# The significance of paradigms in language research

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#### ABSTRACT

The purpose of this paper is to demonstrate the significance of paradigms in language research and to show that paradigms are real and necessary both as 'created language' and 'creators of language' and, therefore, the 'word and paradigm' model should still be regarded as valid in modern language research.

### 0. PROLEGOMENA FOR THE OCCASION

The birth of yet another learned journal devoted to English Studies in Spain is always a great family event for all of us. The reason is obvious. 'English Studies', as a proper field of study, still carries the connotation of something comparatively new in our country. But if the birth coincides with the happy decision of offering the present number, in due homage, to 'patri et conditori nostro' Emilio Lorenzo, then the event becomes an intimate one and as such I intent to celebrate it.

If I may say so, it is an appropriate occasion to take stock and recall some landmarks. As far as I am concerned, I will never forget the day the late Professor Schastián Mariner Bigorra, at that time Professor of Latin in the University of Granada (assuming by his benevolence rather by my performance that I could be on the way to becoming a Classicist) enquired whether I intended to do Classics. He was somewhat surprised when I told

him that I did not contemplate doing so as I had decided to enrole in the newly created School of Modern Languages in the University of Madrid. With his characteristic enthusiasm, he wholeheartedly told me that there was only one Professor of English in the whole of Spain —our illustrious Don Emilio. Upon going to Madrid from my native South I was facetiously corrected by the second in command at the time, Don Esteban Pujals, who said to me that, since we only had 'half a catedrático' (alluding to Don Emilio who was Professor of English and German Linguistics), it wouldn't be a bad thing if we managed to have one and a half. Fortunately, we soon had him as well as Professor and so the boat of English Studies in Spain would neither rock nor run aground. And so, now, thanks to them and some of their scions, like the Elcano eight years ago, we are are beginning to sail the seas of the world.

If I may be allowed to do so, I would also like to recall the day when, immediately after graduating from the Complutense, I decided to sail to Belfast with my 'tesina' under my arm, a little piece of work which Professor Lorenzo had supervised and I had written on the exotic subject of "Indo-European Elements common to English and Spanish". That opened to me the doors of Queen's University, where I enrolled for a preparatory Ph.D. research programme, which materialised five years later in my Belfast Doctoral Dissertation. Though unpublished, it is not entirely unknown in Europe and other parts of the world.

The reader of this paper will by now be impatient with what may appear to be bombastic reminiscences before getting down to my subject. Nevertheless, this introduction was necessary because, not long ago, I discovered that another important personage, this time a purely linguistic one, had slowly broken into my career. I refer to something as straightforward as 'paradigms' in all shapes and forms, the importance of which has increasingly become manifest to me. Allow me once again to remember my first public lecture at Queen's University, which had the title of "The Study of Grammar". "Words, phrases, linguistic operations", I said then, "were not mere instruments to be used in a utilitarian way, but rather precious objects worthy of our love and affection". In the spirit of Francis, the word, the sentence, any word, phrase, sentence or text... should be regarded as our brothers and sisters in our journey through life. Not mere utensils but dear creatures to us, whose invaluable service as bearers and transmitters of joy and distress, happiness and sorrow, are our simple but faithful companions throughout life. Today I would like to show that 'paradigms', the organization of words as well as syntagms into sets of commutable elements are no less noble artifacts. They help us in a variety of ways, not the least in the comparison of languages, particularly in the synchronic dimension. But also, in the historical dimension, 'paradigms' are important since they are both created language and at times also creators of language.

### 1. GENERAL INTRODUCTION: CONCEPT OF PARADIGM

Before Professor Adrados (1969) addresses the important subject of the variety of morphological systems, he states the following on p. 195:

"El estudio de la segmentación lleva, inevitablemente, a estudiar los paradigmas gramaticales: conjunto de formas conmutables que forman una serie cerrada. Suele haber conmutación múltiple, es decir, varios parámetros; por ej., en amo, ama, etc., aparecen simultáneamente el de número y persona".

And he goes on to say (ibid.) that, although "Se ha pensado por muchos que se podría prescindir en la descripción lingüística del estudio de los paradigmas", this could only be feasible in cases of extreme regularity which, of course, is not often the case. He immediately illustrates some complex paradigms which couldn't easily be accounted for in terms of purely morphemic analysis. And how could it be otherwise? He takes his first example from English. In this language we have verbs with only one form, for instance, ought (except in vulgar dialectal or childish \*oughted) and verbs with up to eight forms, as is the case with the verb to be (not too many forms by any standards!). For his second example Professor Adrados resorts to the contrast between the Spanish and English personal pronouns. E. I and Sp. vo illustrate a nearly perfect correspondance. Both are 'de-sexed', to the entire happiness of most feminists, I suppose (!). However, contemporary standard English possesses only one form you, as opposed to no less than fifteen forms in Spanish: tú, vosotros, vosotras, os, Vd., Vdes., ti, te, lo, la, le, los, las, les, se. There have been in fact some attempts to redress such an inbalance. In some contemporary English dialects 'plural' forms such as yous, yousn's and y'all with a visible mark of plurality do in fact exist, notably in some parts of the British Isles like Belfast and also in the United States. Cf. de la Cruz & Cañete (1992) p. 198, nota 12.

It is not my purpose here to indulge in other attempts to redress more transcendental matters such as the irreconcilable desire of some feminists who wish to have epicene pronouns such as E. I or Sp. yo, 'de-sexed' and therefore valid both for masculine and feminine, or such as the case of E. they, a 3<sup>rd</sup> person. plural form also valid both for masculine and feminine, and which is also becoming increasingly popular for 3<sup>rd</sup> person singular 'bisexual' meaning in order to avoid referring to a person as he or she when the sex is not known in cases like If anybody is interested in taking part, will they (= he, he or she, he/she) let me know, please. Cf. de la Cruz y Cañete (1992) pp. 202-204.

All I want to show is that symmetry, although desirable and indeed a tendency often aimed at, is by no means the real stuff of language. As a practising historical theoretical linguist, in addition to being at times an

irreverent generativist, I would be out of business if the real asymmetries existing in language didn't provide for changes to come.

Among the many existing asymmetries which tend to be remedied, partially at least, in the contemporary language, we could adduce some interesting changes in 'paradigms' taking place before our own eyes in many of the well established languages of the world as well as in the exciting field of Creole or Creolized varieties. Let me refer first to the contemporary English paradigm of forms of address. Thanks to the addition of Ms [miz] we have a four-term paradigm:

Mr	Ms	Miss	Mrs.			
Before the adoption of Ms we only had a three-term paradigm:						
Mr		Miss	Mrs			

In this three-term paradigm, Mr is valid for all type of males, whereas in the case of females there is a distinction: Miss ( = unmarried) as opposed to Mrs = married). The asymmetry here is obvious. After the creation of Ms [miz] for females, without any reference to marital status, we may have solved one problem, but the paradigm continues to be grossly asymmetric. The new paradigm still has one form of address for men but three forms of address for women. This may be discriminatory, some feminists would say. (Note that I do not enter into the issue of the surname, whether this is the née surname or the husband's..., an important issue now in some English speaking countries like Britain where the husband, for a change, can now adopt his wife's surname!). One 'partial' solution to the asymmetry of the paradigm, which apparently has been most inefficient to say the least, would have been Mush for the unmarried man (The Devil's Dictionary 1911, repr. 1943). More recent are the so far unacceptable and certainly amusing solutions mentioned in Baron (1986) p. 167: Murm or Mrd (= married man) -1977-; Smur or Mngl (= single man) -1983-. The stark reality is that symmetry has not been achieved. The ideal, it would seem, would be a six-term 'paradigm' with three terms for 'male' and another three terms for 'female'. But, as I have said, the adoption of the pairs \*Smur, \*Mngl, and \*Murm, \*Mrd has failed. Cf., however, what a hypothetical 'symmetrical paradigm' would look like:

	male	
marital status not revealed	bachelor	married man or a widower
Mr	*Smur *Mngl	*Murm *Mrd

### Female

marital	unmarried	married
status	woman	woman
not revealed	(single/	(or possibly
	spinster)	a widow)
Ms [mz]	Miss	Mrs

Adrados (1969), p. 835, records that 'pichinglis' illustrates an interesting case. To the epicene we of standard English, Sp. nosotros (= all males or a group of males and females), and nosotras (= all females) there correspond two different forms, although there is no distinction with regard to gender, be it uniform or a mixture of male and female. However, there is a distinction as to the 'grammatical' persons involved. So, to the word we there corresponds (1) the word mifela (= I + he or he + I) and (2) the word yufela (= I + you or you + I).

But what interests us here is not just the actual existence of morphological or 'word paradigms' but mainly the existence of another type of paradigmatic relationship. The main characteristic of 'paradigms', the fact that they constitute sets of commutable forms, normally 'closed sets', can also occur in the syntagmatic realm, that is, syntagms as well as words can constitute relatively closed sets of commutable strings. The aforementioned author (1969), p. 200, gives us as an example of 'paradigm', again with an English illustration, the set you write / you do not write / do you write? / do you not write? which, as far as he is concerned, "es comparable a cualquiera de los anteriores de tipo gramatical" (ibíd.). It is also self-evident that "las diferencias se marcan por cambio, añadido o eliminación de morfemas gramaticales. No se puede separar a los libres de los ligados..." (ibíd.). Cf., however, Matthews's caveat (1974), p. 172:

"Perhaps, therefore, the Greek term 'periphrastic' might be less misleading. Latin amatus sum would thus be a 'periphrastic form' of the Passive (a form involving 'periphrasis' rather than a single word), and French j' ai vu a periphrastic Tense-form as opposed to the simple Tense-forms vois, etc. But, terminology apart, the crucial point is that they are still divisible into separate words. In Latin, amatus sum is no more cohesive than any other group of words; in fact, its constituents may be separated widely for rhythmic or other reasons... In English the constituents of a phrase such as has helped are regularly separated in the interrogative (Has he helped?)..."

I agree. However, I have no qualms in using the term 'analytic paradigms' as I have done on more than one ocasion. I am interested in both types of paradigm both from the point of view of theoretical linguistics and applied linguistics, despite a certain tendency to ignore them in both senses. As a

matter of fact, I am going to start with one aspect which is purely practical and which concerns our current teaching of Old English. The language is initially taught like any foreign language in its purely synchronic aspect and the methodology is therefore, to all effects, the same as that which one could use in the teaching of a contemporary living foreign language.

### 2. PARADIGMS AND ORDINARY LANGUAGE COMPARISON

### 2.1. The application of paradigms to language teaching

Here we shall be concerned with inflectional morfology as applied to language teaching. In other words, the presentation and mastering of traditional paradigms, which in fact amount to the 'mnemotecnic tables' of traditional grammar. Let us use as our illustration the method launched by McCrae-Gibson in the 70's and which some of my colleagues and I have used to our entire satisfaction. The idea is to initiate the student to the comprehension and even elementary production of Old English right from his or her first encounter with it. For instance, the student learns the paradigm followed by a substantial majority of masculine nouns, the socalled 'strong masculine declension', represented by such nouns as biscop 'bishop', cyning 'king', preost 'priest', o tun 'town'. The student should be aware of the fact that Old English, like Spanish, does not have 'natural' gender but 'grammatical' gender, and tun, which is inanimate is a masculine noun just as Sp. pueblo is masculine side by side with ciudad which happens to be feminine —cf. el sillón but la silla; la ventana but el ventanillo, etc., etc.). So the student should get used to enunciating each noun preceded by the appropriate definite article, which in the case of the Old English nouns mentioned is the masculine. So he should memorize se biscop, se cyning, se preost, se tun, etc. But, of course, he will also have to become familiar with the entire paradigm before he can understand or produce a simple sentence. Once he knows that the paradigm of se biscop is (singular) N. se biscop, Ac. thone biscop, G. thæs biscopes, D. thæm biscope; (plural) N. tha biscopas, Ac. tha biscopas, G. thara biscopa, D. thæm biscopum, he will know how to decline a substantial majority of masculine nouns, in fact the great majority of the so-called strong masculine nouns, and therefore he will be able to use them in simple sentences. Examples are se biscop forthferde, se cyning ferde to tune, thæs biscopes theow is thær, thæs cyninges mæden is fæger, thara biscopa and thara cyninga theowas sind ealde, etc. The mastery of these simple facts is stimulated by means of traditional 'drills' which, far from what is often believed, may turn out to be useful and also amusing or at least enjoyable with a bit of help from the teacher, provided they are moderately administered.

Take, for example, the Genitive construction, which automatically brings to the student's mind the so frequently called in Spanish 'genitivo sajón' which, by the way, is not even a typical 'Saxon' phenomenon in Modern English. Nor is it even in its origins an exclusive peculiarity of Germanic. A Genitive singular in -()s, incidentally not the only Genitive marker of masculine nouns in Old English nor in the other Old Germanic languages, is also found in other Indo-European languages. Cf. L. rex regis and the ancient pater familias. And who might have imagined it? We now seem to have it in the ubiquitous Paco's of many of our modern Spanish shops! But the 'genitivo sajón' is not even a mere relic of the old 'Saxon Genitive', since the Genitive in -()s of Old English, like the Genitive in -()s of Latin is a real 'case' with a desinence or ending attached to the stem of the noun in question. This is not the case of contemporary English where, apart from the apostrophe, 's or s' has become a 'particle' instead of a desinence or ending. The proof is obvious. The element 's can be attached not only to words (as would be the case of a desinence or ordinary ending) but also to phrases and, occasionally, even to entire sentences. This is what has been called 's migration of the original Genitive ending in English. Cf. the boy round the corner's girlfriend where corner's is not the Genitive of the noun corner; the corner is not the possessor of girlfriend and therefore cannot be in the possessive case. The simple fact is that 's is not attached to corner as such but to the phrase the boy round the corner; the possessor is the qualified boy. Cf. the humorous he is the woman who is the best friend this club has ever had's husband, mentioned in Pyles & Algeo (1982), Cf. de la Cruz & Cañete (1992) p. 167.

This by now famous 'genitivo sajón' was not a simple ending for the Renaissance intelligentsia either. Hence the misguided use of the apostrophe as a symbol of an abbreviation for (h)is: Joyce (h)is book > Joyce's book. It was subsequently generalised to other cases like Mary her book, the Parliament their papers, as if (h)is might have ever been appropriate in these cases! In this way the particle 's became a universal possessive particle for the singular. It was slightly transformed orthographically for the plural: s'. Hence Mary's book, the Parliament's papers, the boy's books, etc.

So, even without such an elaborate presentation, it may be fun to practise simple 'word and paradigm syntax'. Here is a simple demonstration:

Se cyning is thær 'The king is there'.

Mid theowe? 'With a servant?'

Answer: Thæs cyninges theow is thær 'The king's servant is there'.

Cf. a similar case in the plural:

Tha abbodas sind thær 'The abbots are there'.

Mid theowum? 'With servants?'

Answer: Thara abboda theowas sind thær 'The abbots' servants are there'.

Cf. similar cases but with a pronominal element for the 'possessive case': He ferth thider 'He goes there'.

Mid theowe? With a servant?

Answer: He ferth thider mid his theowe 'He goes there with his servant'. Hie sind thær 'They are there'.

Mid biscopum? 'With biscops?'

Answer: Hie sind thær mid hiera biscopum 'They are there with their bishops'.

The same can be done with verbal paradigms whether of weak verbs, strong verbs or special verbs. Let us choose the special verb don 'do'. Present: (singular) ic do / thu dest / he deth / (plural) we, ge, hie doth. Here are some illustrations:

ic do Godes word (literally) 'I do (= I put into practice or I practise) the word of God'.

And hie? 'And they?'

Answer: Hie doth Godes word 'They practise the word of God'.

Thu dest swa se preost bodath 'you (singular) do as the priest preaches'. And he?'

Answer: He deth swa se preost bodath 'He does as the priest preaches'.

Why give up a method which is simple and extremely useful? I leave it to the reader to judge for himself/herself.

# 2.2. Lexical clusters, a type of "lexical paradigm". Their application to lexical codification

Here are I am not referring to the 'diachronic equations' of the type illustrated in Gk. hypobaíno, L. subuenio, Ger. aufkommen, E. come up or Gk. probaíno, L. prouenio, Ger. vorkommen, etc. These are verbs the stems of which and the elements (prefixes or so-called 'separable prefixes' in the case of German or just 'locative particles' in English) with which they form units, belong respectively to the same original Indo-European etyma. Even though these combinations of elements that constitute 'diachronic equations' have often developed widely different semantic values throughout the history of the various languages, their comparative study has been extremly useful. Such diachronic equations were the starting point of my British Ph.D. Dissertation (see References). Cf. also de la Cruz (1977), pp. 271-274.

Here I am referring to the importance of codifying the variety of 'lexical clusters' consisting historically of a locative element and a verbal root. In

the first place English has strongly inherited from the Indo-European preverbial consolidation the well known clusters with the native reversative prefix un- and the somewhat archaic be-, and has considerably developed the productive over- and under- as well as created the interesting productive out-. Here are some representative cases of reversative un-: unbind, uncover, undo, unearth, unhinge, unleash, unload, unlock, unpack, unravel, unroof, untie, unsex, unsheathe, unveil, unwrap, etc. Representative cases of out- are: outclass 'to surpass', outdistance 'leave far behind in a competition', outlast 'last longer than', outride 'ride beyond or faster', outrival, outwit, etc.

In other Germanic languages the richness of the prefixes inherited from the Indo-European preverbial consolidation is greater. Cf. Ger. ent-(entdecken 'discover', entehren 'dishonour', enteignen 'expropriate', enterben 'disinherit', entfaren 'escape', entlassen 'let go'). Cf. ver-(verbrechen 'perpetrate -crime-', verfallen 'fall due, expire', vergehen 'pass away', verlernen 'unlearn, forget', verzahlen 'miscount'), etc.

Of a different order are a comparative reduced number of formations, some newer and some older but mostly relics of the old order 'PV' of phrasal verbs where P is not originally a real prefix but a locative particle in adverbial function attached to the verbal stem. Cf. upgrade, uphold, uplift, upset, etc.

But English also possesses an enormous wealth of lexical clusters of Romance origin worth codifying for its own sake. Just as Latin excels for its enormous amount of derivatives from a(b)-, de-, ex-, in-, pro-, etc., Engglish, being a language with a considerable amount of originally foreign material, is also renowned for its own 'Romance clusters'. Cf. the L. stem -clinare in decline, incline, recline; the L. stem -cludere (claudere) in conclude, exclude, include; the L. stem -ducere in adduce, induce, introduce, produce; the L. stem -mittere in commit, emit, dismiss; the L. stem -portare in export, import, report, support; the L. stem -pellere in dispel, expel, impel, repel; the L. stem -plicare in comply, imply, reply and \*-plicate in complicate, implicate, replicate; the L. stem -rumpere in disrupt, erupt, interrupt: the L. stem -scribere in inscribe, prescribe, subscribe, transcribe; the L. stem -sumere in assume, consume, presume, resume; the L. stem -tenere in contain, detain, retain, sustain; the L. stem -vertere in convert, invert, pervert, revert, subvert; the L. stem -vocare in convoke, evoke, invoke, revoke, etc., etc.

However, where the native Germanic element of English has been enormously productive in the formation of 'lexical clusters' is in what I have called the 'new phrasal verb' of the Germanic languages, a new Germanic creation, although considerably influenced semantically by Latin. Cf. de la Cruz (1972 a) pp. 73-96 y (1972 b) pp. 1-42. For a vision of the coexistence of clusters of verbs of Latin origin and clusters of verbs of Germanic origin in English, see *op. cit.* (1972 b), particularly pp. 34-42.

# 3. PARADIGMS AND LINGUISTIC DESCRIPTION (INFLECTIONAL AND DERIVATIVE MORPHOLOGY)

3.1. Grammatical paradigms. Creation of paradigms by the morphological process of vowel change (vowel alternation or "ablaut")

Here we are concerned with inflectional morphology and the actual creation of paradigms. Take the case of the strong verb in Germanic. Are the strong verbs of Old English, for example, mere taxonomic tables learned through experience, as one would say that a Spanish child learns  $s\acute{e}$  instead of \*sabo and supe instead of \*sabí, or are they the automatic result of the application of the phonological rules of the language to minimally specified stems? The second possibility was first launched by Anderson (1970). It was later incorporated in Lass & Anderson (1975) pp. 24-58 and 249-254. There are more specialised works available, but for a first initiation I refer the reader to Matthews (1974) pp. 216-236. Cf. also my elaborate discussion on the subject in de la Cruz (1983) pp. 376-378, specifically what I said when I expounded Lass & Anderson's theory:

"Consiste en la obtención de las vocales radicales del presente, pretérito, pretérito y participio pasado de las distintas clases, simplemente mediante la operación, debidamente ordenada, de reglas fonológicas sincrónicas (según contexto sintáctico -presente / pretérito / pretérito / participio pasado- y fonológico) sobre un elemento vocálico indiferenciado /V/... Se postula, pues, que en el caso de bindan (de la clase 3), por ejemplo, lo que pasa (procedente del léxico) al componente fonológico es /bVnd/ + las especificaciones que correspondan, y esta secuencia resultará en cualquiera de las formas de superficie del verbo bindan (bint, band, bunde, etc.) tras la aplicación del 'paquete fonológico', es decir, el conjunto de reglas de la fonología del inglés antiguo... Por el mismo procedimiento obtendremos cualquiera de las formas de superficie de sprecan (de la clase 5), a partir de /sprVc/".

Cf. *ibid.*, the complete 'paradigm' of *bacan*, of class 6, where we specify all the rules independently of the fact that some operate vacuously and do not affect their input which is therefore also their output, for the simple reason that their instructions do not recognise adequate material upon which to operate. However, in principle they all operate.

3.2. Grammatical paradigms. Creation of new words by the morphological process of suffixation to a specific item in a paradigm (suffixing operates on one particular item of the set)

Once again we are concerned here with morphology, though this time derivational instead of inflectional. But the source is an inflected item

which is itself a member of a paradigmatic set of commutable words. Whether the right form is a noun or a verb, if the source of the derivation is essentially part of a paradigm, we might have here reason enough to support the existence of paradigms in the mind of the speaker or, what is the same, the real existence of their individual constituent items. Take the case of the Spanish dialectal form \*supiendo for sabiendo. It seems obvious that \*supiendo has been taken from the preterite supe instead of from the stem of the infinitive saber, which gives the standard sabiendo. By the same token, the OE deverbal nouns cyre 'choice', hryre 'fall, destruction', lyre 'loss, scyte 'a shoot', etc., are no doubt formed from the pret. of the verbs ceosan 'to choose', hreosan 'to fall, go to ruin', leosan 'to lose' and sceotan 'to shoot'. Remember that the pret, of the aforementioned verbs is (indicative cure, curon, subjunctive cure, curen; hrure...; lure...; scute... All the deverbal nouns mentioned illustrate the rhotacism subsequent to the operation of Verner's law: \*cuse, \*cuson, etc., with [s] which becomes voiced (through Verner's law) and subsequently [r], hence cure, curon, etc. The [y] of cyre, hryre, lyre, scyte, etc., is due to the phenomenon of iumlaut as a result of an i-type nominalising suffix (the final -e) which has the effect of 'fronting' the stem vowel of the pret. of the verbs they come from. Similar is the case with deverbal causative verbs such as sprengan 'to scatter', literally 'to cause to jump', derived from springan 'spring', or drencan 'drown', literally 'to cause to drink', derived from drincan 'drink'. These causative verbs are obviously formed from the stem of the pret, of springan and drincan, namely sprang and dranc. As in the case of the deverbal nouns, here too we have the i-umlaut effect of the verbal suffix -jan on the stem which, previous to a rule of nasalization, was in the case of springan \*spræng and in the case of drincan \*drænc, hence the 'fronting' we see in the outcome of \* spræng + jan > spreng(e)an and of \*drænc + ian > drenc(e)an. Other deverval causatives are  $dr \alpha fan$  from the pret, of drifan; lecgan from the pret læg of licgan, settan from the pret. sæt of sittan; feran from the pret, or from the pret, of faran, fiellan from the pres, or from the past part, of feallan, etc., etc. Of all these the most interesting cases from the point of view of Modern English are the reflexes of the pairs OE. licgan/lecgan = Mod.E. to lie/to lay and OE sittan/settan = Mod.E. to sit/to set. Following Lass and Anderson's observations, I have dealt with this issue in detail (1983) pp. 378-379, parag. 81.4. (Psicología v lingüística). Cf. también de la Cruz (1988) pp. 49-52.

# 4. THE ANALYTIC PARADIGMS OF THE GENERALLY ACCEPTED BASE FOR ENGLISH

In de la Cruz & Trainor (1989 a) pp. 46 and ff., we have shown that a simple base for English along the lines of an AUX consisting of Tense,

Modals, perfective aspect with have -en/-ed (= PERF.), progressive aspect with be -ing (= PROG.) and passive with be -en/-ed (= PASSIVE), can generate 16 and only 16 different chains.

- 1. Tense + Main Verb
- 2. Tense + Modal + Main Verb
- 3. Tense + PERF + Main Verb
- 4. Tense + PROG + Main Verb
- 5. Tense + PASSIVE + Main Verb
- 6. Tense + Modal + PERF + Main Verb
- 7. Tense + Modal + PROGR + Main Verb
- 8. Tense + PASSIVE + Main Verb
- 9. Tense + PERF + PROGR + Main Verb
- 10. Tense + PERF + PASSIVE + Main Verb
- 11. Tense + PROG + PASSIVE + Main Verb
- 12. Tense + Modal + PERF + PROG + Main Verb
- 13. Tense + Modal + PERF + PASSIVE + Main Verb
- 14. Tense + Modal + PROG + PASSIVE + Main Verb
- 15. Tense + PERF + PROG + PASSIVE + Main Verb
- 16. Tense + Modal + PERF + PROG + PASSIVE + Main Verb

If we include affirmative and declarative negatives, the output would be 32 chains. If we also include non-interrogatives and interrogatives, then the output would be 64, and so forth and so on. For a synoptic view see de la Cruz (1989) p. 39.

We must be aware of the fact that although this provides us with a fairly normal account of the living paradigms of the English verb from the point of view of the Auxiliary, not all possible theoretical combinations are equally current and acceptable in all specific grammatical contexts. For instance, there is no such sequence as \*I can have done it as against I can't have done it which is perfectly normal. Cf. de la Cruz & Trainor (1989 a) p. 198, parag. 6.2.1. And last century, and even at the beginning of this century, the been being sequences generated according to points 15 and 16 above were hardly acceptable. Our 16 chains are but the result of historical development (still not perfectly symmetrical as we have seen in \*I can have done it).

I have been recently concerned with Middle English structures of the type *I shall mowe go*, *I shall cunne go*, etc. Cf. de la Cruz (1992 forthcoming). Here is a representative chronological table of the aforementioned type of structure following Visser's evidence:

### 'Double modals' in ME and early Mod.E.

shall mowe + inf.	shall conne + inf.	shall will + inf. mowe kunne + inf.	must kunne + inf.
(shall may + inf.)	(shall can + inf.)	+ inf.)	(must can, may can
Gen. and Ex.	Poema Morale	Ormulum	Lanfranc
c1250 Hampole	c1180 Ormulum	- Chaucer	c1400 Pecock
c1340 Wyclif	c1200 Cursor M.	- Bokenham	_
c1380 Chaucer	c1300 Hampole	1447 Caxton	
c1386 Cloud of	Ayenbite	Th. More	
Unknowing c1400	1340 Chaucer	- (should	
Paston L. 1422-1509	Cloud of	will to also in	
Chauliac's G. Chirurgie	Unknowing - Pecock	Pecock)	
c1425 Castell of Perseverance	c1445		
c1425 Caxton	(should can		
c1489 Linacre's	Caxton)		
Progymnasmatia c1512			
Th. More 1557			

These structures are no longer possible in contemporary standard English. And neither were they in existence in the Old period. I concluded that they were innovations which did not manage to become firmly established in the 'modern' language. As a matter of fact, as I have also recently pointed out (ibid.), Old English lacked the following types of structure:

- (1) Co-occurrence of MODAL, PERF and PROG (Mod.E. he may have discussed it and he may have been discussing it).
- (2) Co-occurrence of PERF and PROG (Mod.E. he has been discussing it).
- (3) Co-occurrence of PERF and PROG and PASSIVE (Mod.E. it has been discussed).
- (4) Co-occurrence of PROG and PASSIVE (Mod.E. it is being discussed).
- (5) Co-occurrence of PERF and PASSIVE (Mod.E. it has been discussed).

The study of 'analytic paradigms' should also cover (1) the peculiarities of bi-functional verbs (verbs which function sometimes as 'modals' and sometimes as 'main verbs', (2) the peculiarities of so-called semi-auxiliaries and (3) the interesting phenomena recently observed in some 'semi-modals'.

With regard to (1) cf. need as main verb in de la Cruz & Trainor (1989 a) pp. 187-188, as against need as 'modal' (ibid.) p. 88. Particularly interesting is the semantics of need (ibid.) pp. 189-190. Cf. she needn't have done so and so 'there was no need for her to have done so and so (as she has done)'; she doesn't need to have done so and so 'it is not necessary for her to have done so and so, for example, in order to qualify for a job, etc.'; she hasn't needed to do so and so 'it hasn't been necessary for her to do or to have done so and so'. The case of dare is no less challenging. We have main dare 'to challenge', we have main dare 'to have sufficient courage to do something', we have modal dare with the same meaning, and we have a 'mixed bundle', also with the same meaning, represented by such cases as she dares not do it, dared she do it? and she dared not do it. Cf. ibid. pp. 190-191.

With regard to (2) cf. the chains currently called semi-auxiliaries like used to (which used to have a present but lacks one at the present time), have to (hafta, hasta), have got to, got to (gotta), had better, had rather, be bound to (bounta), be going to (gonna) and be to. Except for had rather, the major feature in common with ordinary auxiliaries is their regular capacity to allow the passive of the complete sequence. Of course, there are other 'catenative verbs' with similar properties. Cf. the police are sure to have caught the thief, which means exactly the same as the thief is sure to have been caught by the police as against the police are sure that they have caught the thief and the thief is sure that he has been caught by the police. In the first two examples it is the speaker or reporter that possesses or reports the certainty of the arrest. In the last two examples it is the police and the thief respectively who possess that certainty.

With regard to (3), cf. the data adduced in Lass & Anderson (1975) p. 236, in connection with the influence of paradigms. We have the semi-modal structures *I go complain to...* and *you go complain to...* which appear

in fact to be imitations of the modal paradigm I may go etc. But notice that we do not have \*he goes complain or \*he go complain. It is as if go, a main verb could not follow the pattern of may or other modals in the  $3^{rd}$  p.s. because in this person go has an ending (goes) whereas the modals have not! Cf. de la Cruz (1988) p. 69.

I would like to conclude by saying that there are also other analytic paradigms worth describing. Cf. in connection with Spanish what F. Adrados (1969) p.768, has to say:

"Concretamente, E. Lorenzo ha hecho ver recientemente cómo en español, al lado de una perífrasis aspectiva bien conocida como es la de estar + gerundio, funcionan ya otras menos notadas y de igual origen: llevar + participio (llevaba marcados cinco tantos), llevar + gerundio (llevo estudiando dos años), que indican acción inconclusa; ir + gerundio (ir corriendo), de valor durativo; y otras."

Finally, the paradigmatic study of elements should not be exclusively a matter of morphology, lexicology or even basic syntax and phraseology. There are very specific points concerning the syntactical behaviour of verbs, which are largely dependant on the idiosyncratic properties enshrined in the lexicon. These also form 'paradigms' and as such should be analysed and studied. Cf. the case of what would appear to be a pure and simple lexical type like to expect and to be expected. We believe there is a syntactic paradigm here. Cf. de la Cruz & Trainor (1990) p. 409-410, note 14.

#### CONCLUSION

Paradigms are real and necessary both as 'created language' and 'creators of language' and, in consequence, the 'word and paradigm' model is still valid.

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