

Orthography reform and language planning for Dutch*

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0. Introduction

Many native speakers of Dutch with a more than superficial interest for and insight into their language will be surprised to see that this language is the subject of an article about orthography reform *and language planning*. For most of them such a title would seem to be either tautological (if orthography is to be considered as a part of language) or incorrect (if it is not).

We will not go into the implications of the first presupposition. In this article we will keep apart spelling and language and consider the former as the 'garment of language' – to quote an expression that is often used to convince opponents of orthography reforms: changing the spelling is not changing the language.

But then we have to defend ourselves against those who hold that the title is incorrect, or ill conceived. While they will be aware of orthography reforms for Dutch in the past, they will probably claim that the language itself has never been 'planned'. Dutch is not a language like modern Hebrew which has been adapted from an ancient literary language, or even like French which recognizes the authority of the *Académie française*. Maybe they will even claim that language planning as such is contrary to the Dutch and Flemish mind.

Such an attitude became apparent in the Dutch parliament in 1981 when a treaty between Belgium and the Netherlands was under consideration concerning the establishment of the so-called *Nederlandse Taalunie* [Dutch Language Union], that is, a supranational body for the coordination of policy decisions concerning Dutch language and literature. One of the tasks of the *Taalunie*, according to the treaty, was to establish 'an official spelling *and grammar* of the Dutch language' (article 4, emphasis added). In the discussion objections were raised against the idea that the *Taalunie* should issue grammatical prescriptions. The minister responsible answered that this was not intended.

Nevertheless, there has been 'language planning' for Dutch. And by that we do not mean the regulation of language choice in Belgium, but rather

grammatical prescriptions against which objections were raised in parliament. For example, each of the three official spelling regulations that have been enacted so far encompassed an official list of words specifying not only the spelling, but also the gender of the nouns. Gender, of course, is a matter of grammar. The reason why most people fail to realize, nevertheless, that by such specifications their language was planned will become clear below.

In the first part of this article we will deal with the spelling regulations between 1804 and 1954 and the reactions they brought about. The second part presents a survey of the present spelling debate with special attention to recent research and current initiatives by the *Taalunie*. For a better understanding of the points at issue, it will be practical to first outline the four main principles of the present Dutch spelling.

1. *Pronunciation*. The most important rule of Dutch orthography is this: *every word is spelled as it is pronounced*. The rules based on other principles are exceptions to this rule. Of course it is easier to formulate such a rule than to work it out and to apply it. Given the Latin alphabet and its restrictions, especially with regard to vowels and diphthongs, various sorts of spelling conventions are necessary to represent the sounds of speech. Very important in this regard are the single and double vowels and consonants in Dutch orthography.

In Dutch there are – informally speaking – long and short vowels and only short (not geminated) consonants. Open syllables have long vowels only; they are spelled with single letters *zaken* [za.kən] ‘affairs’, *boten* [bo.tən] ‘boats’. In closed syllables vowels can be long or short. Long vowels in closed syllables are spelled with double letters, *zaak* [za:k] ‘affair’, *boot* [bo:t] ‘boat’; short vowels are spelled with single letters, *zak* [zək] ‘bag’, *bot* [bət] ‘bone’. As there are no geminated consonants, double consonant spelling is used to indicate that the preceding vowel is short, *zakken* ‘bags’, *botten* ‘bones’.

2. *Etymology*. In some cases Dutch orthography is based on etymology, in the sense that the same speech sound is spelled in different ways, depending on the pronunciation (and spelling) in an earlier stage of the language, that may be retained in certain Dutch dialects, but not in the standard language.

In present-day orthography there are two important classes of words with etymological spelling. (1) Words with the speech sound [ɔu] may be spelled either *au/auw*, in *klauteren* ‘clamber’, *rauw* ‘raw’, or *ou/ouw*, in *louter* ‘mere, pure’, *rouw* ‘mourning’. (2) Words with the speech sound [ɛi] may be spelled either *ei*, in *leiden* ‘lead’, *peil* ‘mark, level’, or *ij*, in *lijden* ‘suffer’ and *pijl* ‘arrow’. Previous spelling systems included a variety of other etymological spellings.

3. *Congruency*. This principle prescribes similar spellings for words with

different pronunciations (compare English *divine-divinity*). In Dutch *hand* [hant] 'hand' and *goed* [Yut] 'good' are spelled with *d*, despite the final [t] (Dutch, like German, has *Auslautsverhärtung*). The same word, stem, or affix has to be spelled as consistently as possible. *Hand* is therefore spelled like the plural *handen*, *goed* like the inflected form *goede*, where *d* is pronounced as [d].

It should be noted, however, that this principle is not applied consistently. Devoiced [z] and [v] in final position are spelled as they are pronounced, *s* and *f*. Therefore we write *huis* 'house', although the plural is *huizen*, and *golf* 'wave', although the plural is *golven*.

4. *Analogy*. Following this principle, words that are assumed to be formed analogously are spelled analogously. *Dorpsstraat* 'village street', for example, is spelled with double *s* (although only one *s* is pronounced). The analogy is with *dorpskerk* 'village church', where the *s* is heard as a medial sound between *dorp* 'village' and *kerk* 'church'. The verb form [vInt] is spelled with a final *d* in *ik vind* 'I find' (the infinitive is *vinden*: principle (3)), but with *dt* in *hij vindt* 'he finds', in analogy with *ik win* 'I win' and *hij wint* 'he wins', where the [t] is heard as the ending of the third person singular.

Principles (3) and (4) are sometimes jointly referred to as the 'morphological principle'.

1. Spelling regulations between 1804 and 1954

1.1. *Siegenbeek*

The first official regulation of Dutch orthography came into being at the beginning of the 19th century. Before that, Dutch spelling had developed gradually, influenced by writing traditions in medieval monasteries, linguistic views of Renaissance grammarians, and personal habits of various authors, but had never reached uniformity. In the Napoleonic era the time seemed to be ripe for governmental measures. For the first time in their history the Netherlands were a unitary state: the Batavian Republic. Although the dialects were then much more pronounced than nowadays, there was a fairly uniform written standard language; moreover, the spirit of the age was favorable for an orthographic *Code Napoléon*.

By order of J. H. van der Palm, Minister for National Education, the spelling regulation was compiled by Matthys Siegenbeek, professor at the University of Leiden. His *Verhandeling over de Nederduitsche spelling, ter bevordering van eenparigheid in dezelve* [Treatise on Dutch spelling, for the promotion of the uniformity thereof] appeared in 1804; his *Woordenboek voor de Nederduitsche spelling* [Dictionary of Dutch spelling] followed the year after.

Of course, Siegenbeek did not devise a completely new orthography. He adopted existing spelling traditions and, where there were controversies, he chose what he thought best. He also took into account the insights of 18th-century linguists, of whom Lambert ten Cate was the most important.

The four orthographic principles mentioned in the introduction above are already implicit in Siegenbeek's spelling system. His three basic rules were pronunciation, etymology, and usage. He does not name the principles of congruency and analogy as such, but he applies them in practice, according to prevailing usage.

What from a contemporary point of view we would call the 'etymological principle' was applied on a larger scale than in the present orthography. Besides the *au/ou* and *ei/ij* spellings, there were *e/ee*, *o/oo* and *s/sch* alternations. The long [e] and [o] sounds in open syllables were written double when they were considered to be 'hard' (as in *beenen* 'legs', *leeren* 'to learn, to teach', and *boomen* 'trees', *loopen* 'to walk'), and with single letters when they were 'soft' (as in *beken* 'brooks', *leven* 'to live', and *bogen* 'bows', *loven* 'to praise'). The concepts of 'hard' and 'soft' referred to pronunciation differences in certain (but not all) dialects which were reflected in different spellings used by the most highly respected writers. Unfortunately, pronunciation was not consistent in the dialects, nor was spelling consistent between writers.

The word final *s/sch* alternation (for example *bos* 'bunch' vs. *bosch* 'forest') had nothing to do with any difference in pronunciation in Siegenbeek's time; it was just a matter of traditional spelling. There were some unclear cases in this regard too.

For Siegenbeek these different spellings were not a matter of etymology proper. In his discussion of *e* vs. *ee* and *o* vs. *oo* he mentions dialectal pronunciation and the writing tradition first, and only then does he refer to earlier Germanic languages. In the theoretical part of his *Verhandeling* he argues, moreover, that the principle of etymology is much less important than those of pronunciation and usage.

Siegenbeek's orthography was approved by the government and recommended for educational and governmental use. This did not mean, however, that everybody accepted the regulation, neither in the Netherlands, where writers such as W. Bilderdijk and J. A. Alberdingk Thijm used alternative systems, nor in Belgium which was part of the Kingdom of the Netherlands from 1815 until 1830 and then became an independent state. Because of the political situation in the 17th and 18th centuries there was no common standard language in the two parts of the Dutch-speaking area. Many Flemings considered Siegenbeek's spelling as 'foreign' and not in agreement with their local language (Geerts et al. 1977: 185).

These two characteristics, that is, individual departures from official

spelling regulations on the one hand, and the north-south opposition on the other, are pervasive in the history of Dutch orthography and language planning.

1.2. *De Vries and Te Winkel*

There are three main reasons why a new spelling regulation was called for some 60 years after Siegenbeek.

First, Siegenbeek had not regulated everything. The writing of compounds as one word or separately; word division; the medial letters in compounds; and a few other minor points had not been dealt with.

Second, diachronic linguistics made enormous progress in the 19th century which had consequences for the etymological component of orthography.

Third, in 1851 Belgian and Dutch philologists and literary men had decided to begin the compilation of an extensive *Woordenboek der Nederlandsche Taal* [Dictionary of the Dutch language]. Therefore, it was considered necessary to create a uniform spelling that 'was based on clearly formulated and elucidated principles, and was (hopefully) to be acceptable for the whole Dutch language area' (Geerts et al. 1977: 186).

The greater part of the work for the new spelling was done by L. A. te Winkel. In 1859 he published a first proposal. His book *De grondbeginselen der Nederlandsche spelling* [The principles of Dutch spelling] appeared in 1865. It had a preface by M. de Vries, the chief editor of the *Woordenboek*. De Vries and Te Winkel together compiled the *Woordenlijst voor de spelling der Nederlandsche taal* [Word list for the spelling of the Dutch language] which was published in 1866. The new orthography thus became known under the name of 'De Vries and Te Winkel'.

The new regulations were much more detailed than the preceding ones; a great many rules had been formulated and the etymological component had been brought into line with the 'state of the art' in contemporary linguistics. However, there were hardly any fundamental differences between Siegenbeek and De Vries and Te Winkel.

In Belgium the new orthography met with approval: it was prescribed by the government as early as 1864, when the entire project was not even completed. In the Netherlands, on the other hand, it was never officially prescribed and was accepted only gradually by society at large.

At the same time a strong opposition developed against the De Vries and Te Winkel orthography, especially in the Netherlands. Toward the end of the century the most important opponents were no longer writers and other individuals who did not want to change their spelling habits, as in Siegenbeek's time, but teachers who experienced the difficulties of the De Vries and Te Winkel spelling as a didactic problem. Of course their predecessors must

have had the same experience with the Siegenbeek system, but the spirit of the age was becoming more democratic and compulsory education was on its way. The spelling of the mother tongue should be manageable not only for 'men of letters', but also for 'the man in the street'. That is why many teachers called for a simplification of the spelling and thus became known as 'simplifiers'. The first of them was R. A. Kollwijn, who in 1891 published an article entitled 'Our difficult spelling. A suggestion for simplification'.

Within the restricted scope of this article it is impossible to describe (in any detail) the struggle of the simplifiers, their successes and failures, the arguments of the supporters and opponents of spelling simplifications, etc. Therefore we refer to Geerts et al. (1977) and the literature mentioned there.

In this article we restrict our discussion to two important issues of the spelling debate. The first is the etymological spelling of *ee* vs. *e* and *oo* vs. *o* in open syllables and word final *s* vs. *sch* (see 1.1). The simplifiers wanted only *e* and *o* to be spelled in open syllables, according to the normal Dutch conventions for single and double vowel writing (see 0), and only *s*, according to the pronunciation. They did not take issue with the other cases of etymological spelling, that is, *au* vs. *ou* and *ei* vs. *ij*.

The other issue is the inflectional *-n*. We have not yet touched upon this subject, because in the spelling regulations mentioned so far it was not discussed in its own right, as it was simply taken for granted, because it was primarily a matter of grammar, rather than orthography.

Simplifying matters a little, the problem can be defined as follows. According to the official grammar of the 19th century, adnominal adjectives, the definite article *de*, the demonstrative pronouns *deze* and *die*, and independent anaphoric pronouns had a final *-n* in the dative and accusative cases when they referred to, or occurred in conjunction with, masculine nouns.

To illustrate: As *stoel* 'chair' is masculine, one had to write *De stoel is verkocht* 'The chair is sold' (nominative), but *Ik heb den stoel verkocht* 'I sold the chair' (accusative). To apply this rule one has to know that *stoel* is masculine and that in the second sentence it is used in the accusative case (or, at least, in another way than in the first sentence). The masculine gender of *stoel* belongs to the competence of only a part of the native speakers of Dutch; roughly speaking, those living in the southern half of the language area. For all the other speakers the gender distinction is valid only for human beings and animals. As regards nominative and accusative cases, this distinction does not exist in the spoken language. All speakers say *de, deze, die* and never *den, dezen, dien*.

There is little doubt, that in the 19th century the inflectional *-n* had already existed only on paper for a long time. But the grammatical tradition was so strong that neither Siegenbeek nor De Vries and Te Winkel would ever have

thought of applying the principle of pronunciation with regard to this grammatical rule. In order to make the correct application of the rule possible, words were categorized into three genders in the word lists: masculine, feminine (both *de* words) and neuter (*het* words). This was necessary not only for the people in the northern half of the language area, for whom all *de* words were grammatically the same, but also for the southerners, because in their dialects there was no consistency in gender assignment. It is obvious then that these orthography reformers – like their successors, as we will see in 1.3 – were engaged in language planning. For the public, however, the rules looked like ordinary spelling regulation, because the inflectional *-n* belonged to written language only.

1.3 Spelling regulation in the 20th century

Although in the first decades of the 20th century many individuals began to use a simplified spelling, the simplifiers had to wait for the real breakthrough until 1934. In that year the Minister of Education in the Netherlands, H. P. Marchant, prescribed a partly simplified spelling for Dutch schools that became known as the 'Marchant spelling'.

As for the *e/ee*, *o/oo*, and *s/sch* spelling, the simplifiers were completely successful. In open syllables only single *e*'s and *o*'s were to be spelled, and *sch* was only to be spelled when it was pronounced [sX] (never in word final position).

As far as the inflectional *-n* was concerned, the success was not complete. It was kept for dative and accusative masculine nouns; however, only words denoting male human beings and animals were considered to be masculine. It became unnecessary to learn the rules for, and lists of, masculine and feminine nouns, but writing of *de*, *deze*, *die* in some cases and *den*, *dezen*, *dien* in others continued.

The spelling simplification of 1934 was incomplete in another sense too. It was prescribed for schools in the Netherlands, but not in Belgium; nor was it prescribed for public use in the Netherlands.

The present spelling regulations came into existence step by step. The 'Marchant spelling' of 1934 was the first stage. An official regulation for the whole language area was proclaimed in the Belgian *Spellingbesluit* [Spelling decree] of 1946 and the Dutch *Spellingwet* [Spelling act] of 1947. The official orthography of Dutch was to be that of De Vries and Te Winkel, with a number of exceptions.

As far as the two issues mentioned in 1.2 were concerned, the spelling of single *e* and *o* in open syllables and word-final *s* was maintained as it was in the Marchant spelling. The inflectional *-n* was made optional; this means that

it is still permissible to write *den, dezen, dien*, etc., in dative and accusative with all (traditionally) masculine nouns. In fact, the inflectional *-n* died a natural death soon after 1946/1947.

The *Spellingbesluit* and *Spellingwet* made provision for certain orthographical (and grammatical) matters to be regulated at a later date. For the most important issues this came about in 1954, when the *Woordenlijst van de Nederlandse taal* [Word list of the Dutch language] was published.

The *Woordenlijst* was rather different from its predecessor of 1866, compiled by De Vries and Te Winkel, which had been out of print for a long time. In addition to the medial letters in compounds and some other minor points, it contained two innovations concerning gender and the spelling of loan words. In both matters the authors – a Dutch-Belgian committee – introduced ‘the principle of choice’, which was carried through to a rather large extent. The reason for this was that the regulations were the result of a compromise between the Belgian and the Dutch members of the committee.

As a feminine gender was still used in the Belgian part of the Dutch language area, the Belgian members had no desire to change the existing regulations of the gender system. In the Netherlands, however, feminine non-animate nouns only existed in the southern dialects. The usage of the greater part of the population had been discriminated against by prescriptive grammar for a long time, as the written language historically came from the south. For the northerners a change of the highly artificial existing regulations therefore seemed desirable.

In the new regulations most of the traditionally feminine nonanimate nouns were allowed to be treated both as feminines and as masculines. This was important for the use of pronouns; from then on these nouns could be referred to by both ‘he’ and ‘she’ pronouns. The optional use of the inflectional *-n* was restricted to the ‘original’ masculines. Thus this realistic piece of language planning resulted in the official recognition of the northern usage, while the southern usage did not need to be changed.

De Vries and Te Winkel spelled loan words as they were spelled in their respective source languages whenever possible. They called their system the ‘old’ conception; as opposed to the ‘new’ conception, which they rejected. According to the latter, loan words should be spelled like Dutch words. De Vries and Te Winkel based their preference on ‘the principle of etymology’, but also on ‘the principle of pronunciation’. By the latter they meant that, for example, a French spelling of a word indicated that the word should be pronounced in a French way.

The simplifiers after De Vries and Te Winkel advocated the *vernederlandising* (‘Dutchification’) of loan words. In the Marchant spelling of 1934, however, nothing of the sort was prescribed, and the spelling tradition remained more or less unchanged in the Netherlands until 1954.

In Belgium the development was different. The movement in the direction of *vernederlandsing* was stronger there. For the Flemings it was not only a matter of simplification, but also a way of taking a stand against the influence of French. As they fought against gallicisms in their vocabulary and grammar, they also fought against an orthography modeled on the French. Thus spellings like *kultuur* 'culture' instead of *cultuur* and *Kristus* 'Christ' instead of *Christus* were common in Dutch-speaking Belgium long before 1954.

De *Woordenlijst* Committee took a step – but not a stride – in the direction of *vernederlandsing*. Only *ph* and *rh* were consistently replaced by *f* and *r*, for example in *filosofie* 'philosophy' and *reumatiek* 'rheumatism'. In other cases alternative spellings were sometimes permissible, for instance, both *cultuur* and *kultuur*, but one of them was given preferential status by the committee, in this case *cultuur*, that is, the traditional spelling. The traditional spelling was preferred most of the time, but not always. The Dutchified form was preferred in some cases, as in *vakantie* 'vacation'. All in all there were six possibilities, that is, the preferred spelling, the nonpreferred spelling, and the only spelling for both traditional and Dutchified forms, as shown in Table 1.

Table 1. *Spelling possibilities in the Woordenlijst 1954*

	Traditional	Dutchified
Preferred	<i>cultuur</i>	<i>vakantie</i>
Nonpreferred	<i>vacantie</i>	<i>kultuur</i>
Only spelling	<i>cachot</i>	<i>komplot</i>

In other categories, for example, words with *c* pronounced as [s] (such as *centrum* 'center') and with *eau* pronounced as [o] (such as *bureau*), the traditional spelling was maintained, sometimes with a small number of exceptions (such as *sigaret* 'cigarette').

It is understandable that these regulations did not meet with general enthusiasm. As far as it found expression in the press, we can say that public opinion in the Netherlands mostly took a negative stand against the reforms, whereas in Belgium the situation was the reverse. As for the teachers in both countries, many of them welcomed this step in the direction of simplification, but when – as early as in 1955 – the preferred spelling was prescribed for governmental and educational use, especially the Belgian teachers were disappointed, as the preferred spelling in most cases was the traditional one (Geerts et al 1977: 206–214).

The prescription of the preferred spelling was of course in conflict with the 'principle of choice' of the *Woordenlijst* Committee. In matters concerning language most people like firm and fixed rules, not liberty and uncertainty. In this case, however, the prescription of the preferred spelling did not create unequivocal rules.

Because of the negative reactions to the *Woordenlijst*, a new committee was set up in 1963. Its task was to advise the government on an unequivocal and uniform spelling of loan words, which should be Dutchified as much as possible. The committee published a report in 1967 and a final proposal two years later (*Eindvoorstellen* 1969). This proposal caused much more heated debate than the *Woordenlijst* had done. It was never implemented.

An interesting point in the *Eindvoorstellen* is that the committee suggested simplifications for the spelling of certain verbal forms. In so doing they interfered with the spelling principles of congruency and analogy (see 0), which had never been done before.

2. Research and the present-day spelling discussion

2.1. *The discussion in the 1950s and 1960s: empirical investigation and structuralism*

As is demonstrated in the first part of this paper, the discussion in the period between the De Vries and Te Winkel spelling (1865) and the spelling reform of 1946/1947 mainly dealt with 'simplifications'. The most important aim was to reduce the etymological principle (no *ee* or *oo* in open syllables, no final *sch*). The second target of the simplifiers was the inflectional *-n*. The principles of congruency and analogy had never been attacked. The explanation for this situation is simple: knowledge of present-day Dutch is sufficient to master the rules of congruency and analogy, whereas diachronic knowledge is necessary to grasp the etymological aspects and the use of the inflectional *-n*.

Serious discussion about congruency and analogy began in the 1950s and 1960s. The first milestone in the discussion is Isaïc van der Velde's famous book *De tragedie der werkwoordsvormen* [The tragedy of verb forms] (1956). He carried out a large-scale empirical investigation into the mastery of the spelling of verb forms among pupils of different age groups. His gloomy conclusion was that knowledge of verb-form spelling was extremely poor. The rules of congruency and analogy play a decisive role in the spelling of verbal endings (see 0 above). As a result, Van der Velde advocated a new didactic approach which was less rule-oriented and more paradigmatic. This new approach was generally accepted, but in the course of time it became obvious that the results were disappointing. Van der Velde then rejected the possibility of a didactic solution to the problem and, in his 1968 book *Spellingsvereenvoudiging* [Spelling simplification], became an advocate of the simplification of verb-form spelling that is, a reduction or abolition of the rule of analogy.

Van der Velde's book was a turning point in the Dutch spelling discussion

in two respects. First, it was the first time that empirical research had been done about spelling behavior. Before Van der Velde science played a role in the discussion about optimal spelling systems, but only in so far as certain insights of theoretical linguistics were taken into account. The 'state of the art' in linguistics decided the question of optimality. Thus consistency and elegance of the system were the ultimate measure. Te Winkel even expounded the esthetic requirements that spelling systems had to fulfil. The usefulness of a spelling system for the average user was of secondary interest at best. Kollwijn paid attention to this point, but he mentioned only those questions that could be expected to be problematic from a linguistic point of view. It is for this reason that he was against the diachronic elements in our spelling system. Van der Velde was the first to leave his armchair to make observations about real spelling behavior in the classroom.

Second, after his new didactic approach had failed,¹ Van der Velde initiated the debate about the nondiachronic spelling rules. The discussion about a more comprehensive spelling reform was stimulated not only by empirical research, but by theoretical linguistics too. During the 1950s and 1960s Dutch linguists were strongly committed to European structuralism (De Saussure, the Prague school, etc.). An important feature of European structuralism is the autonomy of the levels of linguistic description: phonology, morphology, and syntax are regarded as three different systems. Because the letters of our alphabet are connected with phonemes and not with morphemes, the orthographic system has to correspond to phonology rather than morphology. Morpho-orthographic rules would be a corruption of the consistency and beauty of the system. Given the De Saussurian separation of synchrony and diachrony, the remaining etymological aspects (*ei/ij*, *au/ou*), were of course no longer acceptable. The influence of structuralism led to the foundation of the *Vereniging voor Wetenschappelijke Spelling* [Society for a scientific orthography] (VWS) in 1963 by the linguist P. C. Paardekooper.

This society promotes consistent phonologization of the spelling system: each phoneme is to correspond to a grapheme or to a fixed combination of two or more graphemes. Such combinations are necessary because the number of Dutch phonemes is greater than that of the letters of the Latin alphabet. On the other hand, some Latin letters are considered as superfluous: *q* and *x* could be discarded, *c* would remain only as part of the digraph *ch*, /X/, which is distinguished from its voiced counterpart /x/, *g*.²

The ideas promoted by the VWS and Van der Velde gained wide support, especially by teachers. However, their first and only official achievement was the *Eindvoorstellen* (1969) that would abolish the rule of analogy and thus simplify the spelling of verb endings. As mentioned above (1.3), these proposals gave rise to great controversy, especially in literary circles, and were eventually rejected.

2.2. The discussion after 1970: generative grammar and psycholinguistics

As pointed out above, the years 1956 (Van der Velde) and 1963 (VWS) were milestones of empirical and structuralist influence in the history of Dutch spelling. 1972 was a milestone of generative and psycholinguistic influence. This year witnessed the publication of a brochure entitled *Spellen is spellen is spellen* [To spell is to spell is to spell] by Cohen and Kraak, a phonetician and a generative grammarian, respectively. They argue against hasty change and call for further research. Their position is based on Chomsky and Halle (1968) which can be regarded as a defense of English orthography, which, Chomsky and Halle argue, is much less irregular than has commonly been assumed. Furthermore, Kraak and Cohen emphasized the revival of reading research and the importance of the spelling for the reader. Since Van der Velde, the spelling discussions had always focused on the writer.

Chomsky and Halle (1968) took the position that English orthography reflects an underlying level of phonological description. The fact that English orthography makes no difference between the stems of, for example, *divine* and *divinity*, *profane* and *profanity*, irrespective of the differences in pronunciation, is regarded as an advantage, because in this way 'deeper' linguistic relations are made visible.

'Morphological' spelling rules of Dutch orthography, that is, congruency and analogy, also got renewed support from this novel linguistic approach. It seemed to be right to spell the stems of *goed* /ɣu t/ 'good' and *goedig* /ɣu dæx/ 'good-natured' in the same way, because they share the same underlying form. From a generative point of view it would even be possible to defend certain etymological elements in Dutch orthography. In Dutch, the phoneme /ɔu/ has two spellings: *au* and *ou*. Among the forms written with *ou* are those which at an earlier historical state contained an /l/, which is still preserved in many English equivalents such as *cold*, *old*, *salt*, *malt*. In several other forms *au* is used; for example, *paus* 'pope', *saus* 'sauce'. In some present-day Dutch words the 'old' /l/ still exists, for example in *gulden* 'guilder', derived from an older form of *goud*, and in *zilt* 'salty', derived from an older form of *zout*. By the same token, it could be postulated that *gold* is an underlying form of *goud*.

A rule such as (1) would thus transform /ɔl/ into /ɔu/.

$$(1) \quad /ɔl/ \rightarrow /ɔu/ \quad / \text{---} \left\{ \begin{array}{c} d \\ t \end{array} \right\}$$

Though *goud* would not be the spelling corresponding to the underlying form *gold*, the difference between *ou* and *au* could be defended.

Generative grammar stimulated psycholinguistic research into the psycho-

logical reality of the postulated lexical forms and grammatical rules. Generally speaking, this research has not confirmed in a simple way the mental reality of lexical forms and grammatical rules. The relation between grammatical description and psychological reality is a more complex one than most investigators hoped in the early 1970s.

Two important investigations on reading behavior were carried out in the Netherlands within the framework of psycholinguistic research. The first, Van Heuven (1978), deals with the importance of the rule of analogy for the reader (see Van Heuven 1980 for a discussion of some of the results in English). The second, Van Heuven and Birkenhäger (1983), deals with the importance of congruency.

Within the system of inflectional verb endings in Dutch one can distinguish three different types with regard to the relation between pronunciation and spelling:

1. There is a distinction in writing which corresponds to a distinction in speech between forms with different grammatical functions (such as present tense and past tense).
2. There is a distinction in writing with no counterpart in speech.
3. There is no distinction in writing or speech.

The fourth logical possibility, a distinction in speech but not in writing, does not occur.

Dutch verbs are marked for person, tense, and aspect as illustrated in Tables 2, 3, and 4.

Type 2 spellings are generated by the rule of analogy. Without it there would be no distinction and they would belong to type 3. Van Heuven's

Table 2. *Three opposition types of grammatical person*

First person:			Third person:		
Spelling	Pronunciation	Meaning	Spelling	Pronunciation	Meaning
I (ik) win	/wɪn/	(I) win	(hij) wint	/wɪnt/	(he) wins
II (ik) vind	/vɪnt/	(I) find	(hij) vindt	/vɪnt/	(he) finds
III (ik) wit	/wɪt/	(I) whitewash	(hij) wit	/wɪt/	(he) whitewashes

Table 3. *Three opposition types (plural forms) of tense*

Present:			Past:		
Spelling	Pronunciation	Meaning	Spelling	Pronunciation	Meaning
I wennen	/wɛnə/	accustom	wenden	/wɛndə/	accustomed
II wenden	/wɛndə/	turn	wendden	/wɛndə/	turned
III wedden	/wɛdə/	bet	wedden	/wɛdə/	bet

Table 4. *Three opposition types of aspect*

Finite form:			Past participle:		
Spelling	Pronunciation	Meaning	Spelling	Pronunciation	Meaning
I (ik) dien	/di.n/	(I) serve	gediend	/ɣɔdi.nt/	served
II (hij) verdient	(vɛr)di.nt/	(he) earns	verdiend	/vɛrdi.nt/	earned
III (ik) vermoord	/vɛrmo.rt/	(I) murder	vermoord	/vɛrmo.rt/	murdered

prediction is that type 1 forms are the easiest and type 3 forms the most difficult for the reader. The more type 2 forms behave as type 1 forms, the more useful is the rule of analogy for the reader of Dutch.

A detailed description of the stimulus manipulation in the experiments of Van Heuven (1978) and the tasks the subjects performed would go far beyond the aims of this study. The subjects had to fulfill several reading tasks. Reaction times and accuracy were recorded. There was a significant but not a strong effect in the expected direction, giving some support to the assumed usefulness of the rule of analogy. This was not a strong support, however, because the subjects had to read sentences or to make judgements about sentences without context. Usually the context provides additional information about grammatical person, tense, and aspect.

The second important investigation of reading behavior deals with the rule of congruency. With respect to congruency, too, three different opposition types can be distinguished.

1. There is a distinction in writing which corresponds to a distinction in speech between the stems of forms with different grammatical functions (such as singular and plural).
2. There is a distinction in speech with no counterpart in writing.
3. There is no distinction in writing or speech.

The fourth logical possibility, a distinction in writing but not in speech between the stems, does not occur. Notice that the situation for type 2 forms is the reverse of the situation within the analogy oppositions. Here the distinction between the stems is not written but spoken (compare English *divine-divinity*). The verb endings exhibit a distinction in writing but not in speech (compare English *there-their*). Table 5 illustrates this.

Table 5. *Three opposition types of number*

Singular:			Plural:		
Spelling	Pronunciation	Meaning	Spelling	Pronunciation	Meaning
I poes	/pus/	'pussycat	poezen	/puzə/	pussycats
II hoed	/hut/	hat	hoeden	/hudə/	hats
III stoel	/stul/	chair	stoelen	/stulə/	chairs

According to Van Heuven and Birkenhäger's prediction, it is sometimes easy (type 3) and sometimes difficult (type 1) to decide whether two forms belong to the paradigm of the same word or not. Type 2 forms range between 1 and 3. The closer type 2 forms are to type 3, the more support for the rule of congruency that is responsible for the existence of type 2.

In the experiment that Van Heuven and Birkenhäger had designed in order to investigate processing differences for forms of types 1, 2, and 3, with respect to the rule of congruency, the subjects were presented pairs of nouns, half of which were singular and plural forms of the same word, while the other half were singular and plural forms of different nouns. The subjects had to classify two test items according to whether they belonged to the same noun or not. Response times for type 2 forms proved to be similar to or shorter than those for the type 3 forms. This experiment supports the usefulness of the congruency rule for readers of Dutch.

Van Heuven's experiments show that the congruency rule is of much help for the reader, while the analogy rule is less important. Before any empirical research had been carried out in this field, it was assumed that the morphological rules of Dutch orthography were useful for the reader but were a nuisance for the writer. Thanks to the experiment, we acquired a better understanding of the first part of this assumption; but more research was needed for clarifying the second part.

It was generally assumed that congruency and analogy were a serious obstacle for the writer. Van der Velde's thesis is no doubt one of the main sources of this belief. The vehement discussion after the publication of the *Eindvoorstellen* of the Pée-Wesseling's committee demonstrated this once again. Supporters of a simplification said that the abolition of the analogy rule would result in a 50% reduction in the time spent on spelling instruction in primary schools. Abolition of the rules of congruency and etymology would definitely solve the problem of learning to write correctly. The opponents of a simplification agreed with the supporters about these facts. Their evaluation was, however, different: the beauty of the system and the tradition of the written language were too important to be sacrificed to the interests of the masses.

Verhoeven's (1979) research therefore attracted some attention because it demonstrated that ridding the orthography of morphology and etymology would reduce spelling errors only insignificantly. Verhoeven categorized spelling mistakes by students aged 8 to 21. Only one-third of the mistakes of primary-school students were violations of the rules of analogy, congruency, and etymology. Half of the errors were violations of pronunciation rules, violations of the rule for the spelling of long vowels in open syllables (for example, *zaken* 'affairs', *boten* 'boats'), or the rule for consonants after closed syllables (for example, *zakken* 'bags', *botten* 'bones') (see 0 above).

It seemed very unlikely, therefore, that the abolition of morphological and etymological spelling rules could solve the spelling problem. But nobody, not even the VWS, had ever advocated that the rule of pronunciation should be abandoned or that another system for the spelling of vowels in open syllables and consonants after closed syllables was preferable to the prevailing system. A large part of the spelling errors of college students involved violations of the rules of morphology and etymology. Spelling simplification was always regarded as being most useful for primary-school pupils and adults with little education. (Paardekooper even called it the keystone of the Dutch social welfare program.) However, Verhoeven's research suggests that it is useful primarily for the better educated. It would lead to a greater relative reduction in mistakes in their writing than in the writing of the less educated. Mistakes in verb endings were relatively few (about 10%). This does not mean that most people had mastered the system, but only that they made more mistakes in other more frequent forms. One of the most recent publications on the subject is Verhoeven (1985).

The main issue in this book is the question whether the speller is rule-oriented or visual-oriented. The influence of Anglo-Saxon research on the subject (for example Frith 1980; Baron et al. 1980; Barron 1980) is considerable. Two variables play a role in Verhoeven's experiments. The first is the relationship between spelling and pronunciation. A distinction is made between forms where a distinction in spelling corresponds to one in pronunciation, on the one hand, and on the other, forms where a distinction in spelling has no counterpart in pronunciation (compare the type 1 and type 2 forms of Van Heuven in Tables 2, 3 and 4 above).

The second variable is context. In some contexts it is easy to see whether a finite verb form is a first or a third person form, and in other contexts it is much more difficult to make such a decision. With respect to other grammatical oppositions, such as tense, aspect, and number, similar context variation is possible. The experimental design is given in Table 6.

Table 6. *Context: the experimental design in Verhoeven (1985)*

	Difficult	Easy
Type 1	A	B
Type 2	C	D

The subjects were given a dictation. The assumption was that more errors or a longer writing time (a special 'time-measuring pen' was constructed and used) in A and C in comparison with B and D would indicate rule orientation and that more errors or a longer writing time in C and D in comparison with

A and B would indicate visual orientation. The results were as follows. Visual orientation was stronger than rule orientation, even for Dutch verb forms, which invite, so to speak, the application of rules.

These results provide an argument for the abolition of the analogy rule, which is responsible for the existence of forms where a written distinction has no counterpart in speech, so that only the application of rules can lead to the correct decision. The congruency and etymology rules do not lead to such forms and therefore allow the use of a purely visual strategy, which seems to be the more natural.³

The interesting point is that exactly the opposite of the position adhered to by Kollewijn and his contemporaries seems to be true. Kollewijn was an adversary of the etymological aspects of our spelling system, not of the analogy rule. However, the 'irregular' etymology is not the main problem, but rather the 'regular' analogy. At the same time, it can be argued that analogy is not a very important problem, because the less educated make many more mistakes violating more elementary principles.

The research of Van Heuven and Verhoeven thus demonstrates that congruency and etymology are not a big problem for the writer, and that congruency is helpful to the reader. Analogy, on the other hand, is difficult for the writer and of little use for the reader. This means that there are no good reasons for changing the Dutch orthography with respect to congruency and etymology. There is more reason to change or abandon the rule of analogy. There is even a good reason to change the rule for the spelling of vowels in open syllables and consonants after closed syllables (see Verhoeven 1979). But given the very old tradition of this rule and the possibility of misreading (in a technical sense) due to interference with the old system, it seems very unlikely that this will ever happen. Even the VWS makes no proposal of this kind.

Reviewing recent research on the subject, it is very obvious that the VWS – a society for scientific spelling – does not play any role here, but rather systematically ignores the results of such research.

In 1980, the *Nederlandse Taalunie* was founded. One of its tasks was to establish the spelling for the Netherlands and Flanders (see O). The situation is now at least more favorable than at the time of the spelling regulation of 1946–1947, because more empirically founded observations are available. This can make it easier to take well-informed decisions. The last part of this paper gives an overview of the initiatives of the *Nederlandse Taalunie*.

2.3. *The Nederlandse Taalunie and the proposals for standardizing Dutch spelling*

One of the tasks of the Taalunie is the standardization of Dutch spelling. The prevailing spelling is laid down in the *Woordenlijst* (1954). From the very beginning this *Woordenlijst* was a great disappointment. There was especially strong opposition against the regulation of the spelling of loan words. Sometimes the foreign spelling is prescribed, sometimes the 'Dutchified' form, sometimes both forms are possible. In the latter case either the foreign form or the 'Dutchified' form can have preferential status (see Table 1). To the average user, the choices between these possibilities give an impression of great arbitrariness, even though they are often well founded. Moreover, the *Woordenlijst* is far from complete, and many spellers thus refer to it in vain.

This general feeling of discord was one reason for the Taalunie to set up a new committee to take a closer look at the incompleteness and inconsistency of the *Woordenlijst* in order to make a better proposal. It is not the aim of the Taalunie to propose a fundamental reform of Dutch spelling. The committee consists of three Belgians: P. van de Craen, G. Geerts, and G. de Schutter; and three Dutchmen: E. Assink, J. de Rooij, and G. Verhoeven.

The committee has initiated two projects:

1. An investigation of inconsistencies in the *Woordenlijst*. The most severe problem is words that can be written in two different ways. The second problem is phonemes that can be written in more than one way, without any rule conformity.

2. An opinion poll. The committee wants to investigate Dutch and Flemish public opinion with regard to several proposals for spelling reform. Certain professional groups such as teachers, journalists, and writers are given special attention.

At this moment (January 1987) only the results of a pilot study are available. In any event, the practical result of the work of this committee will be, at the least, a new and better *Woordenlijst*, as complete as possible and without arbitrariness. Will this be the end of the Dutch spelling debate? Maybe so, but in 1947 people had similar ideas.

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Notes

- * We wish to thank Florian Coulmas for correcting the English of the first version of this article and for a number of comments concerning its contents. Bruce Donaldson, University of Melbourne, who happened to be visiting the Netherlands, and Wim Zonneveld, University of Utrecht, were kind enough to solve a few remaining translation problems, which we gratefully acknowledge.
1. Other researchers have tried to find other didactic approaches for the spelling of verb forms. Russian educational psychology was in this regard a source of inspiration. It leads to the construction of algorithms: a kind of decision schemes that lead step by step to the right decision. The algorithm of Assink (1983) is well known and has been tested on a large scale.
 2. At this point there is a new VWS proposal (the so-called 'Spelling 85'), with only one grapheme, *g*, for both voiced and voiceless velar fricatives. This is in accordance with colloquial pronunciation in the western part of the Netherlands (the three big cities, Amsterdam, Rotterdam, and The Hague, are situated in that area). In the other parts of the Dutch language area and in the more official pronunciation of the west, the distinction between voiced and voiceless velar fricatives is still made.
 3. Some forms, similar to type 2 forms, are the result of the etymological principle. Some homophones are not homographs, due to a traditional spelling that preserves a distinction no longer present in Dutch phonology: *ijs* 'ice' and *eis* 'demand' are both pronounced [ɛɪs]; *kou* 'cold' and *kauw* 'jackdaw' are both pronounced [kɔu]. In contrast to the type 2 forms created by the analogy rule, no grammatical rule is necessary to make the right decision, because these forms are different lexical items. Sometimes they even belong to different grammatical categories, for example *mij*, 'me' and *mei* 'May', *wij* 'we' and *wei* 'meadow', *nou* 'now' and *nauw* 'narrow'.

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