

**The Contribution of the Jargon Dictionary in the Construction
of a New English Lexis
Dr.Mohammed Sadek Fodil
Departement of English
University of Mouloud Mammeri – Tizi ousou**

Abstract

The article addresses the issue of lexical neology in nowadays use in computer networks and which affects English. It describes and analyzes the Jargon Dictionary, a type of English lexis used by hackers to create novel meanings in the virtual environment of computer networks. Tournier's 1985 theory of lexicogenesis is used to analyze a randomly selected corpus from the Jargon Dictionary. The analysis is meant to unveil the motivations behind the creation of some recent coinages in English, and bring to light the lexicogenic devices used by hackers, highlighting along the way the particular trend taken by English today.

Key words: *Lexicogenesis, coinages, English, computer networks, hackers.*

L'apport du «Jargon Dictionary» dans la construction d'un nouveau lexique anglais

Résumé

L'article aborde la question de la néologie lexicale actuellement en usage dans les réseaux informatiques et qui affecte l'anglais d'aujourd'hui. Plus précisément, l'article tente d'analyser le "Jargon Dictionary", qui est un type de lexique anglais utilisé par les hackers pour forger du sens dans l'environnement virtuel des réseaux informatiques. La théorie lexico-génétique de Tournier 1985; 1991 est utilisée pour l'analyse du corpus choisi aléatoirement. Cette contribution tente de dévoiler les motivations incitant à la création de quelques néologismes récents en anglais, et à mettre en lumière les dispositifs lexico-géniques utilisés par les hackers, soulignant par là-même la tendance particulière prise par l'anglais aujourd'hui.

Mots-clés: *Lexico-génétique, néologismes, Anglais, réseaux informatiques, hackers.*

إسهام قاموس المصطلحات "Jargon Dictionary" في صناعة معجم جديد للغة الانجليزية

ملخص

يعالج هذا المقال قضية التوليد المعجمي في الشبكات الإعلامية التي تخص اللغة الانجليزية، ونخص بالذكر وصف وتحليل معجم "Jargon Dictionary" الذي يشكل نمطا من الكلمات المستعملة لتوليد دلالات جديدة في المحيط الافتراضي للشبكات الإعلامية. وفي هذا السياق، قمنا بتبني نظرية تورنيي "Tournier" 1985 الخاصة بالنشأة المعجمية "la lexico-génétique" لتسهيل تحليل مدونات اخترناها بصفة عشوائية، لمعرفة دوافع وضع بعض المفردات الانجليزية الجديدة، والكشف عن الآليات المعجمية المستعملة في المحيط الافتراضي مع التأكيد على التوجه الحالي المنتهج في الانجليزية.

الكلمات المفتاحية: *نشأة معجمية، توليد معجمي، انجليزية، شبكات إعلامية، قرصنة.*

Introduction:

The paper considers the continuous renewal of English vocabulary over time. It particularly focuses on its exceptional capacity to cope with technological change such as what happened with the advent of the printing press in the fifteenth century, or more closer to us, with the development of the technological society through the Internet and its adjacent networks. It also attempts to demonstrate that English has always managed to optimize its linguistic potential by a constant regeneration of its lexicogenic processes, instead of succumbing to extensive borrowings as it did in its early days.

In the opening chapter of his 'Understanding Media', Mc Luhan insists on the relationship between the development of a technology linked to literacy and the inevitable sociological effects this has on the evolution of a given community and its language because of the change of scale or pace or pattern it introduces into human affairs⁽¹⁾. The invention of the computer with its manifold graphic possibilities has offered English exceptional latitude to evolve new ways to construct meaning. It is this particular aptitude for Today's English to use technology to create novel meaning that will be discussed.

In effect, the history of English shows that it has abundantly developed a tolerance for words from foreign sources, though at different rates, in different historical periods. In tune with other sociolinguists, Crépin⁽²⁾ maintains that loan words reflect the history of the speech community which uses them. Since borrowings reflect the history of a given linguistic community, a brief review of the history of England will be traced to document the sources of the English language. Needless to say, this is not the place to go as far back as the proto-history of English linked to the Indo-European family. So, it is more reasonable to start with what is attested in English history books like Leith's *A Social History of English*⁽³⁾, Taillé's⁽⁴⁾ *Histoire de la langue Anglaise*, and Miller's⁽⁵⁾ *External Influences on English: From its Beginnings to the Renaissance*. The common theme developed in these books is that English was brought to the British Isles by the Angles, Saxons, Jutes, later Danes, and still later Frisians, who began to settle at latest by the middle of the fifth century. All of them belonged to Germanic tribes who had previously been in contact with the Romans in Gaul and present-day Germany, i.e. the region stretching roughly from the estuary of the Rhine to the southern end of the Jutland Peninsula in eastern Denmark.

Brief history of the external influences on English:

English developed in the British Isles from the West Germanic dialects of the Angles and Saxons in contact with pre-Celts, Celts, Romans, and later Scandinavians primarily from northern Denmark. An example of a very old borrowing from Celtic is the word *bard*. Other relatively recent loanwords include *galore* and *whiskey*. In the period of contact with the Anglo-Saxons, the conflictual context, the enslavement of Brythonic Celts, especially women and the poor status of Celt discouraged any real influence of the latter on the English lexicon. Apart from a few words, like *bannock*, *brock*, *crag*, *wan*, and *ass* (ultimately from Latin *asinus*), and hydronyms (e.g. *Avon*, *Devon*) and numerous toponyms (e.g. *Canterbury*, *Dover*, *Kent*, *London*, *Pembroke*), the major influence on English has been structural. Examples are the pre-English loss of the Germanic reflexive **sik*, and the development of the simple causative / inchoative alternation of verbs of the *break* class that is shared with Celtic and differs from the expression of inchoativity with a reflexive clitic or suffix in the rest of Germanic and Romance⁽⁶⁾.

In contrast to the small number of English words of Celtic origin, English absorbed about a thousand loanwords from Scandinavian. These began with the Viking raids and settlements from c.787 through the 12th century. During the reign of the Danish King Cnut/Canute [1016–35], northeast England was known as the *Dane law*. For instance, the following samples of English words are of Scandinavian origin: *law*, *outlaw*, *husband*, *fellow*, *egg*, *window*, *knife*, *anger*, *gain*, *thrive*, *guest*, *ransack*, *skin*, *sky*. Similar to Celtic, the bulk of the

influence from Scandinavian has been on English syntax. This includes the reflexive in *-self* shared with Old Jutland Danish⁽⁷⁾.

As a result of the earlier contact between the Germanic tribes and the Romans on the continent, the migrating West Germanic tribes brought a number of words of Latin origin with them to Britain. These include such essentials as *butter, cheese, chest, dish, kitchen, mile, ounce, pound, street, wall, wine*. Additional Latin words were acquired through contacts of the pre-English settlers with the Romanized Celts in Britain. Such words include *anchor, cat, coriander, mantle, master, mortar, pail, pearl*⁽⁸⁾.

In the West Saxon tradition, translations of Latin works flourished under King Alfred. Many of those integrated learned Latin(ate) vocabulary into Old English. Later Old English writers, like Ælfric and Wulfstan, continued the use of Latin(ate) vocabulary in Old English. Terms accompanying the educational reforms include *comet, epistle, Latin, pigment, title, verse*⁽⁹⁾.

More words of Latin and Greek origin entered English during the Francogallic period following the Norman conquest of 1066. These include *angel, beef, chair, chamber, chimney, choir, clergy, hour, paper, pork, table, treasure*. Because of input from Norman and other French dialects, English has a number of doublets, like *catch/chase, guarantee/warranty*. Hughes asserts that “Words were borrowed in all domains, the total eventually numbering about 37,000”⁽¹⁰⁾. Many of the loanwords enjoy a privileged status, being stratified in a higher register than corresponding English words, e.g. *address* vs. *talk to, edifice* vs. *building*.

Latin words further streamed into English beginning with the fourteenth century, which witnessed the great European revival of interest in classical thought and language known as the Renaissance. Many of the Latinate loans have been via French. The Literary Renaissance that peaked around 1590-1600 boasts such loanwords as *aberration, democratic, enthusiasm, imaginary, juvenile, sophisticated*. English kept on borrowing from many other languages comprising Arabic, Italian and Spanish, and mostly French after the Norman Conquest. All of these borrowings helped shape what was to become in the twentieth century a most adaptive international language. Yet, in spite of the influence of many languages, French, as most scholars note, remains the most influential on English vocabulary and its lexicogenesis.

The motivation of lexical development:

Tournier⁽¹¹⁾ mentions three main incentives which motivate lexical creation, and these three factors operate either on a single basis or in combination. They are labelled as: the communication need, the law of least effort, and the playful impulse.

A. The communication need:

Tournier affirms that the fundamental role of language is to “help the user become aware of the extra-linguistic universe and communicate about it with other users.”⁽¹²⁾ The need for communication makes necessary the formation of new lexical units (novel words, functions, uses, or meanings) in response to new referents. These can be divided into two super categories based on sociological or technico-scientific criteria. “In the technico-scientific field, any new invention, any new perfecting process, or any discovery of an existing reality which used to be unknown ought to be designated by a new word (or a new) meaning. The new formations may simultaneously concern the sociological or technico-scientific evolution”⁽¹³⁾.

B. The law of law of least effort:

Such a law is the general tendency of language users to reduce the effort necessary to transmit information. When users of a language produce an utterance, and thus transmit information, some effort is required. This effort is termed “the linguistic cost”, and it has two aspects: (i) physical: articulatory for the oral utterance, muscular for the written, both requiring time, and (ii) memory, corresponding to the effort required to commit the received utterance to memory.

Any lexical element used by a speaker has first to be stored and then memorized in order to be retrieved whenever needed. Therefore, any utterance implies both a transmission of information and a cost. For the same amount of information, the higher the cost, the lower the economy. Therefore, “the cost is directly proportional to the length of the lexical units: the shorter the lexical unit, the less the effort and the greater the economy. In practical terms, one pronounces, writes, and memorizes vet more easily than veterinary surgeon”⁽¹⁴⁾. The cost, on the other hand, is inversely proportional to the frequency of use: the more frequently a word is used, the less the memory effort it requires — independent of length. Any process that permits reduction or limitation of the cost promotes linguistic economy.

Tournier also contends that five construction devices constitute the deep core of lexical creation: prefixation, suffixation, back formation, compounding, and blending. Onomatopoeia also participates in the reduction of the memory cost because of the direct motivation it implies. The same is true of the processes of functional or semantic change (conversion, metaphor, metonymy) which permit the same unit to be used in different grammatical functions or with different meanings. The prosodic processes of clipping, abbreviation, acronymy, and initialling also reduce physical and memory efforts.

C. The playful impulse:

The third motivation for the creation of new words is the playful impulse. Though it is the least important means of formation, it remains from the point of view of word production an important aspect of lexical creation. Its effects can be detected in at least twelve lexicogenic processes involving humor as the following Tournier’s⁽¹⁵⁾ examples illustrate.

Prefixation: *debeef* from *de* + *beef* (lose weight).

Suffixation: *nailarium* from *nail* + *arium* (place where hands and nails may be treated).

Back formation: *explete* (use expletives) humorously created to underlie *expletive*.

Composition: *Chiantishire* (place in Tuscany where some British aristocrats have second homes) from *chianti* (dry Italian wine from Tuscany) + *shire* (county).

Blending: *affluenza* (psychological disturbance resulting from excessive wealth) from *affluent* (wealthy) + *influenza* (contagious viral infection).

Onomatopoeia: *chugalug* (noise produced during continuous deglutition).

Conversion: *a crumbly* (crumbling person) from the adjective *crumbly*.

Metaphor: *graze* (nibble continuously) analogical to what cows do with grass.

Metonymy: *sausage* (a German) by a derogatory association of this food with a people.

Clipping: *Conchie* (conscientious objector).

Acronymy/initialling: *Lombard* (Lots Of Money But A Right Dickhead).

Borrowing: *unijambist* from French *unijambiste* (one-legged).

As can be seen, a growing number of amusing acronyms show the impact of the playful impulse in word-formation. Some have already been incorporated in the Oxford English Dictionary⁽¹⁶⁾, e.g. *Dinky* (double income, no kids), *MOR* (middle of the road), *Nimby* (not in my backyard). Given their functionality and suitability, it can be predicted that others such as *Nilky* (no income, lots of kids), *Raids* (recently acquired income deficiency syndrome) may sooner or later be incorporated too.

As Tournier⁽¹⁷⁾ mentions, “The playful impulse can be at work in the coining of new words involving a combination of processes. This shows in humoristic coinages such as *agitpop* (in analogy with *agitprop*, but expressing here the use of pop music to put across a political message), and *château-bottled socialist* (member of the left-wing Bourgeois)”. The latter coinage involves at the same time a combination of borrowing, complex compounding, and metonymy.

When surfing on the Internet, one frequently encounters new words constructed with the processes above, and which belong to morpho-semantic neology, semantic neology, or morphological neology. Morpho-semantic concerns lexical units whose novelty involves both

the signifier and the signified. The lexicogenic processes involved are: prefixation, suffixation, back derivation, compounding, blending and onomatopoeia. Semantic neology groups lexical units whose novelty involves only the signified. It includes conversion, metaphor and metonymy. Morphological neology permits the formation of lexical units whose novelty concerns only the signifier. These categories will be illustrated by the study of a small corpus randomly selected from the “Jargon Dictionary” of the Hackers, version 4.2.0, edited by Eric S. Raymond⁽¹⁸⁾ (esr@snark.thyrsus.com). It must be borne in mind that all the definitions of the terms in brackets serving as explanations to the neologies as well as the transcriptions are those provided by the Jargon Dictionary itself which can be accessed at various sites including the one presently used and which is located at <<http://www.netmeg.net/jargon/>>.

Types of neology:

I-Morpho-semantic neology:

This category is perhaps the most interesting in that it draws a clear distinction between bare simple units of words (primary lexical units) and all the other types which involve some sort of derivation, composition, or acronymy.

1. Primary lexical units: Primary lexical units are defined by their shape:

- Consonant + Vowel (CV), e.g. *tee* [ti:] (a carbon copy of an electronic transmission).
- Vowel + Consonant (VC), e.g. *ogg* [g]: in the multi-player space combat game Netrek, (to execute kamikaze attacks against enemy ships which are carrying armies or occupying strategic positions).
- Consonant + Vowel + Consonant (CVC), e.g. *chad* [æd] (the perforated edge strips on printer paper, after they have been separated from the printed portion).
- CVCV, e.g. *weenie*: (the typical weenie is a teenage boy with poor social skills travelling under a grandiose handle derivative from fantasy or heavy-metal rock lyrics).
- CCVC, e.g. *glark* (to figure something out from context); *grep* (to rapidly scan a file or set of files looking for a particular string or pattern).
- CVCC, e.g. *gonk* (to prevaricate or embellish the truth beyond any reasonable recognition).
- CVCCC, e.g. *womble* (a user who has great difficulty in communicating requirements and / or in using the resulting software; extreme case of a luser).
- CVCVC, e.g. *kiboze* (to grep the Usenet news for a string, especially with the intention of posting a follow-up).
- CVCVCC, e.g. *gorets* ‘the unknown ur-noun’ (fill in your own meaning).
- CCVCC, e.g. *cruft* (an unpleasant substance).
- CVCCVC, e.g. *Wumpus* (the central monster of a famous family of very early computer games called “Hunt the Wumpus”).
- CCVCVC, e.g. *snivitz* (a hiccup in hardware or software).
- CVCCVCVC, e.g. *menutis* (notional disease suffered by software with an obsessively simple-minded menu interface and no escape).

2. Derivative lexical items:

A. Simple derivation:

- *Prefixation*. The main recurring prefixes in *The Jargon Dictionary* express the notions of removal, novelty, recurrence, and factorization.

de- (prefix denoting removal or reversal), e.g. *de* + *hose* (a narrow channel through which data flows under pressure sometimes provoking bottlenecks) => *dehose* (to clear a hosed condition).

mega- (a factor of one million), e.g. *mega* + *penny* \$10,000 (1 cent 10⁶) => *megapenny*, used humorously as a unit in comparing computer cost and performance figures.

neo- (new), e.g. *neo* + *philia* (fondness) => *neophilia* (the treat of being excited and pleased by novelty).

re- (once more), e.g. *re* + *hi* (hello) => *rehi* (hello again).

- *Suffixation*. Suffixes such as *ectomy* are specific to medical jargon. Others like *ish* form derivatives that have been largely unaccepted in academic Standard English. Many words are coined with *ware* and other new suffixes.

age- denotes a function, condition, or state, e.g. *flame* (an abusive message distributed electronically through a computer network) + *age* => *flamage* (a high noise, low-signal postings to Usenet or other electronic fora).

-cide (act of killing), e.g. *squirrel* (agile tree-dwelling rodent with a bushy tail, typically feeding on nuts and seeds) + *cide* => *squirrelcide* (what happens when a squirrel shorts out power lines with their little furry bodies, the result being a dead squirrel and one down computer installation).

-ectomy (surgical removal of a body part), e.g. *feature* (distinctive attribute or aspect) + *ectomy* => *featurectomy* (the act of removing a feature from a program).

-er (actor, agent; person connected with some activity), e.g. *lame* (naïve or socially inept person) + *er* => *lamer* (person who downloads much, but never uploads).

-Gram (something written or recorded), e.g. *nasty* (highly unpleasant) + *gram* => *nastygram* (disapproving mail).

-ics (subject of study; branch of knowledge; field of activity), e.g. *meme* (idea considered as a replicator, especially with the connotation that memes parasitize people into propagating them like viruses) + *ics* => *memetics* (the study of memes). Memetics is a popular topic for speculation among hackers who like to see themselves as the architects of the new information ecologies in which memes live and replicate.

-bie(s) (hypocoristic, diminutive) e.g. *new* (not existing before) + *ie* => *newbie* (a Usenet neophyte).

-ify (transform or make into), e.g. *web* (the World Wide Web) + *ify* => *webify* (put a piece of material into the WWW).

-ish (having the qualities or characteristics of), e.g. *hack* + *ish* => *hackish*

-meter (unit of length in the metric system), e.g. *bogon* (the elementary particle of bogosity) + *meter* => *bogometer* (a notional instrument for measuring bogosity).

-ology (subject of study or interest), e.g. *font* (a set of type of a particular face and size) + *ology* => *fontology* (the body of knowledge dealing with the construction and use of new fonts).

-o (informal variants or derivatives), e.g. *mouse* (small hand-held device having buttons which are pressed to control computer functions) + *o* => *mouso* (an error in mouse usage resulting in an appropriate selection or graphic garbage on the screen).

-ware (manufactured articles of a specified type), e.g. *bloat* (swelling with fluid or gas) + *ware* => *bloatware* (software that provides minimum functionality while requiring a disproportionate amount of disk space and memory).

-y (state or quality), e.g. *cruft* (unpleasant substance) + *y* => *cruffy* (poorly built, possibly over-complex).

-ity (abstract or concrete entity), as in *bogosity*, which is important because -ous adjectives supposedly do not generally make -osity nouns⁽¹⁹⁾. Nevertheless, the allegedly non-existent *glamorosity* (not in the OED) gets many hits on Google, illustrating that people invent forms all the time whether or not they are recognized by lexicographers or predicted by linguists⁽²⁰⁾.

By prefixation + suffixation:

Table 1: Formation of Neologisms by Using a Prefix and a Suffix

PREFIX	+ BASE	+ SUFFIX	=>NEW LEXICAL UNIT
Auto	magic	ally	<i>Automagically</i>
Ambi	mouse	terous	<i>Ambimousesterous</i>
Dis	claim	er	<i>Disclaimer</i>

The three words in the table are composed as follows: prefix *auto* (self) + base *magic* (very exciting) + suffix *al* (relating to) => *automagically*; *ambi* (used as a suffix meaning double) + *mouse* (hand-held device used to move the cursor on a computer screen) + *terous* (used as a suffix meaning user) => *ambimouseterous* (meaning a person able to use a mouse with either hand and built on the model ambidextrous).

B– Complex derivation:

The term complex derivation has been selected because a new kind of prefix is employed with some regularity. One of these is the addition of the initial ‘e’ of the term *electronics* to a root to form a derived lexical unit. The output of this process can be used either as a noun (an *email*) or as a verb (*to email*). The spelling is variable: with a hyphen *e-mail*, or a space *e mail*, but currently most frequent is simply *email* (cf. the recent EOD and COD). Crépin⁽²¹⁾ writes that “spelling may seem arbitrary: teatime, tea-break, tea interval are all three true compounds. Actually spelling provides information about the chronology of the neology: teatime is older than tea-break which is itself older than tea interval”. It is therefore expected that if the Internet usage now accepts the three spellings, in time the block-form *email* will prevail entirely.

3- Back formation:

The more general process of ‘overgeneralization’ among hackers designates backformation and conversion. However, for clarity purposes, they will be treated separately, beginning with back formation. Conversion will be illustrated in semantic neology. One example of backformation mentioned in hackers’ jargon is *defenestrate*, created to underlie *defenestration*.

4- Compounds:

A) – Simple compounds: These coinages are formed of two independent lexical units:

Compound Nouns formed by the combination of two nouns:

Noun + Noun => Noun: *eye* + *candy* => *eye candy* (a display of some sort that is presented to losers/losers to keep them distracted while the program performs necessary background tasks); *a computer geek* (one who fulfils all the dreariest negative stereotypes about hackers); the *bit bucket* (the place where all lost mail and news messages eventually go).

Table 2: Formation of Neologisms through Compound Nouns Type 1

Noun	+	Noun	=>	Noun
Bit	+	bucket	=>	<i>Bitbucket</i>
Computer	+	geek	=>	<i>computer geek</i>
Eye	+	candy	=>	<i>eye candy</i>

Compound Nouns formed by the combination of: Noun + Verb + er => Noun:

tree killer (a printer); *cup holder* (the tray of a CD-ROM Compact Disk-Read Only Memory drive, or by extension the CD drive itself, is so called because of an anecdote about the customer who called to complain that the cup holder on his computer broke).

Table 3: Formation of Neologisms through Compound Nouns Type 2

Noun	+	Verb	+	Er	=>	Noun
Cup	+	hold	+	E Er	=>	<i>Cup holder</i>
Gender	+	mend	+	er	=>	<i>Gender mender</i>
Tree	+	kill	+	er	=>	<i>Tree killer</i>

Compound Nouns formed by the combination of Adjective + Noun => Noun:

hired [participles are not adjectives; you can’t say ‘a very hired gun’] *gun* (a contract

programmer, as opposed to a full-time staff member); *hot link* (a hot spot on a World Wide Web page; an area, which, when clicked or selected, chases an URL- Uniform Resource Locator-, i.e. a WEB address).

Compound Nouns formed by the combination of: Noun + Verb => Noun: *brain fart* (the actual result of a braino, as opposed to the mental glitch that is the braino itself).

Compound Adjectives formed by the combination of: Noun + Adjective => Adjective: *brain dead* (brain-damage in the extreme, generally implying terminal design failure rather than malfunction or simple stupidity).

Compound Adjectives formed by the combination of: Adjective + Adjective => Adjective: *copious free time* (Time reserved for bogus or otherwise idiotic tasks).

Compound Verbs formed by the combination of: Noun + Verb => Verb: *cross post* (to post a single article simultaneously to several newsgroups).

B)– Complex compounds: First level

First level complex compounds are so labeled because they are built from a lexicogenic process combined with an existing lexical unit.

Clipped form + lexical unit e.g.: (*cyber*) back clipping of cybernetics + lexical unit *space* => form *cyberspace*.

Lexical unit + acronym, e.g. lexical unit *Plain* + acronym *ASCII* => *plain ASCII*.

Acronym + lexical unit, e.g. *FISH* Acronym of ‘first in, still here’ +lexical unit *queue* => *FISH queue*, a joking way of pointing out that the processing of a particular sequence of events or requests has stopped dead.

Loan word + lexical unit, e.g. Russian *nyet* + lexical unit *work* => The *nyetwork*, a network that is acting flaky.

This process is different from clipping, because it involves the combination of two lexical units, of which one is clipped while the other is not. It cannot be considered a simple blend either, because it uses a loan word which is itself a lexicogenic process.

C)– Complex compounds: Second level

In second level complex compounds, both elements of the compound are outputs of a word formation process. However, the coinages behave in this particular process as if they were simple primary lexical units, which unite to form one new lexical unit that expresses a novel linguistic reality. The possible combinations of processes concerning second level complex compounds are as follow:

The acronym SIG, written upper case characters stands for *Special Interest Group*, and it can be combined with a clipped word form to build a new word e.g.: SIGARCH, (SIG + back clipped form of architecture, ARCH) => SIGARCH for computer architecture.

Derivative lexical unit + compound, e.g. {*dick* + *less*} + {*work* + *station*} => *dickless workstation*, an extremely pejorative hackerism for (diskless workstation), a class of botches including the Sun 3/50 and other machines designed exclusively to network with an expensive central disk server.

Blend + derivative lexical unit, e.g. *Internet exploiter* / *exploder*.

Acronym + suffix, e.g. *GNUbie* from (Gnu’s Not Unix).

These highly economical linguistic devices illustrate hackers’ proclivity to turn everything to account, i.e. to say the most with the least, as long as comprehension is guaranteed within their circle. The evident gain in time, space, articulation, and memory effort, coupled with a certain touch of humor, makes this ingenious device both productive and pleasant.

5– Blends:

In The Cambridge History of the English Language⁽²²⁾, Suzanne Romaine, quoting Pound, 1914, and Algeo 1977 writes that blending which is “the combination of two or (more) etyma with omission of part of at least one etymon, is a minor, although fashionable technique for forming new words”. Its most obvious form is the portmanteau, which may involve the

overlapping of sounds (*motel* from *motor* and *hotel*), the overlapping of letters, (*smog* from *smoke* and *fog*), or no overlapping of any kind (*brunch* and *Oxbridge*).

Miller⁽²³⁾ argues that “the input constituents of blends are selected and sequenced for pragmatic, extralinguistic and in some cases, sound symbolic reasons, all with a view to compositional transparency of the input which is prosodically constrained”. For the meaning of the blend to be captured, either one or more than one syllable from the first element, and a segment or the word of the second element are telescoped.

Table 4: Formation of Blends

Noun	+ Noun	=> Noun
Crap	+ applet	=> <i>crapplet</i>
Garbage	+ rubbish	=> <i>gubbish</i>
Inter	+ network	=> <i>Internet</i>
Microsoft	+ android	=> <i>microdroid</i>
Network	+ etiquette	=> <i>netiquette</i>
Program	+ orgasm	=> <i>progasm</i>
System	+ operator	=> <i>Sysop</i>

The following blends are clear illustrations of hacker’s jargon: *crapplet* (a worthless applet); *gubbish* (nonsense); *Internet* (the network of networks); *microdroid* (a Microsoft employee); *netiquette* (the conventions of politeness recognized on Usenet, such as avoidance of cross-posting to inappropriate groups and refraining from commercial pluggery outside the biz groups).

It should be noted that blends of the type Noun + Noun => Noun is the most productive probably because it requires less memory effort to be understood and remembered than the following ones.

Verb + Noun => Verb, e.g. *gritch* from *gripe*+*bitch*; *spamvertize* from *spam*+*advertise*;

Verb + Verb => Verb, e.g. *spungle* from *spangle*+*bungle*;

Adjective + Noun => Noun, e.g. *lexer* from *lexical*+*analyzer*; *techref* from *technical reference*.

The exceptional power of a blend to build complex meaning has made of it one of the hackers’ favorite ways of creating new lexical units. It is both economic and transparent.

6- Onomatopoeia:

Despite the differences of their definitions, linguists generally share the view that onomatopoeia involves some imitation of a sound since “a word is coined and conventionalized in imitation of our conceptualization of sounds in nature or the environment”⁽²⁴⁾. In the Jargon Dictionary, some coinages are formed on the basis that they reflect more or less the supposed sonority of the objects they represent. An example of this type include: *feep* (the soft electronic ‘bell’ sound of a display terminal). Yet, as could be expected in Computer Mediated Communication, onomatopoeia remains more of an exception than a rule.

II- Semantic neology:

As defined earlier, this macro-mechanism involves conversion, metaphor and metonymy.

1- Conversion:

This process, together with backformation are labeled overgeneralization by hackers e.g.: *a mouse*, N => *to mouse*, V ; *a toad*, N => *to toad*, V (notionally, to change a MUD player into a toad).

2- Metaphor:

Metaphors seem to be one of hackers’ favorite playgrounds wherein they give free rein to their playful impulse. This lexicogenic process, aside from the great freedom of expression it

permits, makes the coinages more easily understood by analogy, and participates obliquely in the reduction of the linguistic cost of communication.

The metaphoric process of which Hymes⁽²⁵⁾ says that it “is basic in rendering experience intelligible”, involves all types of lexical units: nouns, verbs, adjectives, etc. Miller⁽²⁶⁾ claims that “Metaphor and metonymy are the most basic types of neologistic assignment of word meaning”. In this respect, an extensive metaphoric use of animal and insect nouns can be noted in the Jargon Dictionary as the following examples show: *boa* (any of the flat cables that lurk under the floor in a dinosaur pen); *dinosaur pen* (a traditional mainframe computer room complete with raised flooring, special power, its own ultra-heavy-duty air conditioning, and a side of Halon fire extinguishers); *snail mail* (paper mail, as opposed to electronic); *worm* (a program that propagates itself over a network, reproducing itself as it goes).

Another field of inspiration seems to be the nouns related to food as the following examples attest: *cookie* (a handle, transaction ID, or other token of agreement between cooperating programs); *dogfood* (interim software used internally for testing); *flavor* (variety, type or kind); *meatspace* (the physical world, where the people living creatures live, as opposed to cyberspace); *phage* (literally ‘eating’ [from Greek], a program that modifies other programs or databases in unauthorized ways; especially one that propagates a virus or a Trojan Horse).

Hackers also build metaphors using adjectives such as: *asbestos* (used as a modifier to anything intended to protect one from flames); *brain dead*, *catatonic* (describe a condition of suspended animation in which something is so wedged or hung that it makes no response); *fried* (non-working due to failure; burn out); *hairy* (extremely complicated); *rude* (badly written); *wombat* (applied to problems which are both profoundly uninteresting in themselves and unlikely to benefit anyone even if solved). However, although verbs are seldom used in this process, the following are noteworthy: *despew* (to automatically generate a large amount of garbage to the net; *die* (to crash); *dehose* (to clear a hosed situation).

Aside from these primary lexical units, some other metaphoric expressions have been noticed, which function mainly as nouns. For example: *angry fruit salad* (a bad visual-interface design that uses too many colors); *Chernobyl packet* (a network packet that induces a broadcast storm and/or network meltdown, in memory of the April 1986 nuclear accident at Chernobyl in Ukraine); *cook book* (a book of small code segments that the reader can use to do various magic things in programs); *eye candy*; ([from mainstream slang “ear candy”] A display of some sort that's presented to users to keep them distracted while the program performs necessary background tasks); *laser chicken* (Kung Pao Chicken, a standard Chinese dish containing chicken, peanuts, and hot red peppers in a spicy pepper-oil sauce.) Sometimes, these lexical units are used as adjectives as for example, *user-friendly* (generally used by hackers in a critical tone, to describe systems that hold the user's hand obsessively).

3- Metonymy:

The metasemic process of metonymy is less productive than the metaphoric one but it has produced items like “hack” through semantic narrowing, probably because of the attributes associated with the community. Other examples of metonyms are: *the web*, to refer to the Internet in general, or the computer *bug* to refer to computing problems in general.

III- Morphological neology:

1- Clipping:

Clipping here is distinguished from blending inasmuch as it forms individual autonomous lexical units, while blends require two clipped items to build a single one. Miller⁽²⁷⁾ defines clipping as “an expressive shortening of words by truncation of some part, most frequently at the right edge, as determined by stress and output prosodic factors”. Some items in the Jargon Dictionary involve also truncation at the left or right edge but no example of medial clipping is found in the corpus. This is probably due to the same reason as for metonymy. It

presupposes too much closeness to the culture. However, though rare in number, both back and front clipping processes are illustrated by the following examples.

Back clipping: *Net* (network); *cyber* (cybernetics); *sync* (synchronize);

Fore clipping: *bot* (robot); *droid* (android);

2- Initialling and acronymy:

Initialing

By initialing is meant the process of abbreviation that consists in the reduction of a sequence of words into their initial elements. (The initials of articles and prepositions are omitted). It should also be noted that this process is not subject to morpho-phonological constraints since it is pronounced letter by letter.

Examples are *I.B.M.* (International Business Machines) and *M.I.T.* (Massachusetts Institute of Technology).

Two letter initialing

AI: (Artificial Intelligence); *SO*: (Significant Other, used to refer to one's primary relationship, especially a live-in to whom one is not married); *VR*: (Virtual Reality)

Three letter initialing

AFJ: (April Fool's Joke); *AFK*: (Away From Keyboard); *BTW*: (By The Way); *BBL*: (Be Back Later); *BBS*: (Bulletin Board System); *TLA*: (Three Letter Acronym).

Four letter initialing:

SFLA: (Stupid Four Letter Acronym); *IIRC*: (If I Recall Correctly)

Alphanumeric initialing

Y2K bug: (Year two thousand problem), where Y stands for Year – 2 stands for – two – K stands for – Kilo – and bug which refers to the problem that operating systems like Windows were supposed to encounter on the passage from the 31, December 2000 to the first January 2001. This expression has an equivalent, which is: *W2K bug*: (Windows two thousand year bug)

ID10T error (tech-support people passing a problem report to someone higher up the food chain may ask the user to convey that there seems to be an I-D-Ten-T error)

3- Acronymy:

When an initialing conforms to the morpho-phonological constraints, it is pronounced as an ordinary lexical unit and thus becomes an acronym. Tournier⁽²⁸⁾ points out that the morpho-phonological constraint is exerted at two levels:

- At the first level, it is exerted on the pattern of the phonological realization of the sign defined in terms of consonant (C) and vowels (V). For example building words on the following models /C/, /CC/, /CCC/ is impossible in English whatever the consonants. However, other models such as /V/ (*awe*: /:/, /VC/ (*off*: /of /), /CVC/ (*rat*: /ræt /), /CVCV/ (*baker*: /beik /) etc, are possible.

- At the second level, the constraint is exerted on the choice of consonants and vowels in a given pattern. For example, in a CCCVC pattern, only the following initial consonant clusters are possible: /spr/ as in *spread* /spred/, /str/ as in *strike* /straik/ or /spl/ as in *split* /split/, or /skr/ as in *scream* /skri:m/. No other three consonant initial clusters are allowed.

Therefore, by acronymy is meant the variety of abbreviation which distinct from initialing because it is pronounced as an ordinary lexical unit and because it also conforms to the morpho-phonological constraint. Acronyms are sometimes written in lower-case characters, behaving like any other lexical item, e.g. *radar*, *sonar*, *laser*. As mentioned above, this process is highly productive since it combines the three motives of lexical development. It should also be mentioned that the classification adopted here is purely arbitrary, since it is based only on the number of letters used to coin acronyms.

Three letter acronyms.

BAD (Broken As Designed); *FYA* (For Your Amusement); *JAM* (Just A Minute).

Four letter acronyms

BOFH (Bastard Operator From Hell); *BLOB* (Binary Large Object).

Five letter acronyms

AFAIK (As Far As I Know); *ASCII* (American Standard Code for Information Interchange).

WOMBAT: (Waste Of Money, Brains And Time)

Seven letter acronyms

WYSIWYG: (What You See Is What You Get).

Eight letter acronyms

TMTOWTDI: (There's More Than One Way To Do It)

Nine letter acronyms

TANSTAAFL: (There Ain't No Such Thing As A Free Lunch) .

- ACRONYMS

That are close in meaning to similar acronyms

AIDS (An Infected Disk Syndrome / Acquired Immune Deficiency Syndrome).

Those that are similar to existing lexical units

BAD (Broken As Designed)/(the Adjective bad); *BLOB*(Binary Large OBject)/(a blob, Noun); *W.O.M.B.A.T.* (Waste of Money, Brain and Time) and a wombat (the Australian marsupial that burrows holes in the ground)

Abbreviation and number

ROT 13 (ROTate alphabet thirteen places), the simple Caesar-cypher encryption that replaces each English letter with the one 13 places forward or backward along the alphabet, so that “the butler did it!” becomes “Gur ohgyre qvq vg !”

Other examples of complex acronyms are illustrated below:

(Acronym + suffix) + lexical unit, e.g. *ASCIIbetical order* indicates that data is sorted in ASCII collated order rather than alphabetical order .

Alphanumeric combination + lexical unit e.g.: *W2K bug* (Windows Two thousand bug).

Acronym + graph. This device is mainly used to coin puns for fun purposes to insist on the heavy financial aspect of the concerned companies, e.g. *CI\$* (CompuServe Information Service); *M\$* (Microsoft).

4- Loanwords:

As mentioned above, English is today the major source from which other languages borrow lexis related to technology and it appears therefore logical that being the leader in the technological field it borrows very few items. However, the fact that there are hackers in several parts of the world, who in addition to their respective mother tongues speak other foreign languages besides English, and considering the multiethnic/lingual type of hackers' community, and the frequent and long-lasting interactions between its members and their high cultural levels, it is not surprising to find some loanwords in the *Jargon Dictionary*.

The context of Internet communication entails a differentiation at the level of the message itself, which has to be structured in such a way as to meet the expectations of the community to which it is intended. That means that the message should tend towards clarity, brevity, compactness, usefulness, and preferably, take on a spoken-like character. Coate⁽²⁹⁾, one of Usenet elders, clarifies this aspect “On-line conversation is a new hybrid that is both talking and writing, yet isn't completely either one. It's talking by writing”. Brevity, compactness hybridity and immediacy are features of today's communication and the *Jargon Dictionary* is a major source that feeds today's English lexis. Because the reviewed processes aim at producing the greatest amount of meaning with the least possible means, it can be affirmed that this new expressive way extends man's possibilities of expression.

Conclusion:

It is not by chance that the English language leads in the field of Net English. A number of factors converged to make English the language of the new technologies. To Crystal⁽³⁰⁾

“English was in the right place at the right time”. It holds this position because of historical and economical reasons. Eventually of course, English has become the language of the Internet because the Internet was born in the USA, an English-speaking country. This historical position as the language of technology is what enabled English to respond to the call of the information age and make the necessary linguistic accommodation to fit the needs of this worldwide socio-economic change. This view is shared by Graddol⁽³¹⁾ who considers technology as one of the major producers of both social and linguistic change. A point shared by Mc Luhan⁽³²⁾ to whom a new medium always disrupts the organization of whole communities.

With the advent of the Internet, the lives and languages of all humans are disrupted. We are the current witnesses of how the Internet is imposing linguistic standards on the way we read, write and speak English. Clearly, Internet is imposing new standards on both the form and content of English, and the hackers have undeniably contributed a great deal to the advent of this technology and to the new type of English discussed in this work. In that respect, this paper can be regarded as an attempt to highlight the dawn of the new Empire of English as both receptacle and actor of this latest human adventure. It has analyzed one of its new varieties, the Internet jargon of the hackers born out of the association of English with the new information medium of the Internet.

The hackers evolve in a technological environment whose specificities compel them to do and say the most with the least means. It is true that linguistic economy and clarity are two fundamental criteria in language production in general, but in the *Jargon Dictionary* they have come to assume another dimension, because the jargon of the hackers is mediated through a technology whose basic philosophy consists in compactness, hybridity, immediacy, transparency, and fun. These properties endow it with a particular flavor never experienced before. It is then no wonder that compacting ideas and thought into suitable novel lexical units has brought out a high level of linguistic creativity in hackers' language, employing a wide range of lexicogenic devices supported by transparent processes in their construction. This is probably the new direction the shape of English is taking.

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