

Noah Webster

If Buchanan had attempted to forge unity between two nations by means of language then Webster's aim is to create division between two nations by precisely the same means. In a stark reversal of Buchanan's effort to conjure up cultural unity by the imposition of a standard pronunciation, Webster strives to highlight the cultural and political differences between Britain and America by focusing on the variation in pronunciation and language in the two nations.

Webster's position on spelling reform is interesting in that it progresses through a number of shifts. Initially his argument in the *Grammatical Institute* (1783) was that the dropping, for example, of 'superfluous letters' by particular writers amounted to nothing more than 'absurdities' induced by a 'rage for singularity'. In the extract set out below, however, he shifts his position radically. He did so partly under the influence of Benjamin Franklin's scheme of 'modern innovations in the English language and printing' (1789), and partly for political reasons. The extent of his conversion to the reformation of spelling can be seen in the Preface to his *Collection of Essays and Fugitive Writings*, where he argues that,

Every possible reeizon that could ever be offered for altering the spelling of wuards, stil exists in full force; and if a gradual reform should not be made in our language, it will prove that we are less under the influence of reeizon than our ancestors.

His final position, however, was one of modification rather than radical change and the *American Dictionary* (1828) is not remarkable for great orthographical shifts.

Webster is most famous for those small amendments in spelling, such as the spelling *honor* rather than *honour*, or *theater* rather than *theatre*, which were to cause so much irritation to later British

commentators. Yet it is important to recall the political significance of his work since if the *Declaration of Independence* had asserted the severance of political and economic ties with Britain, then Webster's work is an attempt to extend that break into the linguistic and cultural realms. There are two aspects of his work which are particularly important from the perspective of examining the role of language in the formation of cultural identity. These are the tasks assigned to language of marking and indeed maintaining cultural difference between Britain and America, and the function which language was to play in the construction of national unity within the newly independent states.

Webster's assertion of the need for linguistic as well as political independence is made most explicit in his *Dissertations on the English Language* (1789). In it he argues that 'as an independent nation, our honor requires us to have a system of our own in language as well as government'. Later in the same text he declares,

Customs, habits, and *language*, as well as government should be national. America should have her *own* distinct from all the world. Such is the policy of other nations, and such must be *our* policy, before the states can be either independent or respectable.

This was a position to which he remained faithful throughout his life and it reappears in the Preface to his final and most important work the *American Dictionary of the English Language*. In that text he proposes that,

it is not only important, but, in a degree necessary that the people of this country should have an *American Dictionary* of the English language; for although the body of the language is the same as in England, and it is desirable to perpetuate that sameness, yet some differences must exist.

The examples of the differences in language and ideas which are selected by Webster are significant for no American, he claims, could possibly be satisfied with the English use and definition of terms such as 'congress', 'senate', 'assembly', 'court' and so on.

The declaration of linguistic and cultural independence being one part of his work, the other was the assertion of unity. For in 1789 the American nation was still to be forged and Webster saw a clear role for language in that process. Thus the *Dissertations* are an attempt to set out 'the general custom of speaking' and to separate and reject the local or particular. Within the text there is evidence of that rejection of

the usage of particular groups within the nation which always follows from the call to social unity over and above actually existing differences. For it is clear that what is invoked is national unity rather than social equality: 'every engine should be employed to make the people of this country national; to call their attachments home to their own country; and to inspire them with the pride of national character.' It was a rallying call for the federation which does much to illustrate the role of language in the creation of forms of social identity:

Let us then seize the present moment, and establish a *national language* as well as a national government. Let us remember that there is a certain respect due to the opinions of other nations. As an independent people, our reputation abroad demands that, in all things, we should be federal; be *national*; for if we do not respect *ourselves*, we may be assured that other nations will not respect us.

DISSERTATIONS ON THE ENGLISH LANGUAGE

Appendix

An Essay on the Necessity, Advantages and Practicability Of Reforming the Mode of Spelling, And of Rendering the Orthography of Words Correspondent to the Pronunciation

It has been observed by all writers on the English language, that the orthography or spelling of words is very irregular; the same letters often representing different sounds, and the same sounds often expressed by different letters. For this irregularity, two principal causes may be assigned:

1. The changes to which the pronunciation of a language is liable, from the progress of science and civilisation.
2. The mixture of different languages, occasioned by revolutions in England, or by a predilection of the learned, for words of foreign growth and ancient origin.

To the first cause may be ascribed the difference between the spelling and pronunciation of Saxon words. The northern nations of Europe originally spoke much in gutturals. This is evident from the number of aspirates and guttural letters, which still remain in the orthography of words derived from those nations; and from the modern pronunciation of the collateral branches of the Teutonic,

the Dutch, Scotch and German. Thus *k* before *n* was once pronounced; as in *knave*, the *gh* in *might*, *thought*, *laughter*, and other similar words; the *g* in *reign*, *feign*, &c.

But as savages proceed in forming languages, they lose the guttural sounds, in some measure, and adopt the use of labials, and the more open vowels. The ease of speaking facilitates this progress, and the pronunciation of words is softened, in proportion to a national refinement of manners. This will account for the difference between the ancient and modern languages of France, Spain, and Italy; and for the difference between the soft pronunciation of the present languages of those countries, and the more harsh and guttural pronunciation of the northern inhabitants of Europe.

In this progress the English have lost the sounds of most of the guttural letters. The *k* before *n* in *know*, the *g* in *reign*, and in many other words, are become mute in practice; and the *gh* is softened into the sound of *f*, as in *laugh*, or is silent, as in *brought*.

To this practice of softening the sounds of letters, or wholly suppressing those which are harsh and disagreeable, may be added a popular tendency to abbreviate words of common use. Thus *Southwark*, by a habit of quick pronunciation, is become *Sudhark*; *Worcester* and *Leicester*, are become *Wooster* and *Lester*; *business*, *bizness*; *colonel*, *cornel*; *cannot*, *will not*, *wont*. In this manner the final *e* is not heard in many modern words, in which it formerly made a syllable. The words *clothes*, *cares*, and most others of the same kind, were formerly pronounced in two syllables.

Of the other cause of irregularity in the spelling of our language, I have treated sufficiently in the first Dissertation. It is here necessary only to remark, that when words have been introduced from a foreign language into the English, they have generally retained the orthography of the original, however ill adapted to express the English pronunciation. Thus *fatigue*, *marine*, *chaise*, retain their French dress, while, to represent the true pronunciation in English, they should be spelt *fatigeg*, *mareen*, *shaze*. Thus thro an ambition to exhibit the etymology of words, the English in *Philip*, *physic*, *character*, *chorus*, and other Greek derivatives, preserve the representatives of the original ϕ and χ ; yet these words are pronounced, and ought ever to have been spelt, *Phillip*, *fizzic* or *fizzic*, *karacter*, *korus*.

But such is the state of our language. The pronunciation of the words which are strictly *English*, has gradually been changing for ages, and since the revival of science in Europe, the language has received a vast accession of words from other languages, many of

which retain an orthography very ill-suited to exhibit the true pronunciation.

The question now occurs; ought the Americans to retain these faults which produce innumerable inconveniences in the acquisition and use of the language, or ought they at once to reform these abuses, and introduce order and regularity into the orthography of the AMERICAN TONGUE?

Let us consider this subject with some attention.

Several attempts were formerly made in England to rectify the orthography of the language. But I apprehend their schemes failed of success, rather on account of their intrinsic difficulties, than on account of any necessary impracticability of a reform. It was proposed in most of these schemes, not merely to throw out superfluous and silent letters, but to introduce a number of new characters. Any attempt on such a plan must undoubtedly prove unsuccessful. It is not to be expected that an orthography, perfectly regular and simple, such as would be formed by a 'Synod of Grammarians on principles of science', will ever be substituted for that confused mode of spelling which is now established. But it is apprehended that great improvements may be made, and an orthography almost regular, or such as shall obviate most of the present difficulties which occur in learning our language, may be introduced and established with little trouble and opposition.

The principal alterations, necessary to render our orthography sufficiently regular and easy, are these:

1. The omission of all superfluous or silent letters; as *a* in *bread*. Thus *bread*, *head*, *give*, *breast*, *built*, *meant*, *realm*, *friend*, would be spelt, *bred*, *hed*, *giv*, *brst*, *bill*, *ment*, *reilm*, *frind*. Would this alteration produce any inconvenience, any embarrassment or expense? By no means. On the other hand, it would lessen the trouble of writing, and much more, of learning the language; it would reduce the true pronunciation to a certainty; and while it would assist foreigners and our own children in acquiring the language, it would render the pronunciation uniform, in different parts of the country, and almost prevent the possibility of changes.

2. A substitution of a character that has a certain definite sound for one that is more vague and indeterminate. Thus by putting *æ* instead of *ea* or *ie*, the words *mean*, *near*, *speak*, *grieve*, *zeal*, would become *mæen*, *næer*, *speæk*, *græev*, *zæel*. This alteration could not occasion a moment's trouble; at the same time it would prevent a doubt respecting the pronunciation; whereas the *ea* and *ie* having different sounds, may

give a learner much difficulty. Thus *grief* should be substituted for *grief*; *key* for *beeve*; *believe*, *taff* for *laugh*; *dawier* for *daughter*; *plow* for *plough*; *tuff* for *tough*; *proov* for *prove*; *btud* for *blood*; and *drafft* for *draught*. In this manner *ch* in Greek derivatives, should be changed into *k*; for the English *ch* has a soft sound, as in *cherish*; but *k* always a hard sound. Therefore *character*, *chorus*, *cholic*, *architecture*, should be written *karacter*, *korus*, *kolic*, *arkitecture*; and were they thus written, no person could mistake their true pronunciation.

Thus *ch* in French derivatives should be changed into *sk*; *machine*, *chaise*, *chevalier*, should be written *masheen*, *shaze*, *shevalier*; and *pique*, *tour*, *oblique*, should be written *peek*, *toor*, *obleek*.

3. A trifling alteration in a character, or the addition of a point would distinguish different sounds, without the substitution of a new character. Thus a very small stroke across *th* would distinguish its two sounds. A point over a vowel, in this manner *â*, or *ô*, or *î*, might answer all the purposes of different letters. And for the diphthong *ow*, let the two letters be united by a small stroke, or both engraven on the same piece of metal, with the left hand line of the *w* united to the *o*.

These, with a few other inconsiderable alterations, would answer every purpose, and render the orthography sufficiently correct and regular.

The advantages to be derived from these alterations are numerous, great and permanent.

1. The simplicity of the orthography would facilitate the learning of the language. It is now the work of years for children to learn to spell; and after all, the business is rarely accomplished. A few men, who are bred to some business that requires constant exercise in writing, finally learn to spell most words without hesitation; but most people remain, all their lives, imperfect masters of spelling; and liable to make mistakes, whenever they take up a pen to write a short note. Nay, many people, even of education and fashion, never attempt to write a letter, without frequently consulting a dictionary.

But with the proposed orthography, a child would learn to spell, without trouble, in a very short time, and the orthography being very regular, he would ever afterwards find it difficult to make a mistake. It would, in that case, be as difficult to spell *wrong*, as it is now to spell *right*.

Besides this advantage, foreigners would be able to acquire the pronunciation of English, which is now so difficult and embarrassing, that they are either wholly discouraged on the first attempt, or obliged, after many years labor, to rest contented with an imperfect knowledge of the subject.

A correct orthography would render the pronunciation of the language, as uniform as in the spelling books. A general uniformity thro the United States, would be the event of such a reformation as I am here recommending. All persons, of every rank, would speak with some degree of precision and uniformity. Such a uniformity in these states is very desirable; it would remove prejudice, and conciliate mutual affection and respect.

3. Such a reform would diminish the number of letters about one sixteenth or eighteenth; this would save a page in eighteen; and a saving of an eighteenth in the expense of books, is an advantage that should not be overlooked.

4. But a capital advantage of this reform in these states would be, that it would make a difference between the English orthography and the American. This will startle those who have not attended to the subject; but I am confident that such an event is an object of vast political consequence. For,

The alteration, however small, would encourage the publication of books in our own country. It would render it, in some measure, necessary that all books should be printed in America. The English would never copy our orthography for their own use; and consequently the same impressions of books would not answer for both countries. The inhabitants of the present generation would read the English impressions; but posterity, being taught a different spelling, would prefer the American orthography.

Besides this, a *national language* is a band of *national union*. Every engine should be employed to make the people of this country *national*; to call their attachments home to their own country; and to inspire them with the pride of national character. However they may boast of Independence, and the freedom of their government, yet their *opinions* are not sufficiently independent; an astonishing respect for the arts and literature of their parent country, and a blind imitation of its manners, are still prevalent among the Americans. Thus an habitual respect for another country, deserved indeed and once laudable, turns their attention from their own interests, and prevents their respecting themselves.

Objections

1. This reform of the Alphabet would oblige people to relearn the language, or it could not be introduced.

But the alterations proposed are so few and so simple, that an

hour's attention would enable any person to read the new orthography with facility; and a week's practice would render it so familiar, that a person would write it without hesitation or mistake. Would this small inconvenience prevent its adoption? Would not the numerous national and literary advantages, resulting from the change, induce Americans to make so inconsiderable a sacrifice of time and attention? I am persuaded they would.

But it would not be necessary that men advanced beyond the middle stage of life, should be at the pains to learn the proposed orthography. They would, without inconvenience, continue to use the present. They would read the *new* orthography, without difficulty; but they would write in the *old*. To men thus advanced, and even to the present generation in general, if they should not wish to trouble themselves with a change, the reformation would be almost a matter of indifference. It would be sufficient that children should be taught the new orthography, and that as fast as they come upon the stage, they should be furnished with books in the American spelling. The progress of printing would be proportioned to the demand for books among the rising generation.

This progressive introduction of the scheme would be extremely easy; children would learn the proposed orthography more easily than they would the old; and the present generation would not be troubled with the change; so that none but the obstinate and capricious could raise objections or make any opposition. The change would be so inconsiderable, and made on such simple principles, that a column in each newspaper, printed in the new spelling, would in six months, familiarize most people to the change, show the advantages of it, and imperceptibly remove their objections. The only steps necessary to ensure success in the attempt to introduce this reform, would be, a resolution of Congress, ordering all their acts to be engrossed in the new orthography, and recommending the plan to several universities in America; and also a resolution of the universities to encourage and support it. The printers would begin the reformation by publishing short paragraphs and small tracts in the new orthography; school books would first be published in the same; curiosity would excite attention to it, and men would gradually be reconciled to the plan.

2. 'This change would render our present books useless.'

This objection is, in some measure, answered under the foregoing head. The truth is, it would not have this effect. The difference in orthography would not render books printed in one, illegible to persons acquainted only with the other. The difference would not be

so great as between the orthography of Chaucer, and of the present age; yet Chaucer's works are still read with ease.

3. 'This reformation would injure the language by obscuring etymology.'

This objection is unfounded. In general, it is not true that the change would obscure etymology; in a few instances, it might; but it would rather restore the etymology of many words; and if it were true that the change would obscure it, this would be no objection to the reformation.

It will perhaps surprize my readers to be told that, in many particular words, the modern spelling is less correct than the ancient. Yet this is a truth that reflects dishonour on our modern refiners of the language. Chaucer, four hundred years ago, wrote *bilder* for *builder*; *dedly* for *deadly*; *ernest* for *earnest*; *erly* for *early*; *brast* for *breast*; *hed* for *head*; and certainly his spelling was the most agreeable to the pronunciation. Sidney wrote *bin*, *examin*, *suatable*, with perfect propriety. Dr. Middleton wrote *explane*, *genuin*, *revele*, which is the most easy and correct orthography of such words; and also *luster*, *theater*, for *lustre*, *theatre*. In these and many other instances, the modern spelling is a corruption; so that allowing many improvements to have been made in orthography, within a century or two, we must acknowledge also that many corruptions have been introduced.

In answer to the objection, that a change of orthography would obscure etymology, I would remark, that the etymology of most words is already lost, even to the learned; and to the unlearned, etymology is never known. Where is the man that can trace back our English words to the elementary radicals? In a few instances, the student has been able to reach the primitive roots of words; but I presume the radicals of one tenth of the words in our language, have never yet been discovered, even by Junius, Skinner, or any other etymologist. Any man may look into Johnson or Ash, and find that *flash* is derived from the Saxon *flæsc*; *child* from *cild*; *flood* from *flod*; *lad* from *leode*; and *loaf* from *laf* or *hlaef*. But this discovery will answer no other purpose, than to show, that within a few hundred years, the spelling of some words has been a little changed. We should still be at a vast difference from the primitive roots.

In many instances indeed etymology will assist the learned in understanding the composition and true sense of a word; and it throws much light upon the progress of language. But the true sense of a complex term is not always, nor generally, to be learnt from the sense of the primitives or elementary words. The current meaning of a

word depends on its use in a nation. This true sense is to be obtained by attending to good authors, to dictionaries and to practice rather than derivation. The former *must* be *right*; the latter *may* lead us into *error*.

But to prove of how little consequence a knowledge of etymology is to most people, let me mention a few words. The word *sincere* is derived from the Latin, *sine cera*, without wax; and thus it came to denote *purity of mind*. I am confident that not a man in a thousand ever suspected this to be the origin of the word; yet all men, that have any knowledge of our language, use the word in its true sense, and understand its customary meaning, as well as Junius did, or any other etymologist.

Yea or *yes* is derived from the imperative of a verb, *avair* to have, as the word is now spelt. It signifies therefore *have*, or *possess*, or *take* what you ask. But does this explication assist us in using the word? And does not every countryman who labours in the field, understand and use the word with as much precision as the profoundest philosophers?

The word *temper* is derived from an old root, *tem*, which signified *water*. It was borrowed from the act of *cooling*, or moderating heat. Hence the meaning of *temperate*, *temperance*, and all the ramifications of the original stock. But does this help us to the modern current sense of these words? By no means. It leads us to understand the formation of languages, and in what manner an idea of a visible action gives rise to a correspondent abstract idea; or rather, how a word, from a literal and direct sense, may be applied to express a variety of figurative and collateral ideas. Yet the customary sense of the word is known by practice, and as well understood by an illiterate man of tolerable capacity, as by men of science.

The word *always* is compounded of *all* and *ways*; it had originally no reference to time; and the etymology or composition of the word would only lead us into error. The true meaning of words is that which a nation in general annex to them. Etymology therefore is of no use but to the learned; and for them it will still be preserved, so far as it is now understood, in dictionaries and other books that treat of this particular subject.

4. 'The distinction between words of different meanings and similar sounds would be destroyed.'

'That distinction,' to answer in the words of the great Franklin, 'is already destroyed in pronunciation.' Does not every man pronounce *all* and *awl* precisely alike? And does the sameness of sound ever lead a hearer into a mistake? Does not the construction render the distinction

easy and intelligible, the moments the words of the sentence are heard? Is the word *knew* ever mistaken for *new*, even in the rapidity of pronouncing an animated oration? Was *peace* ever mistaken for *piece*, *flour* for *flower*? Never, I presume, is this similarity of sound the occasion of mistakes.

If therefore an identity of *sound*, even in rapid speaking, produces no inconvenience, how much less would an identity of *spelling*, when the eye would have leisure to survey the construction? But experience, the criterion of truth, which has removed the objection in the first case, will also assist us in forming our opinion in the last.

There are many words in our language which, with the *same orthography*, have *two* or more *distinct meanings*. The word *wind*, whether it signifies *to move round*, or *air in motion*, has the *same spelling*; it exhibits no distinction to the eye of the silent reader; and yet its meaning is never mistaken. The construction shows at sight in which sense the word is to be understood. *Hail* is used as an expression of joy, or to signify frozen drops of water, falling from the clouds. *Rear* is to raise up, or it signifies the hinder part of an army. *Lot* signifies fortune or destiny; a plot of ground; or a certain proportion or share; and yet does this diversity, this contrariety of meanings ever occasion the least difficulty in the ordinary language of books? It cannot be maintained. This diversity is found in all languages; and altho it may be considered as a defect, and occasion some trouble for foreign learners, yet to natives it produces no sensible inconvenience.

5. 'It is idle to conform the orthography of words to the pronunciation, because the latter is continually changing.'

This is one of Dr. Johnson's objections, and it is very unworthy of his judgement. So far is this circumstance from being a real objection, that it is alone a sufficient reason for the change of spelling. On his principle of *fixing the orthography*, while the *pronunciation is changing*, any *spoken language* must, in time, lose all relation to the *written language*; that is, the sounds of words would have no affinity with the letters that compose them. In some instances, this is now the case; and no mortal would suspect from the spelling, that *neighbour*, *wrought*, are pronounced *nabur*, *rawt*. On this principle, Dr. Johnson ought to have gone back some centuries, and given us, in his dictionary, the primitive Saxon orthography, *wol* for *wilt*; *ydthness* for *idleness*; *eyen* for *eyes*; *echte* for *each*, &c. Nay, he should have gone as far as possible into antiquity, and, regardless of the changes in pronunciation, given us the primitive radical language in its purity. Happily for the language, that doctrine did not prevail till his time; the spelling of words changed with the

pronunciation; to these changes we are indebted for numberless improvements; and it is hoped that the progress of them, in conformity with the national practice of speaking, will not be obstructed with the erroneous opinion, even of Dr. Johnson. How much more rational is the opinion of Dr. Franklin, who says, 'the orthography of our language began to be fixed too soon.' If the pronunciation must vary, from age to age, (and some trifling changes in language will always be taking place) common sense would dictate a correspondent change of spelling. Admit Johnson's principles; take his pedantic orthography for the standard; let it be closely adhered to in future; and the slow changes in the pronunciation of our national tongue, will in time make as great a difference between our *written* and our *spoken* language, as there is between the pronunciation of the present English and German. The *spelling* will be no more a guide to the pronunciation, than the orthography of the German or Greek. The event is actually taking place, in consequence of the stupid opinion, advanced by Johnson and other writers, and generally embraced by the nation.

All these objections appear to me of very inconsiderable weight, when opposed to the great, substantial and permanent advantages to be derived from a regular national orthography.

Sensible I am how much easier it is to propose improvements, than to *introduce* them. Every thing *new* starts the idea of difficulty; and yet it is often mere novelty that excites the appearance; for on a slight examination of the proposal, the difficulty vanishes. When we firmly *believe* a scheme to be practicable, the work is *half* accomplished. We are more frequently deterred by fear from making an attack, than repulsed in the encounter.

Habit also is opposed to changes; for it renders even our errors dear to us. Having surmounted all difficulties in childhood, we forget the labor, the fatigue, and the perplexity we suffered in the attempt and imagine the progress of our studies to have been smooth and easy. What seems intrinsically right, is so merely thro habit.

Indolence is another obstacle to improvements. The most arduous task a reformer has to execute, is to make people *think*; to rouse them from that lethargy, which, like the mantle of sleep, covers them in repose and contentment.

But America is in a situation most favourable for great reformations; and the present time is, in a singular degree, auspicious. The minds of men in this country have been awakened. New scenes have been, for many years, presenting new occasions for exertion; unexpected distresses have called forth the powers of invention; and the application

of new expedients has demanded every possible exercise of wisdom and talents. Attention is roused; the mind expanded; and the intellectual faculties invigorated. Here men are prepared to receive improvements, which would be rejected by nations, whose habits have not been shaken by similar events.

Now is the time, and *this* is the country, in which we may expect success, in attempting changes favourable to language, science and government. Delay, in the plan here proposed, may be fatal; under the tranquil general government, the minds of men may again sink into indolence; a national acquiescence in error will follow; and posterity will be doomed to struggle with difficulties, which time and accident will perpetually multiply.

Let us then seize the present moment, and establish a *national language* as well as a national government. Let us remember that there is a certain respect due to the opinions of other nations. As an independent people, our reputation abroad demands that, in all things, we should be federal; be *national*; for if we do not respect *ourselves*, we may be assured that other nations will not respect us. In short, let it be impressed upon the mind of every American, that to neglect the means of commanding respect abroad, is treason against the character and dignity of a brave independent people.

TEXT AND SELECTED READING

The text is taken from the Appendix to Webster's *Dissertations on the English Language* first published in 1789. The best studies of the significance of Webster's work in its general context are provided by D. Baron, *Grammar and Good Taste* (London: Yale University Press, 1982) and D. Simpson, *The Politics of American English, 1776-1850* (Oxford: Oxford University Press, 1986), along with Julie Andresen, *Linguistics in America 1769-1924* (London: Routledge, 1990). Other interesting evaluations are V.P. Bynack's 'Noah Webster's Linguistic Thought and the Idea of an American National Culture', *Journal of the History of Ideas*, 45 (1984), along with R. Rollins' 'Words as Social Control: Noah Webster and the Creation of the American Dictionary', *American Quarterly*, 28 (1976). A contemporary essay by the poet Tom Paulin uses Webster's argument for a separate language in relation to Ireland and the use of English therein; 'A New Look at the Language Question' appears in T. Paulin, *Ireland and the English Crisis* (Newcastle: Bloodaxe, 1984).