Abstract
If words were principally invented to convey human meaning, it can also be reasonable to affirm that over time, they substantially grow in morphological complexity to cater for the subtle details of evolving human condition. When writing was invented, different materials were designed to serve as locus for the ever increasing words being coined to satisfy the unending interaction needs of the various human communities. Some carved words in clay, others in parchment, leather, rock or other stuff, each time committed to preserve in the stored words and sentences, the different memories what were deemed important to bequeath for later generations. However, as human knowledge has continuously augmented in both quantity and quality, especially since the invention of the printing press, even thick books proved unfit to store amounts of knowledge which have exponentially evolved with the increase of published books around the planet. The change of knowledge storage from a physically situated to a virtual transient locus has started impacting word shape and its storage capacity by exploding the supposed stability of word units. Too much production of knowledge requires more sophisticated management tools, and linguistic structures principally words, are increasingly requested to accommodate the newly constructed realities by adopting coinage structures better fit to account for hypermodern expressions. In this paper, we argue that new knowledge representation constructions labelled ‘componyms’ like those listed by NetLingo are being invented to fulfil this task. The aim of this contribution is to demonstrate that these ‘componyms’ which are not built from phonemes like ordinary lexical items, but from MICUs (Minimal Informational Cooperative Units) appear more suited to answer the new linguistic needs of the knowledge society.

Keywords: complex meaning, complex words, storage capacity, knowledge society

Introduction
Though the linguistic community at large does not seem much receptive to the important changes currently taking place in the English language lexicon, notably as concerns its lexicogenic structures, we consider with sociolinguists and cognitivists that language use is a necessary and sufficient condition to elaborate on the state of a given language. In this respect, the article holds that given the information overload which characterizes today’s knowledge society, it appears an emergency to use optimally the resources offered by natural language, specifically English, to code information in novel linguistic units better fit to store more knowledge in tiny structures, in place of the ordinary words built from phonemes into monemes.

Objective
Because the interconnected village is evolving rapidly, inciting new exchanges of all kinds between netizens, thus creating new realities that need to be informed by language, and observing the late reaction of the linguistic community to respond to the expectations, the purpose of the research is to attract researchers’ attention toward the importance of considering the issue at stake, and toward the emergency to devise appropriate lexicogenic structures, liable to answer the linguistic needs of the information era.
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Research Question
Since it is language which carves order out of chaos by representing knowledge in structured words which build new mental spaces along the way, and considering the unprecedented capacity of humans to both produce new knowledge and disseminate it further and further, how can linguistic tools accompany this unprecedented creativity? In other words, how is it possible to put some linguistic order in the information chaos resulting from the rapid boom of technological development?

To answer this question, we posit that new lexicogenic devices like componyms are able to cater for this want because of their specific capacity to store larger amounts of knowledge in highly economical linguistic structures.

Theory
Humboldt (1999) early pointed out that the principle behind grammar was the infinite use of finite media. That is, humans use a limited number of phonemes to build words combining together to construct an infinite number of utterances, bearing in mind that whatever their other intents, need for intelligibility remains the driving force, as the purpose of all expression is to communicate some meaning with the lowest possible noise. To speak then, one needs to utter speech sounds which take the form of words, which in their turn combine into sentences. Production of words requires knowledge of the rules of language (knowledge of the phonetic-phonological, the lexico-semantic, and the morpho-syntactic systems, in addition to the pragmatic knowledge linked to the situation of communication), and physical capacity to articulate the speech sounds into meaningful strings liable to be understood as words. A writer uses the same information to convert knowledge into chirographic, or now, into typographic and even into multimodal sentences.

The theoretical framework set up by Humboldt and later developed by other scholars, consisting in making use of the least means to build the most complex sentences will serve as a general guideline to the following argumentation.

Methodology
The research is a qualitative study of a new linguistic phenomenon and in order to spotlight the issue to be discussed, we start from Fauconnier’s pronouncement that language does not "represent" meaning; it prompts for the construction of meaning in particular contexts with particular cultural models and cognitive resources. This subtle distinction permits to shift linguistic interest from language seen as a linear stable relationship between signifiers and signifieds, to a more dynamic interaction between the components of a language involving a greater participation of the reader.

From another perspective, it appears also worth reminding that mental spaces are defined (Fauconnier 2003) as small conceptual packets constructed as we think and talk, for purposes of local understanding and action. They are very partial assemblies containing elements, and structured by frames and cognitive models. They are interconnected and can be modified as thought and discourse unfold. Although Fauconnier focuses mental spaces on grammar, we shall argue for our part throughout this paper that the lexicogenic process labelled componymy also participates in building new mental spaces, but in the tiny linguistic space offered by vocabulary instead.

Literature review
Lumsden (Kerckhove, 1988) once contented that human memory tends to organize both continuous and discontinuous impressions into discrete clusters.....The brain speeds
processing further by compounding the clusters hierarchically into larger assemblages, we assume for our part that to perform this cognitive activity of storing knowledge, humans make use of the best tool at their disposal, language, to produce organized sentences which are themselves composed of smaller both structural and functional units called words, and that words permit both construction and expression of the ‘discrete clusters’ that we equate with Fauconnier’s ‘mental spaces’. Hence, if as Brandt (Brandt 2004) suggests, Any mental construction is to be understood as a complex MSN (Mental Space Network) architecture, corresponding to integrative processes in the mind that semantic research will elucidate, then it becomes urgent to consider the recent contribution of componymy to the construction of new mental spaces made possible by hypermodern condition, featured by a plain inclination toward speed, brevity, conciseness and economy.

In his analysis of French users of SMSs, Jacques Anis (Anis, 2007) recalls that any goal, functionality, or limit of a communication system can be seen as a constraint. The author also mentions a number of constraints that shape mediated communication. They consist in economic, technical, communicative, linguistic, and psychosocial constraints. Accordingly, if speech is constrained by the specificities of the vocal organs which eventually shape the puff of air coming out from the lungs, the constraints identified by Anis also contribute to shape computer mediated communication (CMC). However, difference in constraints induces difference in both shape and consistence of words and sentences. Therefore, one ought not to be surprised to encounter within CMC complex linguistic structures which differ both structurally and technically from the ordinary linear linguistic structures which are based on the double articulation of language. As will be developed, these constraints have a significant impact on current word formation processes which now resort to novel lexicigenic processes making use not of phonemes but of MICUs.

In his reconstitution of all lexicogenic structures in English, Tournier (Tournier, 1991) explains that when the user of a language produces an utterance, and thus transmits a piece of information, he needs to make an effort. The effort it costs him is what is meant by the linguistic cost- it bears two aspects: 1- A physical aspect (articulatory for the oral utterance, and muscular for the written one, both requiring a certain length of time). 2- A memory aspect, corresponding to the memory effort. Production of speech requests efforts then, and the task of people is to preserve the communicative potential of utterances by trying to reduce the cost of these efforts. A practical linguistic tool at our disposal is to use abbreviations amongst other economical lexicogenic processes.

Ingo Plag (2002) limits complexity of coinages to complex affixation and complex compounding, but does not mention complex acronymy. Similarly, Zamira (Metaj) Alimemaj discusses Web Language and Word Formation Processes on Slang Words, but mentions only simple acronyms, while she limits the use of complex ones to SMS prompts. Gary Miller (Miller 2014) reminds that need is the mother of all inventions, and confirms that lexicogenesis is defined with reference to the operations involved in creating words, and mentions a number of processes. Likewise, in his elaboration of the Encyclopedia of the English Language David Crystal (Crystal, 2003), mentions the following processes: affixation – conversion – compounds – back formation – blends or portmanteau words, and curiously classifies acronyms as a type of abbreviation. The focus will thereby be put on this type of word formation processes labelled acronymy but whose definition stills lacks precision and thoroughness, to show that an acronym, and more specifically a complex acronym, or, better, a componym requires more cognitive effort for both its coding and decoding than a simple abbreviation.

The Online Oxford English Dictionary (online reference) defines an acronym as a word formed from the initial letters of other words, without further detail. Yet, given the broad
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variety of this highly productive process for the generation of new ‘mental spaces’ and where more meaning can be stored, it could be interesting from the theoretical standpoint to offer a wider and more updated definition for acronymy, especially since a remarkable feature characterizes acronyms and permits their evolution into componyms. This feature is their capacity to build up a composite structure capable of being incremented, and which can blend letters, numerals, and symbols, thus, fulfilling all the necessary conditions to adhere to a concept such as neography viewed here as ‘unconventional spelling for word formation, or as a synthetic system of writing.’

In a previous article (Fodil, 2010) we explained the difference in articulation between the production of a simple lexical item and that of an acronym. A strict distinction was then made between simple acronyms and more complex ones, called componyms. A further distinction was made to explain the difference in ‘nature’ between ordinary lexical units built from phonemes, and componyms which are not built from phonemes, but from MICUs (Minimal Informational Cooperative Units). It was also argued that contrary to simple ordinary words, componyms require a triple articulation of language instead of two. This phonetic attribute which is specific to MICUs, in addition to their remarkable ability to integrate other units than letters (numerals as in ROT13 standing for ‘rotate alphabet 13 places’, B2B & B2C, standing for Business to Business and Business to Consumers, a numeral and a suffix as in CUL8er for See You Later, a mathematic symbol as in I <3 U for I love you, or even a genuine electronic symbol like & as in Business & the Speed of Thought) requires the use of an additional articulation of language, absent from ordinary lexical units.

In another article, (Fodil, 2016) we mentioned a new trend in the evolution of language today which involves in electronic media a fourth stratus which requires a triple articulation of language, and which consists in the naturalization of complex acronyms labelled ‘componyms’. To defend this hypothesis we resorted to Logan (Logan, 2006) who explains that it is by means of language that man transforms the outside chaos into internal order, by devising words representing concepts, which, in their turn, structure the external world into cognisable units. Logan (Idem) referring to Prygogine, argues that a new level of order emerges out of chaos, which in the case of languages manifests itself as an information overload. The new level of order that emerges to handle the information overload is a new form of language. With the tremendous development of communication means, notably the networked computer and the mobile phone, information travels like never before, and reaches areas where no precedent communication means has ever entered. This chaotic continuous flow of information, sometimes turning to info-pollution or infobesity has brought about an information overload which is very difficult to manage with the existing linguistic tools, and a new form of language is thus required to organize this information into intelligible structures. As will be argued now, this new form of language, instead of combining phonemes into morphemes which, on their turn combine into more complex sentences, use MICUs to form complex componyms liable to express the same amounts of knowledge expressed by the ordinary sentences.

Findings

To illustrate the necessity for linguists and language users to coin words that can store the greatest amounts of information in the shortest possible space, using the least possible linguistic tools, an analogy with late Ninety Century sky-scrappers, or with more recent multi-storey car parks which responded to a crucial space management want seems to be appropriate. Actually, brevity, speed, conciseness and economy, seem to be permanent human traits, but in hypermodern times, and notably since the advent of the networked computers, they seem to have become the dominant ones in the conduct of human affairs.
This tendency to make the most with the least means, in the fastest possible way, and at the lowest cost, has regularly oriented human activity, effort, and creativity. An interesting way to illustrate this human penchant would be a brief comparison between humans’ desire to move always faster through space, each time designing new technologies liable to meet their growing needs for communication, and their desire to express new meanings faster, using more and more economic linguistic devices. The new lexicogenic process labelled ‘componymy’ permits to store several layers of meaning within a linguistically reduced space, as a response to internet users of English who seem to lack suitable linguistic structures to put some order in the linguistic chaos created by present day information overload.

Human history is rich with evidence supporting this trend. Indeed, from the invention of the wheel, to the steam engine, to the automobile, to the electric train, and the supersonic plane, from the first working telegraph in 1816 to the first telephone call by Bell in 1892 to the first radio messages in 1910, to the cellular or satellite mobile phone, and from the first carrier pigeons to snail mail deliverers, to instant emails, humans have always tried to communicate better and faster, with the least means and at the cheapest possible cost. Likewise, from the first words uttered in the language that was to become English, which, like most natural languages is based on the combinations of phonemes conforming to the emerging phonotactics of Old English, and up to the use of the first acronyms in the 1940’s in Modern English, the language has known a significant evolution, part of which is due to its various lexicogenic processes, all aiming at producing or refining meaning induced by the increasing communication needs of the users of English over time.

The answer to the research question posited in the introduction is equally simple: through linguistic creativity it is possible to answer the linguistic needs of the information era. Indeed, just as writing surfaces impose linearity on writing and print, virtual space which is not restricted by these constraints promotes multidimensionality. Given their virtual nature, and because they do not dwell in physical space, and are not dependent on ink supplies, words in cyberspace can afford themselves a greater freedom of construction. In electronic writing, this feature places MICUs in a sort of vantage point for the integration of items (both linguistic and non linguistic) that do not belong to one particular alphabet, in order to map successive layers of meanings in new mental spaces, and display them as a unified whole.

It is also attested by use, that the addition of non linguistic elements to a word structure to build coinages is now being accepted by different languages (French, Spanish, German, Swedish, Arabic, etc.) It works as if the global character of the internet, a virtual medium but which is no less primarily a written medium attenuates the differences between systems of writing, by getting them to share more common features, despite, or maybe because of the imposing dominance of English in this new medium.

Discussion

As a matter of fact, even mathematical equations originate in the necessity to reduce the amount of time and effort used to express equivalence. Indeed, a mathematic expression like \( X = 2Y \), is worth an explanation using several sentences in natural langue. In other words, the function of a mathematical equation is to embed an expression in the form of symbols and whose normal chirographic production would require lengthy phrases, with the least possible characters. That is, mathematical equations serve to reduce the number of characters needed for the expression of a long sentence, and componyms seem to be a perfect illustration of this cognitive activity.

The unique flexibility of the structure of componyms affords them a remarkable capacity to store meaning at a scalable dimension beyond linearity (since each MICU that
compose it represents a semantic level), exactly like hypertext links in a network system. The MICUs unfold in dynamic scenarios that conflate to stabilize in a unique but complex whole. In fact, componyms unfold in a syntagmatic structure which comprises several paradigmatic ones, each providing information on its object, but which, as a whole form a complex coherent sign. When read as caption, a componym displays an iconic image which gives it a genuine appearance and facilitates its learning. Its repeated use consolidates its neural recruitment and it ends in human memory like any other internalized neuronal circuit but with the notable exception that its layered structure requires more neuronal activity.

Another feature of electronic writing is shared by both complex acronyms and hypertexts. This concerns the absence of linearity in which they unfold. Indeed, since the structure of a componym as well as that of a hypertext are non-linear from the onset, their unfolding, involving both brevity and speed requires a cognitive dimension in reading, superior to the one involved in the simple linearity of ordinary lexical items. In fact, both componyms and hypertexts involve a shift from linear, to network thinking. Concerning componyms, their inner structure functions as if each MICU were a node exactly like a hypertext node indicates an IP address. For instance, each MICU in a componym like a ‘GOOD Job’ (Good Out Of Debt Job), or a ‘WOMBAT’ (Waste Of Money, Brains, And Time) implies the enactment of relations only valid within the context of the internalized componym. Truly, componyms request from the reader an additional cognitive effort, comprising a metalinguistic activity during the reading process, for a thorough understanding. The cognitive operation performed consists in transporting (figuratively) the reader from one closed dimension to an open one.

Indeed, by deciding to use written graphs to represent elements of thought about five thousand years ago, the first Sumerians invented a semiotic practice that considerably formatted the later expression of meaning. Human knowledge found good expressive space in the alphabetic systems that flowered around the globe, providing singularity to each and every phonological system in use in a geographically situated territory. As Walter Ong (Ong, 2002) puts it, writing distances the word from sound, and allows for more abstraction. In other words, a literate person is endowed with cognitive possibilities liable to introduce some distance between language as an object of study and language as mediator. An illustration of this argument is when a non literate person but fluent speaker of their native language is asked to comment on the relationships between, say the adjective and the verb, or the transitivity of some verbs. Despite a complete mastery of speech, a non literate person would not be able to explain such inner linguistic relationships which request a high order of abstraction.

Ong (Idem) adds that Technologies are not mere exterior aids but also interior transformations of consciousness, and never more than when they affect the word. Such a pronouncement means that technologies influence the manner in which people think, and therefore increase the difference between literate and non-literate people. This second stance, which is a further development of the first, deserves a thorough attention. It means that the way words are conceptualized impacts on the manner in which they are being used, and thus on the manner in which we think and express our thoughts. In other words, Writing offered speech a further dimension together with the possibility to distance the producer of a text from the text itself, and thus proceed to conscious metalanguage, that is, it separates the knower from known. This important change in the medium of expression also changes the way people think, and the appearance of componyms only accentuate this change.

Each literate community tried its best to use specific alphabetic writing systems and store its knowledge in the available physical means at their disposal. With the growing complexity of human evolution, thanks to human encounters due mainly to commerce,
expansion through exploration, wars, dissemination of information or merely through travelling, humans came to better know about each other so much that in the Twentieth Century, they invented the internet.

**Limitations**

The present paper has investigated only the type of componyms used by netizens, and it could be very fruitful to generalize it to SMS users to better measure the trend taken by English lexicogenesis. Besides, though the trend taken by the construction of componyms remains rather marginal, the necessity to answer today’s communication needs amply pleads for an increasing appeal for the use of componyms.

**Recommendations**

As a consequence, and given their unique flexible character, we propose the inclusion of componyms to the wider area of neography, and this can be justified by a number of arguments:

- Componyms are the latest word formation process to integrate the lexicogenic processes of English. Componyms do not conform to the double articulation of language as defined by Martinet, because contrary to other word formation processes, componyms are not built from phonemes but from initials of words.
- Because of this feature, componyms can grow in complexity correlatively to the complexity of the meanings they are commissioned to express. It is the flexibility of their structure which permits a better modularity of coinages.
- Componyms lend themselves both to inflection and derivation, and thus behave as simple lexical items.
- Componyms are capable of being incremented on need, and thus evolve continuously.
- In addition to their acceptance to combine initials of words (whether consonants or vowels), and abbreviations of words, componyms can also be formed from the association of letters and numerals, of emoticons, of letters and symbols like @, &., £, $, etc. This flexibility testifies to the ability of a componym to optimize its semiotic potential by integrating visual items which provide additional information to the reader about the external referent it represents.
- Maybe a precision ought to be added here concerning the “writingness” of componyms, especially concerning their ability to build and express a bundle of meanings. We recall that writing is first and foremost another way of producing knowledge using external tools like a stylus, a feather or any other writing tool to carve signs on an external support also serving as storing surface, rather than speech sounds. In this respect, we totally share with Halliday his pronouncement that “writing begins when pictures are interpreted as language.” Therefore, if there came time when blends or compounds for instance were fully accepted as words, we see no objection today to equally consider componyms as words as well.

**Conclusion**

It would certainly seem pretentious to claim that componymy is the only possible process to construct new mental spaces liable to put some order in the information chaos which features today’s knowledge society, yet componyms are clearly a possible path to
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contribute paving the way towards network thinking, as ordinary words once did for linear thinking.

We therefore assume that the lexicogenic process labelled componymy proves to be particularly apt to represent complex knowledge thanks to its flexible structure which enhances at the same time brevity, speed, conciseness and economy. It is also the remarkable flexibility of componyms to adopt innovative writing material that makes them better fit to account for the ever growing communication needs of today’s knowledge society. To avoid what Robert Logan names an information chaos, humans need in emergency linguistic tools and devices likely to respond to their presently superior thinking potential in order to express new meanings in a hypermodern fashion, and componyms appear as the most suitable direction towards this end.
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