In 1850, Schleicher used another comparison to explain the difference between the "Philolog" and the "Linguist". Because it is less known in the literature I quote it in full:  "Der Philolog gleicht dem Landmann, der mit ein Paar Rossen ein fruchtbares und reiches Feld bestellt; ihm genügt, wenn er praktisch mit seinen Rossen gut umzugehen weiß, mit ihren Eigentümlichkeiten muss er daher völlig vertraut sein. Der Linguist dagegen gleicht dem Zoologen, der einer ganz andern Kenntniss der Species equus caballus bedarf, als der Landmann, die er sich nur durch das Studium vieler Thiergättungen..."
The notes of the academic lectures de Vries gave in Leiden in the early 1850s witness the impact of other Schleicherian ideas as they had been put forward in the latter's *Linguistische Untersuchungen II: Die Sprachen Europas in systematischer Übersicht* (1850). They include the distinction between the 'linguist' and the 'philologist'; I have dealt quite extensively with that topic elsewhere (Noordegraaf 1985: 379-390). What I should like to do on this special occasion is to make a few remarks on the way botanical analogies and metaphors were used in the writings of earlier grammarians and linguists. After all, Schleicher's 'language garden' as such is definitely not an original metaphor. As the aim of this paper must be a modest one, I shall limit myself to some evocations of the 'language garden' in eighteenth-century linguistic literature. Being a student of Dutch I have decided to choose my *specimina* from the body of writings with which the founding father of the scientific study of the Dutch language, Matthias de Vries, was acquainted.² As regards this selection, it should be borne in mind that in the years 1839-1843 de Vries was educated as a student of classical languages at Leiden university, where his professors felt themselves the heirs of celebrated eighteenth-century Leiden classicists such as Tiberius Hemsterhuis and Lodewijk Caspar Valckenaer. What is more, as a young student de Vries fell under the spell of mediaeval Dutch literature and decided to devote his life to the study of Dutch. He subsequently familiarized himself with the writings of great Dutch linguists such as Lambert ten Kate, an eighteenth-century Amsterdam *Privatgelehrter*. Both in the works of ten Kate and the Dutch classicists one finds botanical terminology, as will become clear in the following sections.

2. Lambert ten Kate (1674-1731)

Lambert ten Kate Hermansz. is regarded as one of the greatest and most celebrated Dutch linguists in Dutch history. His voluminous *Aenleiding tot de kennis van het verhevene deel der Nederduitsche sprake* ('Introduction to the Exalted Part of the Dutch Language') was written during the years 1710-1723 and was published in 1723. The *Aenleiding* consists of two volumes, each of approximately 750 pages, presenting the first historical grammar of Dutch, the concepts 'historical', 'grammar', and 'Dutch' being understood in a very broad sense. The first volume includes a highly informative preface, which outlines the book and gives its contents. The book is, for the most part, written in the form of 14 dialogues between N., ten Kate's friend, the grammarian Adriaen Verwer (c. 1655-1717), and L., Lambert ten Kate himself. Among other things they discuss the importance of linguistics, the dispersion of languages in Europe, speech sounds, and the declensions and conjugations of Dutch. Besides eight appendices covering rather varied material one finds a fundamental essay presenting a full comparative description of the irregular verb systems of Dutch, Gothic, Old High German, Anglo-Saxon, New High German, and Icelandic. Ten Kate presented irrefutable proof that these verbs, far from representing an erratic type of conjugation, were subject to rules that obtained not only in Gothic, but were valid for all branches of Germanic. The second volume provides an etymological dictionary, set up on the basis of the material collected in the first volume and

² As much has been argued about Schleicher's alleged 'Darwinism', it is interesting to mention the fact that Matthias de Vries was an uncle of the 'Dutch Darwin', the renowned botanist Hugo de Vries (1848-1935).
It is, indeed, in the verbal conjugation system that ten Kate recognized the regularity of vowel alternation, which eventually led him to the discovery of the phenomenon of what Jacob Grimm would later call Ablaut. In his *Deutsche Grammatik* (II: 67) Grimm acknowledged: "Ten Kate hat die Ablauten zuerst in ihrer Wichtigkeit hervorgehoben [...]".

In the first volume the reader comes across various instances of botanical language use, for example, when ten Kate discusses the "European Language Tree" with its "branches" and "twigs" (1723, I: 59, 60-63). Although ten Kate did not draw a language tree à la Schleicher (cf. Koerner 1989: 190), he provided a folding geographical map showing the diffusion of the various peoples and their languages all over Europe. In volume two, in a piece which actually dates from the year 1715, ten Kate suggested that one could consider "our unevenly flowing [sc. irregular] VERBS as the Roots [...], the Nouns derived from them as [...] Main Branches, the Verbs which have sprung from them as Strong Limbs, and the Nouns which arise from these latter as [...] Lesser Limbs". Then, as far as derivation is concerned,

we will walk on a vast Field, which is covered with Amazing Trees; a Field, which due to the passing of so many ages has gone wild, and all over it is [...] sprinkled with old barren or torn off Branches, among which new Shoots from hidden Roots can be discovered. Here we have sought to clear a way, in order to be able to cross it without obstruction, to repair here and there what has been broken; to bring back Dispersed Branches and Sprigs to their proper Tree or Plant each; to heal the Fissures; to create Space in order to get some perspective; to give access to the Fruits; and, finally, to change a Plantation, which at first looked like an orderless Wilderness, into a Garden of Delight (ten Kate 1723, II: 95-96).

It is true that this comparison has a definite historical slant, but it is also evident that ten Kate was concerned to find the regularity which had become obscured in the course of the history of the language. "Regularity" was "the crown of a language" (1723, I: 543); ten Kate could not believe that the so-called unevenly flowing verbs were as irregular as his contemporaries considered them to be. To him, language was a "divine gift" (1723, I: 6); "fostered by the Milk of Reason" its development and extension had been left to Man (1723, I: 9-10). As Reason had been the "foster mother" of language (1723, I: 14), language must also be characterized by regularity and show logical coherence. Thus, to ten Kate reshaping the "orderless Wilderness", the waste land, into a "Garden of Delight", a pleasure-garden, was definitely not a prescriptive activity. His aim was to bring to light the underlying systematic nature of language by searching earlier language stages; with the help of the researcher's reason, consistent rules could be found.

A nice illustration of this approach can be found in the first volume of the *Nieuwe bijdragen tot opbouw der vaderlandsche letterkunde* ('New contributions to the building of Dutch literature', 1763-1766), which was one of the first periodicals to be completely devoted to the study of Dutch language and literature. The first volume (1763) of the *Nieuwe bijdragen* carries a beautifully engraved title, which abounds with allegorical images (cf. Knol 1977: 64). It shows an idyllic spot somewhere in the country. At the lower right one observes a set of gardening tools: without any doubt these instruments stand for human reason.

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3. The Schola Hemsterhusiana

3.1. Tiberius Hemsterhuis (1685-1766)

It is believed that ten Kate participated in an early eighteenth-century Amsterdam linguistic circle whose members probably included Tiberius Hemsterhuis, professor at the Amsterdam Athenaeum Illustre from 1704 until 1717, who would become the founding father of the 'Schola Hemsterhusiana', a group of Dutch classical scholars which consisted of Hemsterhuis and some of his students who followed his approach in the study of Greek. In addition to their literary and interpretative work, Hemsterhuis and his followers developed their own etymological method of investigating language based on principles of reconstruction. In 1717, Hemsterhuis left Amsterdam for the University of Franeker, where he had accepted the Greek chair. From 1740 to 1765 he was Professor of Greek at Leiden. Lord Monboddo (1714-1799) once eulogized Tiberius Hemsterhuis as "the greatest Greek scholar of his time".

Hemsterhuis's sole purely linguistic treatise that has come down to us is the *Lectio Publica de Originibus Linguae Graecae*, which probably dates from around 1740. As late as 1845 it was edited by the Frisian scholar J.H. Halbertsma (1789-1869). I have been able to establish that not only Jacob Grimm (1785-1863) received a complimentary copy from the editor, but also Matthias de Vries. A close analysis of the *Lectio* yields a clear insight into Hemsterhuis's concept of analogy, showing that Hemsterhuis was the first to introduce a methodical system to the etymology of the Greek language in its entirety (Gerretzen 1940: 372).

As it appears from his lecture, Hemsterhuis saw the Greek language as an ideally-built body, and just like an anatomist he dissected the "corpus linguæ" (Hemsterhuis 1740: 329, 330, 350) seeking to become acquainted with its innermost detail (cf. Gerretzen 1940: 109). According to Hemsterhuis, the "origines" of a language include "primordia et radices verborun per multiplices formas derivatorum". The word 'radix' triggers the image of trunk and trees, which illustrates the connection between the derivations and the original, a connection which easily escapes our attention, as Hemsterhuis himself noted — "Quo diutius linguae usurpantur eo quoque latiores ramos diffundunt. Rami uti cum primis radicibus connectantur, saepe nos praeterit" (Hemsterhuis 1740: 341; cf. Gerretzen 1940: 141).

Two remarks in margin. Hemsterhuis has been accused of having fostered a "naïve conception of the meaning and purpose of `etymology'", which comes to light in his attempts to reconstruct "the original language" (Cassirer 1973 [1923]: 149n.55). Note, however, that in his comments on the *Lectio* Halbertsma (1845: 381) made it clear that "Linguam reducere ad primas voces, quas primi mortalium rebus imposuerant, et nexum inter sonum earum vocum et rem significatam inquirere, Hemsterhuis retulit" (emphasis added). Second, it has been remarked that

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4 As a matter of fact, the lecture is undated. Note, however, that according to the university series *lectionum* Hemsterhuis discussed the *Origines linguae graecae* for two hours a week throughout the years of his Leiden professorship (1740-1765). Halbertsma (1845: vi) noted that Hemsterhuis was "[a]ccoutumé, il y a plus d'un siècle, à considérer la langue comme une émanation immédiate de l'âme humaine" (emphasis added).

5 As Hemsterhuis (1740: 330) put it himself: "Nos monere debemus, cum promittamus in quirere origines Linguae Graecae, nos non loqui de primis illis principis et vocibus, quae primae rebus sunt impositae. Harum vocum prima ratio in nulla lingua constat [...]. In originibus igitur linguarum inquirendis haec pars tanquam obscura et latens est praetermittenda". A prudent scholar, acquainted
with the works of Locke ("Lockius", cf. Ruhkenius 1807: 17), Hemsterhuis decided to refrain from any speculations in this field.

3.2. L.C. Valckenaer (1715-1785)

Hemsterhuis's student Lodewijk Caspar Valckenaer was his successor to the Greek chair both at Franeker and Leiden. In his "jugendlichen" (Bernhardy 1832: 236) Observationes academicae, quibus via munitur ad origines graecas investigandas, lexicorumque defectus resarciendos, a set of lecture notes from the year 1743, one also finds various botanical images. Observatio X, for instance, reads in full: "Ex verbis primitivis, tanquam totidem stirpibus & radicibus, amoeno linguae horto in sitis, derivatorum verborum, tanquam totidem ramorum, foecunda propago emicuit & propullulavit" (Valckenaer 1790 [1743]: 12; emphasis added).

This image was elaborated in Observatio XXIII. "We consider", Valckenaer said, "the Greek language as a garden ('tanquam hortum'), which is most lovely thanks to its simple and natural beauty, and most cultivated by a charming quantity of variegated flowers''. However, this one has to be admired more than other gardens. First of all, this large garden has a rather small number of trees [i.e. the small number of primitiva] standing in rows pointing in the same direction. The height and the diffusion of the branches [i.e. the numerous derivata] take so much room both in length and width that they darken the full space of the garden ("spatium horti totum"). Furthermore, what is very special with regard to the trees in this garden is that their trunks ("trunci") are fully identical ("similissimus"), that the branches of every tree are equal in number and appear to protrude in one line, and that every branch of every trunk has the same quantity of leaves, entirely identical in shape, so that whoever has profoundly studied oculo curioso & philosophico the leaves of one branch and the branches of one trunk will soon understand how many branches have sprouted from each trunk (Valckenaer 1790 [1743]: 26-27).

Valckenaer commented that he deemed it appropriate to insert this "allegoria", systemati nostro [...] congruam, in order to try minds who were more capable of understanding the present matters and who could bring them into a better light later on. It is clear that Valckenaer, a professional language teacher after all, sought to demonstrate that the Greek language was easy ("linguam Graecam facilem esse"), and that the derivations could quickly be learned, in particular by those qui cogitare didicerunt (1790 [1743]: 27). I cannot discuss the didactic dimension of this approach here, although I feel it is an interesting feature of his method (cf. Valckenaer s.d.).

It has been remarked (Gerretzen 1940: 275) that when writing his allegoria Valckenaer appears
In a private comment on this passage the late Pieter Verburg (1905-1989) suggested that "architectus" could mean "the Creator, God". If so, then Valckenaer was quite in line with his teacher Hemsterhuis (1740: 325) who spoke about analogy as something "infinitum [...] omnibus hominibus a summo rerum auctore Deo". Ten Kate, too, considered God to be the very first origin of language.
Mounin (1968: 97) reminds us of the fact that Saussure too saw "l'analogie comme principe des créations de la langue" — "naissance d'une grammaire générative", Mounin comments in his compact Saussure anthology. Within this context, Saussure's mentioning "la formule de la quatrième proportionnelle" reminds the well-informed reader of the modus operandi of the Hemsterhusians in the field of morphology. See, for instance, the quotation on "proportio" from Quintilian, which precedes Scheidius's foreword to his 1790 edition of Valckenaer's Observationes.

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8 For the term "structura orationis" see Hemsterhuis 1740: 325, 362.

4. Final remarks

In ten Kate's characterization of derivation as a field which in the course of time has become a wilderness one finds the evolutionary dimension of the garden analogy: trees grow, and develop, branches die off and fall, and the beautiful garden turns into a waste land; consequently, the original structure becomes unrecognizable. Only historical research - removing the dead wood and the branches grown crooked - can help us to see its fundamental regularity. In Valckenaer's evocation of the linguae hortus, however, emphasis is laid upon the systematic aspects of the garden concept. As is well known, nineteenth-century mainstream linguistics stressed the historical dimension of language, whereas in Saussure's Cours the systematic character of language received its due share. This shift in attention appears to be a nice example of the working of the pendulum-swing model as proposed by Koerner (1989: 54).

That a transition from eighteenth-century Hemsterhusian style linguistics to nineteenth-century historical grammar is indeed conceivable, is a thesis advocated by Dam (1935). He concluded that Hemsterhuis's teachings meant an interesting renewal of the ancient analogy concept. In Hemsterhuis, the concept of analogy became more dynamic and subjective, and, consequently, could be also applied to language history. As evidence for his thesis that the connection between Hemsterhuis and Romanticism is a real one, Dam pointed to the works of a nineteenth-century student of historical linguistics and faithful correspondant of Jacob Grimm, the Frisian J.H.
Halbertsma, whose etymological ideas go back to the Schola and who was an ardent admirer of both Hemsterhuis and Valckenaer. In a letter dated 12 June 1843 to Valckenaer’s grandson, L.C. Luzac (1786-1861), Halbertsma explicated what had been the source of his linguistic knowledge and of his "historical view": "I may say: it was solely Ludovicus Casparus [Valckenaer]. [...] everything I have achieved and still hope to achieve" is "nothing else but the application of his principles to Germanic language study" (Kalma 1968: 139-140).

Can it be argued that the emergence of structuralism in the twentieth century meant just another swing, namely the revival of eighteenth-century concepts including the concept of *systema* (cf. Mounin 1968: 60)? Exactly how, one is inclined to ask, and what aspects actually changed in the course of time? It is now more than twenty years since Konrad Koerner set out to write an extensive study on the evolution of "the concept of structure in general linguistic theory" (Koerner 1975). While he was fully engaged in making the History of Linguistics what it is now, a widely recognized and practiced field of scholarly research, this study remained manuscript (cf. Cowan & Foster 1989: 42). I hope that in the years to come Konrad will find the time to return to this theme and give it another thought, sitting in the shadow of his beloved Schleicherian language garden. Crescat, floreat.

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