonemes of a neutralizable exclusive opposition and which occurs in the position of neutralization.*

This formulation calls for a few explanations.

- (i) The phrase 'a minimum distinctive unit of the second articulation' is basically identical with the definition of 'phoneme'. See [Martinet \(1960: I-14\)](#) where a definition of 'a language' is given.
- (ii) Both 'phoneme' and 'archiphoneme' are minimum distinctive units of the second articulation'.
- (iii) What distinguishes 'archiphoneme' from 'phoneme' is that the former is 'the common base of the member phonemes of a neutralizable exclusive opposition'; this does not apply to 'phoneme'.
- (iv) The expression 'a minimum distinctive unit' alone is insufficient because 'relevant feature' too is. The additional phrase 'of the second articulation' makes sure that 'a minimum distinctive unit' in question is not 'relevant feature' but is either 'phoneme' or 'archiphoneme'.
- (v) The additional phrase 'whose phonological content is identical with the common base of the (two or more) member phonemes of a neutralizable exclusive opposition' ensures that 'a minimum distinctive unit of the second articulation' is 'archiphoneme', not 'phoneme'.
- (vi) The term 'exclusive' in the phrase 'a neutralizable exclusive opposition' is indispensable, for a non-exclusive opposition cannot be a neutralizable opposition.
- (vii) The phrase 'the (two or more) the member phonemes' ensures that there is no restriction to the number of the member phonemes, which are two or more. The parenthesized phrase '(two or more)' is added just to obviate any potential misconception that the number of the member phonemes is always two and not more.
- (viii) The phrase 'which occurs in the position of neutralization' is important in that it is the archiphoneme itself and alone that occurs in the position of neutralization.

The differences between Trubetzkoy's definition of 'archiphoneme' and mine are as follows.

- (i) With Trubetzkoy, the number of the member phonemes of a neutralizable opposition is limited to two. With me, it is two or more. This is because Trubetzkoy is constrained by binarism, but not me.
- (ii) With Trubetzkoy, a reference is made to 'die Gesamtheit der Züge' or 'die Gesamtheit der distinktiven Eigenschaften' in which relevant features ('Züge' or 'distinktiven Eigenschaften') are explicitly mentioned, while with me, the reference to those

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<sup>41</sup> I have attempted in some past writings of mine formal definitions of 'archiphoneme' couched differently, as in [Akamatsu \(1988: 199, 1992a: 47\)](#).

relevant features which constitute the common base are implicitly made, as it is obvious that the phonological contents of the member phonemes are constituted by relevant features.

- (iii) Trubetzkoy mentions neither ‘opposition’ nor ‘neutralizable opposition’ when defining ‘archiphoneme’ while I mention not only ‘neutralizable opposition’ but also ‘neutralizable exclusive opposition’.
- (iv) What Trubetzkoy understands as ‘die Gesamtheit der Züge’ or ‘die Gesamtheit der distinktiven Eigenschaften’ is in reference to the common base of the member phonemes of either ‘neutralizable opposition’ or ‘non-neutralizable opposition’.
- (v) Trubetzkoy does not clearly say that the opposition in question, which is implied, is an exclusive opposition as I do. Instead, he would say that it is a bilateral privative proportional opposition.
- (vi) I believe that the archiphoneme is never part of the phoneme, unlike Trubetzkoy (1936b: 34, 1939: 73) who indicates to the contrary through the formula showing the marked phoneme being « Archiphonem + ein bestimmtes Merkmal » (see *supra* Fig 3).

### VIII-3. Exclusive relation

What I call ‘exclusive opposition’ is of paramount importance and is relevant to ‘neutralizable opposition’. Prior to proceeding to explain ‘exclusive opposition’, I need to spend some space first to explain ‘rapport exclusif’ which I translate as ‘exclusive relation’.

It is [Martinet \(1939/1945\)<sup>42</sup>](#): § 2.7, 1956: § 3.17) who introduced the concept and term ‘rapport exclusif’ as follows.

Deux phonèmes sont dits dans un **rapport exclusif** [Martinet’s boldface] lorsqu’ils ne se distinguent que par un seul trait pertinent et qu’ils sont seuls à présenter tous les traits qu’ils ont en commun ...

The definition of ‘rapport exclusif’ repeated verbatim in [Martinet \(1956: § 3.17\)](#) is as follows.

Deux phonèmes sont dits dans un **rapport exclusif** lorsqu’ils ne se distinguent que par un seul trait pertinent et qu’ils sont seuls à présenter tous les traits qu’ils ont en commun ...

[Martinet \(1956: § 3.17\)](#) straight away gives an example of ‘rapport exclusif’ and one of ‘rapport non exclusif’ from French as follows.

... en français /p/ and /b/ sont dans un rapport exclusif parce qu’ils ne se distinguent que par l’absence ou la présence de la sonorité, et que ce sont les seuls phonèmes du français qui présentent les traits de bilabialité et non-nasalité ... /p/ et /t/ n’y sont pas dans un rapport exclusif parce que, s’ils ne se distinguent que par la seule opposition de bilabialité de /p/ à l’apicalité de /t/, les traits qu’ils présentent en commun sont également communs à /k/, /f/, /s/ et /ʃ/.

The concept and term ‘rapport exclusif’ that Martinet proposes are excellent and I am surprised that few writers of phonology either know or exploit them in their writings on

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<sup>42</sup> The publication of the journal *Revue de linguistique romane*, Vol. 15, in which this article by Martinet was to have appeared in 1939, was postponed by external circumstances and only saw the light of day in 1945, hence my indication (1939/1945) in the References.

neutralization and the archiphoneme. It is true that [Trubetzkoy \(1939: 60\)](#) employs the term 'Vergleichsgrundlage' which refers to the sum of the relevant features common to the two phonemes of an opposition and which he employs in defining what he calls 'bilateral opposition' and 'multilateral opposition' and also in referring to the sum of the relevant features shared by the two phonemes of a neutralizable opposition. [Trubetzkoy \(1939: 70\)](#) actually uses the term 'Vergleichsgrundlage' when writes: '... jene Züge bleiben relevant, die beiden Gliedern gemein sind (d. i. die Vergleichsgrundlage der betreffenden Opposition).' 'Vergleichsgrundlage' is generally translated as 'basis for comparison', 'base de comparaison', 'base para la comparación', etc., but I personally find these terms awkward, and they do not clearly suggest what 'Vergleichsgrundlage' refers to. This is why in all my writings in English, including the present paper, I prefer to employ the term 'common base' which is immediately comprehensible. Incidentally, [Vachek \(1966a\)](#) does not include neither 'Vergleichsgrundlage' nor any corresponding terms in French, English or Czech.

I have never been happy on certain points in Martinet's definition, quoted above, of 'rapport exclusif' and discussed them in some of my past writings. First, his words that the two phonemes in an exclusive relation are distinguished from each other 'par un seul trait pertinent'. This phrase is vague and misleading. What really happens is that the two phonemes are distinguished from each other through (the opposition between) two relevant features, one relevant feature of one phoneme and the other relevant feature of the other phoneme. One could say that this is clarified in the example where /p/ and /b/ are shown to be distinguished from each other through the opposition between "voiceless" (of /p/) and "voiced" (of /b/). However, the trouble is that, in the phrase 'par l'absence ou la présence de la sonorité', 'sonorité' *should* be taken to refer to the mark (of correlation), but this is incompatible with Martinet's use of 'sonorité' as a relevant feature ([Martinet 1960: III-15](#)) which we have seen earlier. One should correctly understand that 'absence de sonorité' is phonologically "sourd" and 'présence de sonorité' is phonologically "sonore" where 'sonorité' is the mark, not the relevant feature while "sourd" and "sonore" are relevant features. The misleading phrase 'par un seul trait pertinent' reappears when Martinet goes on to mention /p/ and /t/ (which are two phonemes which are not in an exclusive relation) which Martinet says are distinguished from each other 'par un seul trait pertinent'. However, any ambiguity about the expression 'par un seul trait' suddenly clears up when Martinet proceeds to specify correctly as "bilabialité" (= "bilabial") of /p/ versus "apicalité" (= "apical") of /t/. In this example, it is quite clear that 'un seul trait pertinent' actually corresponds to two relevant features. For my discussion of 'exclusive relation', see [Akamatsu \(1988: 2.8 = 53-58\)](#) which includes my discussion about the point 'par un seul trait pertinent'.

[Martinet \(1956: § 3.17\)](#) additionally gives the example of /m/, /n/ and /ɲ/ from English which he says are distinguished from each other through only one relevant feature (par un seul trait pertinent) and specifies three relevant features, "labialité" (= "labial"), "apicalité" (= "apical") and "palatalité" (= "palatal"), that is, through the opposition between "labial" (of /m/), "apical" (/n/) and "palatal" (of /ɲ/). The unfortunate mistake of putting 'palatalité' (= "palatal") can be corrected in one of two ways; either '/m/, /n/ and /ɲ/ from English' is changed to '/m/, /n/ and /ɲ/ from Spanish' or to change "palatalité" (= "palatal") to "dorsalité" ("dorsal"). The problem I see of saying 'par un seul trait pertinent', which I have discussed above, still lingers. What is important is the fact that /m/, /n/ and /ɲ/ in English, or /m/, /n/ and /ɲ/ in Spanish, are in an exclusive relation as the common base of the three phonemes is "nasal" which is exclusive to them.

That Martinet additionally gives an example of three phonemes being in an exclusive relation is a definite and welcome amelioration. This paves the way for recognizing any

number (two or more) of phonemes that stand in an exclusive relation. For example, /t/, /t'/, /d/ and /d'/ in Russian whose common base, 'denti-alveolar non-nasal', is exclusive to these four phonemes which stand in an exclusive relation. In order for these four Russian phonemes are distinguished from one another, two sets of two relevant features are necessary, i.e. "voiceless"/"voiced" and "palatalized"/"non-palatalized", which results in "voiceless non-palatalized non-nasal" = /t/, "voiced non-palatalized non-nasal" = /d/, "voiceless palatalized non-nasal" = /t'/, "voiced palatalized non-nasal" = /d'/.

#### VIII-4. Exclusive opposition

Martinet who coined the term 'rapport exclusif' ('exclusive relation') strangely stops short of coining the term 'opposition exclusive' which would doubtlessly be useful. My first presentation of 'opposition exclusive' ('exclusive opposition', the term I coined), can be found in Akamatsu (1988: § 2.9 = 58-63, esp 58).<sup>43</sup> The concept and term 'opposition exclusive' derives of course from Martinet's concept and term 'rapport exclusif' ('exclusive relation'). By the term 'exclusive opposition' is meant '*a phonological opposition whose two or more terms are in an exclusive relation*' (Akamatsu 1988: 58). In this sense it was just an extension of 'exclusive relation' but it has turned out to be a useful and indispensable term because of the concept it embodies in discussing neutralization, the archiphonemes and related matters. The use of the term 'exclusive opposition' averts a circumlocution like 'a phonological opposition whose two or more terms are in an exclusive relation'. It should be said again straight away that an exclusive opposition is either a non-neutralizable opposition or a neutralizable opposition, as the case may be, but a neutralizable opposition is bound to be an exclusive opposition. The following can be said with regard to the relation between 'neutralizable opposition' and 'non-neutralizable opposition'.

- (i) An exclusive opposition is either non-neutralizable or neutralizable.
- (ii) A non-exclusive opposition is bound to be a non-neutralizable opposition.
- (iii) A neutralizable opposition is bound to be an exclusive opposition.

Amongst a few writings of mine on 'exclusive opposition', Akamatsu (2015) is entirely devoted to the subject of 'exclusive opposition' and 'non-exclusive opposition'.

'Exclusive opposition' has been misconstrued as being synonymous with 'bilateral opposition' and 'non-exclusive opposition' as 'multilateral opposition' by a number of writers since I launched the concept and term of 'exclusive opposition'. For example, Maiden (1990: 566) and Avram (1991: 281, 1993: 385-386) fall into the trap of equating 'exclusive opposition' with 'bilateral opposition' on the one hand and 'non-exclusive opposition' with 'multilateral opposition' on the other. I should stress straight away that this error is unfortunate and that, besides, I personally do not operate with what Trubetzkoy considers 'bilateral opposition' and 'multilateral opposition' anyway.

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<sup>43</sup> In his review of Akamatsu (1988), Maiden (1990: 566) misattributes the creation of the term 'exclusive opposition' to Martinet. Maiden writes: '... an exclusive opposition (a term originally introduced by Martinet ...)'. Maiden goes on: '... is defined as that existing between two phonemes ...'. I must correct this latter statement straight away by saying that the terms of an exclusive opposition are *two or more*. Notice that 'exclusive opposition' is never constrained by binarism.

The mistake wherein 'exclusive opposition' is regarded as being synonymous with 'bilateral opposition' is so fallacious that I need to dwell on this mistake for some space below. To begin with, it is necessary to quote what Maiden (1990: 566) writes:

... EXCLUSIVE OPPOSITION ... is defined ... between two phonemes which are distinguished from each other by the absence in the one and the presence in the other of a given RELEVANT FEATURE [the small capitals are Maiden's],

In Maiden's passage just quoted, he makes two major errors. First, an exclusive opposition is an opposition whose terms are *two or more*, as the case may be. It is possible that Maiden has read only Martinet (1939/1945: § 2.7) or read only partially, i.e. only the first part of Martinet (1956: § 3.17). Second, the two terms of an exclusive opposition are distinguished from each other through the opposition between *two (different) relevant features*, not through the opposition between the presence of a single relevant feature in one of the terms and the absence of the same relevant feature in the other term. We turn next to Avram (1991) which is a review of Akamatsu (1988).

Avram (1991: 280) writes as follows.<sup>44</sup> The symbol 'ń' which Avram employs corresponds to the symbol 'ŋ' which other writers generally do.

La notion d' "opposition multiple" – une telle opposition serait ... l'opposition entre /m/, /n/ et /ń/en espagnol – ne nous semble pas justifiée ... dans certaines positions doit être interprétée comme neutralisation non d'une opposition multiple, mais de trois oppositions: /m/ : /n/, /m/ : /ń/, /n/ : /ń/ ... À notre avis, le fait qu'en espagnol ... la valeur distinctive du trait phonétique "lieu d'articulation" des consonnes [m], [n] and [ń] est annulée dans certaines positions doit être interprété comme neutralization non d'une opposition multiple, mais de trois oppositions: /m/ : /n/, /m/ : /ń/, /n/ : /ń/ ... Nous avons l'impression que le plaidoyer pour la notion d' "opposition multiple" ... dérive de l' "antibinarisme" de l'auteur, qui d'ailleurs explique aussi ce qui est dit sur la distinction bilatéral/multilatéral. En admettant (ce que nous avons déjà fait ...) qu'une opposition n'a que deux termes (cela va de soi N. S. Trubetzkoy ...) ... exclusif devient synonyme de bilatéral ... en espagnol ce n'est pas seulement l'opposition /m/ : /n/ qui est neutralisable, mais aussi l'opposition multilatérale /m/ : /ń/ (et l'opposition, toujours multilatérale, /n/ : /ń/).<sup>45</sup> En d'autres termes, peut être neutralisée aussi l'opposition entre deux phonèmes qui ne sont pas l'un vis-à-vis de l'autre dans un rapport exclusif.

While reviewing Akamatsu (1988) a few years later, Avram (1993: 386) discusses the same points again.<sup>46</sup>

... on constate que la distinction exclusive / non-exclusive de T. Akamatsu n'est autre chose que la bilatérale / multilatérale de N. S. Trubetzkoy ... En ce qui nous concerne, nous ne croyons pas qu'il soit recommandable d'abandonner l'opinion – partagée paraît-il, par la majorité des chercheurs – suivant laquelle une opposition ne contient que deux termes ... nous dirons donc que les consonnes nasales constituent dans le système phonologique de l'espagnol non pas une opposition multiple, mais trois oppositions: /m/ : /n/, /m/ : /ŋ/, /n/ : /ŋ/. En rejetant la notion d'opposition multiple, nous pouvons toutefois accepter les termes (opposition) exclusive / (o.) non-exclusive en tant que synonymes des bilatéral et, respectivement, de multilatérale.

<sup>44</sup> Avram (1991) is written in Romanian. Avram, the reviewer, very kindly provided me, for ease of reading, with his own French translation of his review. The quotation which follows is taken from the French version of the review but the original pagination is retained.

<sup>45</sup> '(et aussi l'opposition, toujours multilatérale, /n/ : /ń/)' should be read 'et l'opposition (toujours multilatérale) /n/ : /ń/'

<sup>46</sup> Avram (1993), the review article, is written entirely in French.



It is evident that Avram's views have not changed between the times of writing his two review articles from which I have just quoted certain passages. There are a few points about which Avram and I fundamentally disagree from each other.

- 1) Unlike me, Avram believes, in following Trubetzkoy, that any phonological opposition consists of two, not more, terms. In other words, while I admit unproblematically both 'simple opposition' and 'multiple opposition', Avram accepts only what I call 'simple opposition'.
- 2) Avram attributes 'antibinarisme' to me (he is quite right to do so) on which my concept of 'multiple opposition' is based.
- 3) Avram disagrees with me considering the three nasal consonant phonemes /m/, /n/ and /ɲ/ in Spanish in terms of /m/ vs /n/ vs /ɲ/, i.e. as a single multiple opposition, which goes against Trubetzkoyan binarism according to which any phonological opposition must consist of only two, not more, terms (see [Trubetzkoy 1939: 61 = 1949: 70 = 1960: 68](#)). Both a bilateral opposition and a multilateral opposition are *two-term* oppositions which are compatible with binarism.
- 4) Consequently, Avram believes that the oppositions between /m/, /n/ and /ɲ/ in Spanish can correctly be considered in terms of /m/ vs /n/, /m/ vs /ɲ/, and /n/ vs /ɲ/, i.e. as a complex of what I call three simple oppositions, instead of a single multiple opposition.
- 5) It follows from what has been said above that what I regard as the neutralization of /m/ vs /n/ vs /ɲ/ in Spanish should not be regarded, as a complex of three neutralizations, i.e. that of /m/ vs /n/, that of /m/ vs /ɲ/, and that of /n/ vs /ɲ/, as Avram believes.
- 6) Avram avers that 'exclusive' (in 'exclusive opposition') is synonymous with 'bilateral' (in 'bilateral opposition') and 'non-exclusive' (in 'non-exclusive opposition') is synonymous with 'multilateral' (in 'multilateral opposition'). I categorically disagree with him. Exclusive oppositions consist each of *two or more* terms, as can be shown by examples like /r/ vs /r/ in Spanish, /m/ vs /n/ vs /ŋ/ in English, /t/ vs /d/ vs /t'/ vs /d'/ in Russian, /m/ vs /n/ vs /ɲ/ vs /ŋ/ vs /ɲ/ in Tamil (as cited by [Trubetzkoy 1939: 163-164 = 1949: 193-194 = 1969: 168](#)), /m/ vs /m'/ vs /n/ vs /n'/ vs /ŋ/ vs /ŋ'/ in Japanese, and so on. As is clear from these examples, exclusive oppositions can be what I call simple oppositions (e. g. /r/ vs /r/ in Spanish) or multiple oppositions (e. g. /m/ vs /n/ vs /ŋ/ in English). It will be seen that the common base of the member phonemes of the exclusive opposition is 'exclusive' to these phonemes, irrespective of the number (two or more) of these phonemes. Clearly, Trubetzkoy's (and also Avram's) classification of types of phonological oppositions cannot accommodate multiple oppositions. Some examples of non-exclusive oppositions can be /m/ vs /ŋ/ in English, /i/ vs /e/ vs /ɛ/ in French, and so on. Non-exclusive oppositions can be simple oppositions (e.g. /m/ vs /ŋ/ in English) or multiple oppositions (e.g. /i/ vs /e/ vs /ɛ/ in French). The common base of the member phonemes of the non-exclusive oppositions is non-exclusive to these phonemes, irrespective of the number (two or more) of the phonemes. Simple non-exclusive oppositions may correspond to 'multilateral' oppositions in Trubetzkoy's (and hence, Avram's) classification of types of phonological opposition but, on the other hand, non-exclusive multiple oppositions cannot be accommodated since a 'multilateral' oppositions consists of two (not more) phonemes. Therefore, I cannot accept Avram's

view that a non-exclusive opposition (necessarily) corresponds to a multilateral opposition and an exclusive opposition (necessarily) corresponds to a bilateral opposition. It should not be forgotten that both a bilateral opposition and a multilateral opposition consist of two (not more) terms.

- 7) So far as /m/, /n/ and /ɲ/ of Spanish are concerned, all of /m/ vs /n/, /m/ vs /ɲ/ and /n/ vs /ɲ/ are three non-exclusive oppositions and non-neutralizable while /m/ vs /n/ vs /ɲ/ is a single exclusive opposition and neutralizable.
- 8) Against my analytical solution wherein a single neutralization of /m/ vs /n/ vs /ɲ/ is envisaged, Avram recommends envisaging three neutralizations, viz the neutralization of /m/ vs /n/, that of /m/ vs /ɲ/, and that of /n/ vs /ɲ/.

The functional untenability of Avram's stance against a single exclusive opposition /m/ vs /n/ vs /ɲ/ but instead in favour of three non-exclusive oppositions /m/ vs /n/, /m/ vs /ɲ/ and /n/ vs /ɲ/ is revealed when we investigate what Avram's potential analysis eventuates. Avram himself does not show us the details of his potential analysis. It is a pity that Avram himself does not show us what his own analysis of this case would be. I am obliged to vicariously present his probable analysis. Avram is aware that /m/ vs /n/, /m/ vs /ɲ/, and /n/ vs /ɲ/ are non-exclusive oppositions since the common base of /m/ and /n/, that of /m/ and /ɲ/, and that of /n/ vs /ɲ/ are all equally "nasal" which is found in /ɲ/, /n/ and /m/, respectively. Recall that non-exclusive oppositions are not neutralizable. Nevertheless, Avram assumes that the three oppositions *are* neutralizable. He would therefore posit three ghost archiphonemes \*/m-n/, \*/m-ɲ/ and \*/n-ɲ/ consequent on the above-mentioned three ghost neutralizations. I talk about ghost neutralizations here because none of /m/ vs /n/, /m/ vs /ɲ/, and /n/ vs /ɲ/ are non-exclusive oppositions and also multilateral oppositions to Avram and consequently non-neutralizable despite Avram's assumption to the contrary. The product of the three ghost neutralizations would be three ghost archiphonemes, i.e. \*"nasal" (= \*/m-n/), \*"nasal" (= \*/m-ɲ/), and \*"nasal" (= \*/n-ɲ/). It is right to think that the 'ghost archiphonemes' \*"nasal", \*"nasal" and \*"nasal" should not be identified with the archiphoneme "nasal" (= /m-n-ɲ/) which is not a ghost archiphoneme and which results from a single neutralization of /m/ vs /n/ vs /ɲ/ (which is not a ghost neutralization). I mentioned the occurrences of 'ghost neutralizations' and 'ghost archiphonemes', but it would be more appropriate to understand the non-occurrence of either the neutralizations or the associated archiphonemes. The potential analysis vicariously presented above is the one I suggested in [Akamatsu \(2015: 104-105\)](#). Since Avram considers 'non-exclusive opposition' is synonymous with 'multilateral opposition', it would follow that the three multilateral oppositions, viz /m/ vs /n/, /m/ vs /ɲ/, and /n/ vs /ɲ/, are also neutralizable, a stance incompatible with Trubetzkoy's.

There is another and preferred way to analyze the neutralizations of /m/ vs /n/, of /m/ vs /ɲ/, and of /n/ vs /ɲ/ as Avram chooses (instead of analyzing the neutralization of /m/ vs /n/ vs /ɲ/ as I choose) without having to create either ghost neutralizations or ghost archiphonemes.

- 1) The three nasal phonemes in Spanish /m/, /n/ and /ɲ/ are definable as follows.
  - /m/ "non-apical non-palatal nasal"
  - /n/ "non-labial non-palatal nasal"
  - /ɲ/ "non-apical non-labial nasal"

- 2)
  - (i) The common base of /m/ and /n/ is “non-palatal nasal” which is not found anywhere else among the Spanish consonant phonemes. This proves /m/ vs /n/ to be an exclusive opposition.
  - (ii) The common base of /m/ and /ɲ/ is “non-apical nasal” which is not found anywhere else among the Spanish consonant phonemes. This proves /m/ vs /ɲ/ to be an exclusive neutralizable opposition.
  - (iii) The common base of /n/ and /ɲ/ is “non-labial nasal” which is not found anywhere else among the Spanish consonant phonemes. This proves /n/ vs /ɲ/ to be an exclusive neutralizable opposition.
- 3) The three archiphonemes /m-n/, /m-ɲ/ and /n-ɲ/ are definable as follows.
  - /m-n/ “non-palatal nasal”
  - /m-ɲ/ “non-apical nasal”
  - /n-ɲ/ “non-labial nasal”
- 4) The three further and necessary neutralizations are that of /m-n/ vs /m-ɲ/, that of /m-n/ vs /n-ɲ/, and that of /m-ɲ/ vs /n-ɲ/.
- 5) These three neutralizations result in the occurrence of the following three archi-archiphonemes, as indicated below.
  - //m-n/ vs /m-ɲ// “nasal”
  - //m-n/ vs /n-ɲ// “nasal”
  - //m-ɲ/ vs /n-ɲ// “nasal”

This alternative analysis rightly characterizes /m/ vs /n/, /m/ vs /ɲ/ and /n/ vs /ɲ/ as exclusive oppositions, not non-exclusive oppositions, and has the advantage of not engendering either ghost neutralizations or ghost archiphonemes. On the other hand, it has the disadvantage of necessitating a second neutralization,<sup>47</sup> i.e. neutralizations of oppositions between archiphonemes and simultaneously creating an archi-archiphoneme.<sup>48</sup> This analysis is, so to speak, an indirect and roundabout analysis to arrive at the same result which the analysis of /m/ vs /n/ vs /ɲ/ directly reaches.

Here finally is the optimum analysis that I myself propose. /m/ vs /n/ vs /ɲ/ (“labial nasal” vs “apical nasal” vs “palatal nasal”) in Spanish is a single neutralizable exclusive opposition. In the single neutralization of /m/ vs /n/ vs /ɲ/, the opposition “labial” vs “apical” vs “palatal” is nullified, and “nasal” alone which is exclusive to /m/, /n/ and /ɲ/ remains valid, and this is the archiphoneme “nasal”.

It would be interesting to speculate how Trubetzkoy himself would have analyzed the neutralization of /m/ vs /n/ vs /ɲ/ in Spanish if he had lived on beyond 1938 and possibly shedded the last remaining vestige of his binarism. Trubetzkoy’s remarks about Spanish in both his correspondence with Jakobson (letter dated 18 January 1931,<sup>49</sup> letter dated 20

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<sup>47</sup> I would be tempted to consider this as a case of ‘cumulative neutralization’. Such a neutralizable opposition as may have three or more terms (e.g. /m/ vs /m’/ vs /n/ vs /n’/ vs /ɲ/ vs /ɲ’/ in Japanese; see Akamatsu 2000: 144-147) will need more than two cumulative neutralizations. The reason for my strong objection to the notion of ‘cumulative neutralization’ can be found in Akamatsu (2015: 104-105).

<sup>48</sup> ‘Archi-archiphoneme’ is a concept and term found in Tcheu (1967). I conveniently employ it here without subscribing to it.

<sup>49</sup> Trubetzkoy does not refer to phonetics/phonology about Spanish.

October 1937<sup>50</sup>) and in *Grundzüge* (1939: 42,<sup>51</sup> 186<sup>52</sup>) do not touch on any Spanish phonological problems.

### VIII-5. Akamatsu's analysis of neutralization of phonological oppositions

I will show below how I would analyze neutralization of various phonological oppositions.

It is important to stress that the terms (two or more) of any neutralizable exclusive opposition consist of the same number of relevant features. Here are a few examples whereby to explain this statement.

- (i) /p/ and /b/ in English are the two terms of the neutralizable exclusive opposition /p/ vs /b/ and consist each of the same number of relevant features, i.e. /p/ "voiceless non-nasal plosive" and /b/ "voiced non-nasal plosive". As can be seen, the equal number of the relevant features in the case of /p/ and /b/ is three.
- (ii) /č/ and /ǰ/ in English are the two terms of the neutralizable exclusive opposition /č/ vs /ǰ/ and consist each of the same number of relevant features, i.e. /č/ "voiceless palato-alveolar plosive" and /ǰ/ "voiced palato-alveolar plosive". The equal number of the relevant features in the case of /č/ and /ǰ/ is again three.
- (iii) /m/, /n/ and /ŋ/ in English are the three terms of the neutralizable exclusive opposition /m/ vs /n/ vs /ŋ/ and consist each of the same numbers of relevant features, i.e. /m/ "labial nasal", /n/ "apical nasal" and /ŋ/ "dorsal nasal". The equal number of the relevant features in the case of /m/, /n/ and /ŋ/ is two.
- (iv) /o/ and /ɔ/ in French are the two terms of the neutralizable exclusive opposition /o/ vs /ɔ/ and consist each of the same number of relevant features, i.e. /o/ "half-close back" and /ɔ/ "half-open back". The equal number of the relevant features in the case of /o/ and /ɔ/ is two.
- (v) /p/ and /b/ in French are the two terms of the neutralizable exclusive opposition /p/ vs /b/ and consist each of the same number of relevant features, i.e. /p/ "voiceless bilabial non-nasal" and /b/ "voiced bilabial non-nasal". The equal number of relevant features in the case of /p/ and /b/ is three.
- (vi) /k/ and /k'/ in Japanese are the two terms of the neutralizable exclusive opposition /k/ vs /k'/ and consist each of the same number of relevant features, i.e. /k/ "voiceless non-palatalized dorsal non-nasal" and /k'/ "voiceless palatalized dorsal non-nasal". The equal number of relevant features in the case of /k/ and /k'/ is four.

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<sup>50</sup> Trubetzkoy gives his findings under separate heads concerning 'phonological isoglosses' in Europe in the main. He refers a few times to Spanish but not from a phonological point of view.

<sup>51</sup> Trubetzkoy refers to 'the alveolar r' (as distinct from 'the uvular r') as being regarded as the norm in Spanish and some other languages.

<sup>52</sup> Trubetzkoy refers to Spanish among some other European languages in which the correlation of accent ('Betonungskorrelation') is the only prosodic correlation ('prosodische Korrelation').

- (vii) /m/, /m'/, /n/, /n'/, /ŋ/ and /ŋ'/ in Japanese are the six terms of the neutralizable exclusive opposition /m/ vs /m'/ vs /n/ vs /n'/ vs /ŋ/ vs /ŋ'/ which consist each of the same number of relevant features, i.e. /m/ “non-palatalized labial nasal”, /m'/ “palatalized labial nasal”, /n/ “non-palatalized apical nasal”, /n'/ “palatalized apical nasal”, /ŋ/ “non-palatalized dorsal nasal” and /ŋ'/ “palatalized dorsal nasal”. The equal number of relevant features in the case of /m/, /m'/, /n/, /n'/, /ŋ/ and /ŋ'/ is three.<sup>53</sup>
- (viii) /r/ and /r̄/ in Spanish are the two terms of the neutralizable exclusive opposition /r/ vs /r̄/ which consist each of the same number of relevant features, i.e. /r/ “single tap” and /r̄/ “multiple tap”. The equal number of relevant features in the case of /r/ and /r̄/ is two.

All these facts can be formulaically shown as follows.

**Fig 17**

/A/ “X α”  
 /B/ “X β”  
 /C/ “X γ”  
 /D/ “X δ”  
 /E/ “X ε”  
 etc.

- (i) “α”, “β”, “γ”, “δ”, “ε”, etc. represent mutually different relevant features;
- (ii) “X” represents the common base of (two or more) phonological oppositions (i.e. /A/ and /B/ (and ...));
- (iii) “X” consists of a different number (one or more) of relevant features;
- (iv) Different terms (/A/, /B/, etc.) of different phonological oppositions (i.e. /A/ vs /B/ (vs /C/...)) are distinguished from each other through the opposition “α” vs “β” (vs “γ” ...),
- (v) The opposition “α” vs “β” (vs “γ” ...) is cancelled in contexts where /A/ vs /B/ (vs /C/ ...) is neutralized.
- (vi) /A/ vs /B/ vs /C/ may be exemplified by /m/ vs /n/ vs /ŋ/ in English where the opposition “α” = “labial” (of /m/) vs “β” = “apical” (of /n/) vs “γ” = “dorsal” (of /ŋ/) sets apart /m/, /n/ and /ŋ/ from each other, while “X” is “nasal” which is the common base of /m/ and /n/ and /ŋ/; the opposition “α” vs “β” vs “γ” is cancelled in the neutralization of /m/ vs /n/ vs /ŋ/.
- (vii) /A/ vs /B/ may be exemplified by /p/ vs /b/ also in English where the opposition “α” = “voiceless” (of /p/) vs “β” = “voiced” (of /b/) sets /p/ and /b/ apart from each other, while “X” is “labial plosive” which is the common base of /p/ and /b/; the opposition “α” vs “β” is cancelled in the neutralization of /p/ vs /b/.

<sup>53</sup> See Akamatsu (2000: 134, 144-145).



The fundamental reason why I have spent fair space above at the beginning of **VIII-5** is to affirm again my total rejection of Trubetzkoy's idea of the two terms of a neutralizable opposition, i.e.

**Fig 3**

/A/ = « Archiphonem + Null »  
 /B/ = « Archiphonem + ein bestimmtes Merkmal »

to which I referred here and there because such an idea goes against the functionalist principle which none other than Trubetzkoy himself so correctly asserted in [Trubetzkoy \(1933: 238\)](#) when he said, to repeat, that 'Une qualité phonologique n'existe que comme terme d'une opposition phonologique' and then in [Trubetzkoy \(1939: 85\)](#) that 'Es darf nicht vergessen werden, daß eine distinktive Eigenschaft nur als Glied einer distinktiven Opposition bestehen'. This functionalist principle is so precious that it should never be neglected by functionalists.

I will show below how I personally analyze neutralization of various exclusive oppositions by taking a few examples from different languages.

1) The neutralization of /p/ vs /b/ in (British) English.

- (i) The commutation test will have yielded all the consonant phonemes of (British) English together with their phonological contents.
- (ii) We find the following information: /p/ is "voiceless labial non-nasal plosive" and /b/ is "voiced labial non-nasal plosive". The full list of all the consonant phonemes of English together with their phonological contents is found in [Akamatsu \(2017: 20-21\)](#) or [Akamatsu \(2019: § 15.2 = 405\)](#).
- (iii) /p/ vs /b/ is valid in the position of relevance.
- (iv) In the position of relevance, /p/ and /b/ are distinguished from each other through the opposition "voiceless" (of /p/) vs "voiced" (of /b/).
- (v) The common base of /p/ and /b/ is "labial non-nasal plosive", which is exclusive to these two phonemes in English. Therefore /p/ vs /b/ is an exclusive opposition.
- (vi) In the position of neutralization, the opposition "voiceless" vs "voiced" is cancelled, and the common base of /p/ and /b/ alone is valid in that position.
- (vii) The common base of /p/ and /b/ is the archiphoneme /p-b/ which is definable as "labial non-nasal plosive" and which alone occurs in the position of neutralization.
- (viii) /p/ vs /b/ in English can therefore be declared to be a neutralizable exclusive opposition.
- (ix) It should be noted that throughout (i) to (viii), I have not mentioned (as it is unnecessary to) 'correlative opposition' (which /p/ vs /b/ is), 'mark (of correlation)', 'quality of correlation', 'marked (phoneme)', 'unmarked (phoneme)' and 'archiphoneme representative', all of which Trubetzkoy would have mentioned.

2) The neutralization of /m/ vs /n/ vs /ŋ/ in (British) English.

- (i) We find the following information: /m/ is “labial nasal”, /n/ is “apical nasal”, and /ŋ/ is “dorsal nasal”.
- (ii) /m/ vs /n/ vs /ŋ/ is valid in the position of relevance.
- (iii) In the position of relevance, /m/, /n/ and /ŋ/ are distinguished from each other through the opposition “labial” (of /m/) vs “apical” (of /n/) vs “dorsal” (/ŋ/).
- (iv) The common base of /m/, /n/ and /ŋ/ is “nasal”, which is exclusive to these three phonemes in English. Therefore /m/ vs /n/ vs /ŋ/ is an exclusive opposition.
- (v) In the position of neutralization, the opposition “labial” vs “apical” vs “dorsal” is cancelled, and the common base of /m/, /n/ and /ŋ/ alone is valid in that position.
- (vi) The common base of /m/, /n/ and /ŋ/ is “nasal”. The archiphoneme /m-n-ŋ/ is definable as “nasal” which alone occurs in the position of neutralization.
- (vii) /m/ vs /n/ vs /ŋ/ in English can therefore be declared to be a neutralizable exclusive opposition.

### 3) The neutralization of /č/ vs /j/ in English.<sup>54</sup>

- (i) We find the following information: /č/ is “voiceless palato-alveolar plosive” and /j/ is “voiced palato-alveolar plosive”.
- (ii) The common base of /č/ and /j/ is “palato-alveolar plosive” which is exclusive to these two phonemes in English. Therefore /č/ vs /j/ is an exclusive opposition.
- (iii) In the position of relevance, /č/ and /j/ are distinguished from each other through the opposition “voiceless” (of /č/) vs “voiced” (of /j/).
- (iv) /č/ vs /j/ is valid in the position of relevance, i.e. word-initially (e.g. *chin* vs *gin*), word-medially (e.g. *lecher* vs *ledger*), and word-finally (e.g. *rich* vs *ridge*).
- (v) The position of neutralization of /č/ vs /j/ is ‘after word-medial /s/’ (as in *question*).
- (vi) In the neutralization of /č/ vs /j/, the opposition “voiceless” vs “voiced” is cancelled, and the common base of /č/ and /j/ alone remains valid in that position.
- (vii) The common base of /č/ and /j/, i.e. “palato-alveolar”, is the archiphoneme /č-j/ which alone occurs in the position of neutralization.
- (viii) /č/ vs /j/ in English can therefore be declared to be a neutralizable exclusive opposition.

### 4) The neutralization of /o/ vs /ɔ/ in French.<sup>55</sup>

- (i) The commutation test will have yielded all the French vowel phonemes except /ə/ (schwa) together with their phonological contents.

<sup>54</sup> See Akamatsu (2019: 412-414) and Akamatsu (2022).

<sup>55</sup> My analysis of /o/ vs /ɔ/ in French will be directly followed by my analysis of /e/ vs /ɛ/ in French.

- (ii) We find the following information: /o/ is “half-close back” and /ɔ/ is “half-open back”.<sup>56</sup> For a table of the French vowel system, see [Walter \(1977: 39\)](#).
- (iii) In the position of relevance, /o/ and /ɔ/ are distinguished from each other through the opposition “half-close” (of /o/) vs “half-open” (of /ɔ/).
- (iv) The common base of /o/ and /ɔ/ is “mid<sup>57</sup> back”, which is exclusive to these two phonemes in French. Therefore /o/ vs /ɔ/ is an exclusive opposition.
- (v) /o/ vs /ɔ/ is valid in closed syllable ending with e.g. /b/ (as in *aube* vs *lobe*), /d/ (as in *Aude* vs *ode*), /ʒ/ (as in *auge* vs *loge*), /k/ (as in *rauque* vs *roc*), /g/ (as in *rauque*<sup>58</sup> vs *rogue*), /l/ (as in *saule* vs *sole*), /m/ (as in *heume* vs *homme*), /n/ (as in *Saône* vs *sonne*), /p/ (as in *taupe* vs *tope*), /s/ (as in *hausse* vs *os*), /ʃ/ (as in *fauche* vs *Foch*), /t/ (as in *côte* vs *cote*), /v/ (*sauve* vs *love*), etc.; /o/ vs /ɔ/ is also valid in non-final open syllable (as in *beauté* vs *botté*, *côté* vs *coter*, *taupé* vs *toper*).
- (vi) In the position of neutralization, the opposition “half-close” vs “half-open” is cancelled, and this cancellation creates the relevant feature “mid” which is opposed to both “close” (in /u/) and “open” (in /a/) since the boundary between “half-close” and “half-open” is eliminated.
- (vii) The common base of /o/ and /ɔ/ is “mid back”. The archiphoneme /o-ɔ/ definable as “mid back” occurs alone in the position of neutralization.
- (viii) /o/ vs /ɔ/ in French can therefore be declared to be a neutralizable exclusive opposition.
- (ix) There are a few different positions of neutralization of /o/ vs /ɔ/;
- First, in closed syllables ending with /r/ (as in *hors* [ɔ])<sup>59</sup> and with /z/ (as in *rose* [o]).<sup>60</sup>
  - Second, in final open syllable (as in *allô* [o], *boulot* [o], *carreau* [o])<sup>61</sup>.
  - Third, in non-final open syllable (as in *comète* [ɔ], *doser* [o], *forure* [ɔ], *gaucher* [o], *kohol* [ɔ], *lotor* [ɔ], *nota* [ɔ], *paulette* [o], *roter* [ɔ], *rôti* (n) [o/ɔ]<sup>62</sup>, *rôtir* (v) [o/ɔ], *rotie* (n) [o/ɔ], *sottise* [ɔ], *taupe* [o], *vaudou* [o], *yogi* [ɔ], *zona* [o]), etc.

<sup>56</sup> Neither /o/ nor /ɔ/ should be additionally characterized as “rounded”. The “back” vowels in French are automatically ‘phonetically’ — but not phonologically — rounded.

<sup>57</sup> The relevant feature “mid” comprehends “half-close” and “half-open”. This means that “mid” is opposed to both “close” (in /u/) and “open” (in /a/).

<sup>58</sup> In the absence of \**raugue* in French, I make do with *rauque* which is attested in French. My justification in bringing in \**raugue* is that the occurrence of /g/ which is voiced instead of that of /k/ is not thought to necessarily change the vowel before /g/ from [o] to other vowels.

<sup>59</sup> In final closed syllable ending with /r/, the archiphoneme /o-ɔ/ is realized by [ɔ].

<sup>60</sup> If final closed syllable ends with /z/, the archiphoneme /o-ɔ/ is realized by [o].

<sup>61</sup> In final open syllable, the archiphoneme is always realized by [o]. See [Martinet & Walter \(1973: 772\)](#).

<sup>62</sup> By the notation [o/ɔ] is meant that this word and the following two words, for example, are pronounced either way.

(x) For each example given in (ix), I have indicated how the archiphoneme /o/ vs /ɔ/ is realized, i.e. [o] or [ɔ]. The source of the information is Martinet & Walter (1973). Irrespective of whether only [o] occurs, or only [ɔ] occurs, or both [o] and [ɔ] occur, in all such cases [o] and [ɔ] are realizations of the archiphoneme /o-ɔ/.

5) The neutralization of /e/ vs /ɛ/ in French.

- (i) The commutation test will have shown that /e/ is definable as “front unrounded half-close” and /ɛ/ as “front unrounded half-open”.
- (ii) In the position of relevance, i.e. in final open syllable, /e/ and /ɛ/ are distinguished from each other through the opposition “half-close” (of /e/) vs “half-open” (of /ɛ/) (as in *dé* vs *dais*, *ré* vs *raie* and *thé* vs *taie*).
- (iii) The common base of /e/ and /ɛ/ is “front mid unrounded”, which is exclusive to these two phonemes in French. Therefore /e/ vs /ɛ/ can be declared to be an exclusive opposition.
- (iv) The archiphoneme /e-ɛ/ definable as “front mid unrounded” occurs in the position of neutralization.
- (v) /e/ vs /ɛ/ in French can be declared to be a neutralizable exclusive opposition.
- (vi) There are two different positions of neutralization of /e/ vs /ɛ/.
  - (a) First, in closed syllable (as in *paire*, *peigne*, *seize*, *quel*, *thème*) where the archiphoneme /e-ɛ/ is realized by [ɛ].
  - (b) Second, in non-final open syllable where the archiphoneme /e-ɛ/ is realized by [e] (as in *béant*, *pénal*, *récent*) or by [e], [ɛ] or any vowels intermediate between [e] and [ɛ] (as in *caisson*, *maison*, *plaisir*, *saisir*).
- (vii) Note that [ɛ] (as in e.g. *paire*) is not a realization of /ɛ/ since [ɛ] as a realization of /e-ɛ/ is distinguished from [i] as a realization of /i/ (“front close unrounded”) as in *pire* and [a] as a realization of /a/ (“front open”) as in *par*, that is, [i] vs [e] vs [a], not [i] vs [e] vs [ɛ] vs [a]. Likewise, [e] (as in *béant*) is not a realization of /e/ since [e] as a realization of /e-ɛ/ is distinguished from [i] vs [ɛ] vs [a], not [i] vs [e] vs [ɛ] vs [a].

6) The neutralization of /p/ vs /b/ in French.

- (i) We find the following information: /p/ is “voiceless bilabial non-nasal” and /b/ is “voiced bilabial non-nasal”.
- (ii) /p/ vs /b/ is valid in the position of relevance.
- (iii) In the position of relevance, /p/ and /b/ are distinguished from each other through the opposition “voiceless” (of /p/) vs “voiced” (of /b/).
- (iv) The common base of /p/ and /b/ is “bilabial non-nasal”, which is exclusive to these two phonemes of French. Therefore /p/ vs /b/ is an exclusive opposition.
- (v) In the position of neutralization, the opposition “voiceless” vs “voiced” is cancelled, and the common base of /p/ and /b/ alone is valid in that position.
- (vi) The common base of /p/ and /b/ is the archiphoneme /p-b/ which is definable as “bilabial non-nasal” and which alone occurs in the position of neutralization. The position of neutralization of /p/ vs /b/ in French is

after /s/ (word-initially as in *spire* /s p-b i r/, (word-medially as in *transpirer* /trās p-b ire/), (word-finally as in *aspe* /as p-b/).

- (vii) /p/ vs /b/ in French can therefore be declared to be a neutralizable exclusive opposition.
- (viii) It should be noted that throughout (i) to (vii), I have not mentioned (as it is unnecessary to) 'correlative opposition' (which /p/ vs /b/ is), 'mark (of correlation)', 'quality of correlation', 'marked (phoneme)', 'unmarked (phoneme)' and 'archiphoneme representative', all of which Trubetzkoy would have mentioned.

(7) The neutralization of /k/ vs /k'/ in Japanese.

- (i) We find the following information: /k/ is "voiceless non-palatalized dorsal non-nasal" and /k'/ is 'voiceless palatalized dorsal non-nasal'. The full list of all the consonant phonemes of Japanese together with their phonological contents can be seen in Akamatsu (2000: 181, 183).
- (ii) /k/ vs /k'/ is valid in the position of relevance.
- (iii) In the position of relevance, /k/ and /k'/ are distinguished from each other through the opposition "non-palatalized" (of /k/) vs "palatalized" (of /k'/). The position of relevance for /k/ and /k'/ is before /a o u<sup>63</sup>/, i.e. in /ka/ (か/カ), /ko/ (こ/コ) and /ku/ (く/ク).<sup>64</sup>
- (iv) The common base of /k/ and /k'/ is "voiceless dorsal non-nasal", which is exclusive to these two phonemes of Japanese. Therefore /k/ vs /k'/ is an exclusive opposition.
- (v) In the position of neutralization, the opposition "non-palatalized" vs "palatalized" is cancelled, and the common base of /k/ and /k'/ alone is valid in that position. The position of neutralization for /k/ vs /k'/ is 'before /i e/, i.e. /k-k' i/ (き/キ) and /k-k' e/ (け/ケ).
- (vi) The common base of /k/ and /k'/ is the archiphoneme /k-k'/ which is definable as "voiceless dorsal non-nasal" and which alone occurs in the position of neutralization.
- (vii) /k/ vs /k'/ of Japanese can therefore be declared to be a neutralizable exclusive opposition.
- (viii) It should be noted that throughout (i) to (vii), I have not mentioned (as it is unnecessary to) 'correlative opposition' (which /k/ vs /k'/ is), 'mark (of correlation)', 'quality of correlation', 'marked (phoneme)', 'unmarked (phoneme)' and 'archiphoneme representative', all of which Trubetzkoy would have mentioned.
- (ix) Trubetzkoy himself refers to neutralization of oppositions between palatalized consonants and non-palatalized consonants in Japanese before 'front vowels' (i.e. /i e/) as he puts it. He says that this

<sup>63</sup> I am deliberately employing the symbol 'u' to expressly indicate for the benefit of non-Japanese readers the phonetic detail about this vowel in Japanese. Otherwise I could of course employ the symbol 'u'.

<sup>64</sup> In (iii) and (v), I have added the hiragana characters on the left of the forward slash and the corresponding katakana characters to the right, e.g. /ka/ (か/カ).



neutralization does not take place before ‘back vowels’ (i.e. /a o u/). He does not specify, however, exactly which oppositions between palatalized and non-palatalized consonants in Japanese undergo this neutralization. His references to this neutralization/non-neutralization in Japanese can be found in Trubetzkoy (1939: 74, 92, 122-123, 208 = 1949: 86, 108, 145, 249 = 1969: 82, 101, 129-130, 231).

- (x) Trubetzkoy who consistently operates with the notion of ‘archiphoneme representative’ says in connection with neutralization of the opposition between “palatalized” phonemes and “non-palatalized” phonemes in Japanese that *both members* of such oppositions serve as the archiphoneme representatives without saying (he cannot anyway) that one of them is marked and the other is unmarked (Trubetzkoy 1939: 74 = 1949: 86 = 1969: 82). In my analysis of the present case, I simply say that the archiphoneme /k'-k/ occurs in the position of neutralization, i.e. before /i e/.

8) The neutralization of /m/ vs /m'/ vs /n/ vs /n'/ vs /ŋ/ vs /ŋ'/ in Japanese.

- (i) We find the following information. /m/ is “non-palatalized labial nasal”, /m'/ “palatalized labial nasal”, /n/ “non-palatalized apical nasal”, /n'/ “palatalized apical nasal”, /ŋ/ “non-palatalized dorsal nasal” and /ŋ'/ “palatalized dorsal nasal”.
- (ii) /m/, /m'/, /n/, /n'/, /ŋ/ and /ŋ'/ are distinguished from each other through two sets of opposition, viz the opposition “non-palatalized” vs “palatalized” and the opposition “labial” vs “apical” vs “dorsal”.
- (iii) The common base of /m/, /m'/, /n/, /n'/, /ŋ/ and /ŋ'/ is “nasal” which is exclusive to these six phonemes. /m/ vs /m'/ vs /n/ vs /n'/ vs /ŋ/ vs /ŋ'/ is therefore an exclusive opposition.
- (iv) In the position of neutralization, the two sets of oppositions, viz the oppositions “non-palatalized” vs “palatalized” and the opposition “labial”, “apical” vs “dorsal” are cancelled, leaving “nasal” alone which is valid in this position.
- (v) The product of the neutralization of the opposition /m/ vs /m'/ vs /n/ vs /n'/ vs /ŋ/ vs /ŋ'/ is the archiphoneme definable as “nasal”.

9) The neutralization of /r/ vs /r'/ in Spanish. This neutralization has already been mentioned in 4) in VII.

- (i) This phonological opposition is the type of what Trubetzkoy would consider ‘isolated opposition’ (as distinct from ‘proportional opposition’).
- (ii) We find the following information: /r/ is “multiple tap” and /r'/ is “single tap”.
- (iii) /r/ vs /r'/ are distinguished from each other through the opposition “multiple” (of /r/) vs “simple” (of /r'/), and the common base of these two phonemes is “tap” which is exclusive to them, so /r/ vs /r'/ is an exclusive opposition.
- (iv) /r/ vs /r'/ is valid in word-medially (e.g. *carro* vs *caro*).
- (v) Word-initially (e.g. *rabo*) and word-finally (e.g. *cantar*), /r/ vs /r'/ is neutralized as the opposition “multiple” vs “simple” is cancelled and only the

common base of /r/ vs /r/, viz “tap”, remains valid as the archiphoneme /r-  
r/.<sup>65</sup>

(vi) /r/ vs /r/ in Spanish is therefore declared to be a neutralizable exclusive opposition.

## IX. CONCLUDING REMARKS

In the foregoing pages, I have first of all attempted to give a short critical survey of essential concepts underlying Trubetzkoy's theory of neutralization and the archiphoneme which culminated in *Grundzüge der Phonologie*. A series of key concepts on which Trubetzkoy's theory in question is founded include 'phonological opposition', 'phoneme', 'relevant feature', 'basis for comparison', 'privative opposition', 'bilateral opposition', 'mark', 'marked/unmarked', 'correlation', 'neutralization', 'archiphoneme', 'archiphoneme representative', etc. I readily accept and operate with such concepts *except* 'privative opposition', 'bilateral opposition' (both being two types of 'phonic difference' to me), 'mark', 'marked/unmarked' and 'archiphoneme representative'. My concept of 'archiphoneme' differs from Trubetzkoy's in that his is not a phonematic unit that actually occur in the position of neutralization because the archiphoneme is said to be represented by the unmarked phoneme. Still constrained by 'Jakobsonian binarism', the terms of neutralizable oppositions must be, for Trubetzkoy, two, not more. Both 'bilateral opposition' and 'multilateral opposition' prove to be two-term phonological oppositions. Trubetzkoy gives only a partial solution to neutralization of more-than-two-term phonological oppositions because of constraint of binarism; he can only points to the common base of the terms of such phonological oppositions. The tight relation between the archiphoneme and the unmarked member of a neutralizable opposition is absolute to Trubetzkoy. To my mind, the fundamental cause that is reflected in various ways in Trubetzkoy's theory of neutralization seems to boil down to binarism.

As shown in VIII (= VIII-1 through VIII-5), in my theory of neutralization and the archiphoneme, binarism has no place. To me, phonological oppositions are simple oppositions (each with two terms) or multiple oppositions (each with three or more terms), as the case may be. Trubetzkoy's notions of 'bilateral opposition', 'multilateral opposition', 'privative opposition' and 'gradual opposition' are types of phonic differences,<sup>66</sup> not phonological oppositions (see Akamatsu 1977), and I do not operate with them. At any rate, [p] vs [b] in English (said to be a privative opposition) proves to be /p/ vs /b/, [i] vs [e] in French (said to be a gradual opposition) proves to be /i/ vs /e/, and [f] vs [k] in German (said to be an equipollent opposition) proves to be /f/ vs /k/. Functionally speaking, that is, phonologically, /p/ vs /b/, /i/ vs /e/, and /f/ vs /k/ all play the same function, that is, distinctive function (*pun* /pʌn/ vs *bun* /bʌn/; *prix* /pri/ vs *pré* /pre/; *Fabel* /fa:bəl/ vs *Kabel* /ka:bəl/). The difference between 'privative', 'gradual' and 'equipollent' is irrelevant in /p/ vs /b/, /i/ vs /e/, and /f/ vs /k/.

What is crucially important in my theory of neutralization and the archiphoneme is the notion of 'exclusive opposition'. The only difference that matters between types of

<sup>65</sup> For my analysis of /r/ vs /r/ in some detail, see Akamatsu (2019: § 16.8 = 408-409).

<sup>66</sup> I employ the term 'phonic difference' rather than 'phonic opposition', keeping the term 'opposition' to 'phonological opposition'.

phonological oppositions, in the matter of neutralization, is the difference between ‘exclusive opposition’ and ‘non-exclusive opposition’. Only an exclusive opposition can be a neutralizable opposition, though an exclusive opposition can be a non-neutralizable opposition. The common base of the two or more phonemes of a neutralizable exclusive opposition is the archiphoneme which occurs in the position of neutralization, but, in the position of relevance, the common base in question is certainly not the archiphoneme, though Trubetzkoy suggests to the contrary. I do not believe that a phonematic unit can be conceived to be included in another phonematic unit.

## REFERENCES

- Actes du deuxième colloque de linguistique fonctionnelle* (1976). Clermont-Ferrand: Centre Régional de Documentation Pédagogique (C.R.D.P.).
- AKAMATSU, Tsutomu (1972): ‘The functional level of the archiphoneme’. *Proceedings of the 7<sup>th</sup> International Congress of Phonetic Sciences*, 1067-1074. Montreal: Mouton.
- AKAMATSU, Tsutomu (1975): ‘On the ‘representability’ of the archiphoneme’. Presented at the 8<sup>th</sup> International Congress of Phonetic Sciences. Leeds. Unpublished.
- AKAMATSU, Tsutomu (1976): ‘De la notion de ‘représentant de l’archiphonème’’. *Actes du deuxième colloque de linguistique fonctionnelle* (1976), 93-101. Clermont-Ferrand: Centre Régional de Documentation Pédagogique (C.R.D.P.).
- AKAMATSU, Tsutomu (1977): ‘Opposition privative, graduelle, équipollente et opposition phonologique’. *Estudios ofrecidos a Emilio Alarcos Llorach* 1. 1-14. Oviedo: Universidad de Oviedo.
- AKAMATSU, Tsutomu (1978): ‘On the Notion of the Mark in Phonology’. *Actes du 4<sup>ème</sup> colloque international de linguistique fonctionnelle* (Oviedo), 141-145. Oviedo: Universidad de Oviedo.
- AKAMATSU, Tsutomu (1986): Review of Viel (1984). *Historiographia Linguistica* Vol 3, No. 1, 71-83. Amsterdam & Philadelphia: John Benjamins.
- AKAMATSU, Tsutomu (1988): *The Theory of Neutralization and the Archiphoneme in Functional Phonology*. Amsterdam & Philadelphia: John Benjamins.
- AKAMATSU, Tsutomu (1992a): *Essentials of Functional Phonology*. Louvain-la-Neuve: Peeters.
- AKAMATSU, Tsutomu (1992b): ‘Whither the Archiphoneme?’. *Revue roumaine de linguistique* 38, 389-394. Bucharest: Editura Academiei Române.
- AKAMATSU, Tsutomu (2000): *Japanese phonology: A functional approach*. München: Lincom Europe.
- AKAMATSU, Tsutomu (2013): ‘Opposition in Phonology’. *Contextos XXV-XXVI/49-52*, 89-107. León: Universidad de León. To be available also as ‘La noción de oposición en fonología’, transl. by Celia Veiga Pérez, in Álvaro Arias-Cachero Cabal (ed.): *Sistematicidad y variación en la fonología del español*. Lugo: Axac, forthcoming.

- AKAMATSU, Tsutomu (2015): 'Exclusive opposition and non-exclusive opposition'. *La Linguistique* 51.1, 89-107. Paris: Presses Universitaires de France.
- AKAMATSU, Tsutomu (2017): 'Validity or invalidity of oppositions between "nasal" phonemes in English'. *La Linguistique* 51.1, 89-107. Paris: Presses Universitaires de France.
- AKAMATSU, Tsutomu (2019): 'Commutation test in action: Establishing the English consonantal phonematic system'. *Moenia* 25, 345-438. Santiago de Compostela: Universidad de Santiago de Compostela. Servizo de Publicacións e Intercambio Científico.
- AKAMATSU, Tsutomu (2022): 'Neutralization of /č/ vs /ʃ/ in English, a new discovery?'. *Actes du XLII Colloque de la Société internationale de linguistique fonctionnelle* (13-15 octobre 2021, Paris), 157-162. Louvain-la-Neuve: EME Éditions.
- AVRAM, Andrej (1991): Review of Akamatsu (1988). *Studii și cercetări*. XLII.5-6, 279-281. Bucharest: Editura Academiei Române.
- AVRAM, Andrej (1993): Review of Akamatsu (1992). *Revue roumaine de linguistique* 38/4, 385-387. Bucharest: Editura Academiei Române.
- BUYSSENS, Eric (1980): *Epistémologie de la phonématique*. Bruxelles: Éditions de l'Université de Bruxelles.
- DAVIDSEN-NIELSEN, Niels (1978): *Neutralization and Archiphoneme: Two phonological concepts and their history*. Copenhagen: Akademisk Forlag / Wilhelm Fink Verlag.
- DUCROT, Oswald & Jean-Marie SCHAEFFER (1995): *Nouveau dictionnaire encyclopédique des sciences du langage*. Paris: Éditions du Seuil.
- JAKOBSON, Roman (1929): *Remarque sur l'évolution phonologique du russe comparée avec celle des autres langues slaves*. *Travaux du Cercle linguistique de Prague* 2. Prague: Jednota československých matematiků a fyziků.
- JAKOBSON, Roman (1932): 'Fonéma'. *Ottův slovník naučný*, Dodatky [Supplement] II, I, 608.
- JAKOBSON, Roman (1985): *N. S. Trubetzkoy's Letters and Notes*. Prepared for publication by Roman Jakobson, with the assistance of Henryk Baran, Omry Ronen and Martha Taylor. Berlin, New York, Amsterdam: Mouton.
- JAKOBSON, Roman (2006): *Correspondence avec Roman Jakobson et autres écrits*. Édition établie par Patrick Sériot. Traduit du russe par Patrick Sériot et Margarita Schönenberger. Lausanne: Éditions Payot.
- MAIDEN, Martin (1990): Review of Akamatsu (1988). *Journal of Linguistics* 26, 565-569. Cambridge: Cambridge University Press.
- MARTINET, André (1936): 'Neutralisation et archiphonème'. *Travaux du Cercle linguistique de Prague* 6, 46-57. Prague: Jednota československých matematiků a fyziků.

- MARTINET, André (1939/1945): 'Description phonologique du parler franco-provençal d'Hauteville (Savoie)'. *Revue de linguistique romane* 15, 1-36. Paris: Champion. See also Martinet (1956).
- MARTINET, André (1949): *Phonology as Functional Phonetics*. Oxford: Oxford University Press. [Remark: a reprint, Martinet (1955) was published by Oxford: Blackwell.]
- MARTINET, André (1956): *La description phonologique avec application au parler franco-provençal d'Hauteville (Savoie)*. Genève: Droz & Paris: Minard.
- MARTINET, André (1960 [1970<sup>2</sup>, 1980<sup>3</sup>, 1996<sup>4</sup>, 2008<sup>5</sup>]): *Éléments de linguistique générale*. Paris: Armand Colin.
- MARTINET, André (1963): *Grundzüge der Allgemeinen Sprachwissenschaft*, transl. Anna Fuchs of Martinet (1960). Stuttgart: Kohlhammer Verlag.
- MARTINET, André (1964<sup>2</sup> [1955<sup>1</sup>]): *Économie des changements phonétiques: Traité de phonologie diachronique*. Berne: A Francke. See also Martinet (2005<sup>3</sup>).
- MARTINET, André (1965): *La linguistique synchronique: Études et recherches*. Paris: Presses Universitaires de France.
- MARTINET, André (1976): A remark in Akamatsu (1976).
- MARTINET, André (2005<sup>3</sup>): *Économie des changements phonétiques: Traité de phonologie diachronique*. Paris: Maisonneuve & Larose.
- MARTINET, André & Henriette WALTER (1973): *Dictionnaire de la prononciation française dans son usage réel*. Paris: France-Expansion.
- MATHESIUS, Vilém (1929) 'La structure phonologique du lexique du tchèque moderne'. *Travaux du Cercle linguistique de Prague* 1, 67-84. Prague: Jednota československých matematiků a fyziků.
- MOUNIN, Georges (1976): A remark in Akamatsu (1976).
- Ottův slovník naučný* [ [Jan] *Otto's encyclopedia*], Dodatky [Supplement] II, I, 608.
- 'Projet de terminologie phonologique standardisée' (1931). *Travaux du Cercle linguistique de Prague* 4, 309-323. Prague: Jednota československých matematiků a fyziků.
- SAUSSURE, Ferdinand de (1916<sup>1</sup>, 1922<sup>2</sup>, 1931<sup>3</sup> ...): *Cours de linguistique générale*. (1st ed) Lausanne: Payot, (2nd ed) Paris: Payot, (3rd ed) Paris: Payot.
- TCHEU, Soc-Kiou (1967): 'La neutralisation et le consonantisme coréen'. *La Linguistique* 3.2, 85-97. Paris: Presses Universitaires de France.
- TCHEU, Soc-Kiou (1969): 'Marque'. *La linguistique, guide alphabétique* (dir André Martinet), 240-244. Paris: Denoël.



- TRUBETZKOY, Nikolai Sergejevič (1929): 'Polabische Studien'. *Sitzungsberichter der Akademie der Wissenschaften in Wien*. Philosophisch-historische Klasse, Band 211, Abhandlung 4. Wien/Leipzig: Hölder-Pichler-Tempsky A.-G.
- TRUBETZKOY, Nikolai Sergejevič (1931): 'Die phonologischen Systeme'. *Travaux du Cercle linguistique de Prague* 4, 96-116. Prague: Jednota československých matematiků a fyziků.
- TRUBETZKOY, Nikolai Sergejevič (1932): 'Charakter und Methode der systematischen phonologischen Darstellung einer gegebenen Sprach'. *Proceedings of the [1<sup>st</sup>] International Congress of Phonetic Sciences*, first meeting of the Internationale Arbeitsgemeinschaft für Phonologie, 18-22.
- TRUBETZKOY, Nikolai Sergejevič (1933): 'La phonologie actuelle'. *Journal de psychologie normale et pathologique* 30, 227-246. Paris: Presses Universitaires de France.
- TRUBETZKOY, Nikolai Sergejevič (1935): *Anleitung zu phonologischen Beschreibungen*. Brno: Édition du Cercle Linguistique de Prague.
- TRUBETZKOY, Nikolai Sergejevič (1936a): 'Essai d'une théorie des oppositions phonologiques'. *Journal de psychologie normale et pathologique* 33, 5-18. Paris: Presses Universitaires de France.
- TRUBETZKOY, Nikolai Sergejevič (1936b): 'Die Aufhebung der phonologischen Gegensätze'. *Travaux du Cercle linguistique de Prague* 6, 29-45, Jednota československých matematiků a fyziků.
- TRUBETZKOY, Nikolai Sergejevič (1939): *Grundzüge der Phonologie*, *Travaux du Cercle linguistique de Prague* 7. Prague: Jednota československých matematiků a fyziků.
- TRUBETZKOY, Nikolai Sergejevič (1949): *Principes de phonologie*, transl. Jean CANTINEAU of Trubetzkoy (1939). Paris: Klincksieck.
- TRUBETZKOY, Nikolai Sergejevič (1969): *Principles of Phonology*, transl. Christiane Anne Marie BALTAXE of Trubetzkoy (1939). Berkeley & Los Angeles: University of California Press.
- VACHEK, Josef (1936): 'Phonemes and Phonological Units'. *Travaux du Cercle linguistique de Prague* 6, 235-239, Jednota československých matematiků a fyziků.
- VACHEK, Josef (1959): 'The London group of linguists'. *Sborník Prací Filosofické Fakulty Brněnské University* 7. Brno: Universita J. E. Purkyne n.d.
- VACHEK, Josef (1966a): *Dictionnaire de linguistique de l'École de Prague* (avec collaboration de Josef DUBSKÝ). Utrecht/Anvers: Édition Spectrum.
- VACHEK, Josef (1966b): *The Linguistic School of Prague: An introduction to its theory and practice*. Bloomington & London: Indiana University Press.
- VIEL, Michel (1984): *La notion de "marque" chez Trubetzkoy et Jakobson: Un épisode de l'histoire de la pensée structurale*. Lille: Atelier National de Reproduction des Thèses, Université de Lille III; Paris: Diffusion Didier – Érudition.

VION, Robert (1978): A remark in Akamatsu (1978).

WALTER, Henriette (1977): *La phonologie du français*. Paris: Presses Universitaires de France.