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# Linguistic guerrilla warfare 2.0: On the "forms" of online resistance

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**Abstract:** While initially feared to cause linguistic homogenization, the Web has rapidly emerged as a space for language variety and experimentation. In fact, as communication infrastructures have developed around the globe, online communication has progressively moved away from the "anglicizing" model hypothesized by critics, embracing — and increasing — the great linguistic variability of offline exchanges. What is more, the hybridization of orality and writing characterising the Internet has resulted in the emergence of multiple variations of a new language: the *Netspeak*. Alongside such a creative and playful impulse, a movement of "resistance" to the various systems of control that have been imposed over online communication can be noticed. Consider, for instance, *leet* (or *1337*), a codified form of English characterised by the use of non-alphabetic characters instead of common letters, as well as some phonetic changes, the genesis of which is linked — among other reasons — to the attempt to overcome the control and censorship put in place by the administrators of forums, digital communities and other multi-user computer systems. Another example is the very popular *algospeak*, which includes alterations similar to the ones found in leet, in addition to the use of synonyms, figurative expressions and other strategies used to deceive algorithmic systems and thus bypass automated controls. This paper deals with the analysis of such phenomena in order to foster the reflection on the impact of new media on today's communication processes, with particular reference to the crucial issue of the relationship between language and power.

## 0. Introduction

«While the Internet is often looked upon as a channel for international community building, it also has the potential to hasten an already rapid shift toward a dominant global language – English. It is the default language of choice». With these words, a 1998 article appeared on *Asiaweek*, provocatively entitled «Cyberspeak: the death of diversity» (Erickson 1998), gave expression to a major concern arisen with the development and spread of the World Wide Web in the late 1990s: the risk of linguistic homogenization it seemed to bring about. In fact, according to Global Reach (n.d., in Dor 2004: 98), in 1997 45 million English speakers were using the Net, while the

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number of non-English-speaking users was only 16 million. The fear of a "global Englishization" (Crystal 1997, 2001) therefore increasingly emerged, leading public figures such as the then US Vice-President Al Gore to publicly denounce such a risk through anecdotes like the one reported in the above-mentioned article:

> The eight-year-old son of the Kyrgyzstan president informed his father: "I have to learn English." In a central Asian country where Western tongues are rarely spoken, President Askar Akayev wanted to know why. The reply: "Because, father, the computer speaks English" (Erickson 1998).

Conversely, the Web has rather rapidly emerged as a space for language variety and incessant experimentation. In fact, as communication infrastructures have developed around the globe, online communication has progressively moved away from the "anglicizing" model hypothesized by critics, embracing — and increasing — the great linguistic variability of offline exchanges. Already in 2003 the English-based Internet community was believed to comprise approximately 230 million users, against 403 million non-English-speaking users (Global Reach n.d., in Dor 2004: 99). And the following year the discrepancy grew further, with 280 million English users against 657 million non-English users (*ibidem*). As a result, a constant year-on-year decline in the percentage of webpages in English — from 75 percent in 1998 to 45 percent in 2005 (Pimienta, Prado and Blanco 2009) — was registered, and a variety of languages became visible on the Web[1].

What is more, the hybridization of orality and writing characterising the Internet has progressively resulted in the emergence of multiple variations of a brand "new language": the so-called *Netspeak* (Crystal 2001), also known as *Netlish*, *Weblish*, *electronic discourse*, or *CMC – Computer-Mediated Communication* — just to mention a few of the several denominations that have spread all over the globe. «A type of language displaying features that are unique to the Internet, … arising out of its character as a medium which is electronic, global, and interactive» (*ivi*: 18), Netspeak relies on an unprecedented combination of characteristics belonging to both oral speech and writing. This is evident, for instance, in the exaggeration of spelling and punctuation recalling particular intonation patterns (e.g. «aaaaahhhhh», «hiiiiiii», «ooops», «soooo», «no more!!!!!», «hey!!!!!!!», etc.), as well as in the use of capital letters to "shout" (e.g. «I SAID NO»), the inclusion of special symbols, such as asterisks, to emphasise specific words (e.g. «the *real* problem», etc.), and the addition of spaces between letters to create a "loud and clear" effect (e.g. «W H Y N O T»). The British linguist David Crystal (1997) also stressed the importance of verbal glosses, generally reported within angle brackets, as a way to evoke kinesic effects (e.g. «<smirk>», «<laugh>», etc., sometimes also appearing in abbreviated forms such as «<g>» for «grin», or reiterated sequences, such as «<gg>» or «<ggg>», used to highlight a hyperbolic characterisation).

The introduction of smileys or emoticons first, and emojis later, further enriched the language of the Net, introducing signs expressing facial expressions, gestures, and other corporeal conventions intervening in oral exchanges alongside — and sometimes even in substitution of — the verbal code. The «world's fastest-growing form of communication» (Danesi 2016), such an iconic (in Peircean terms) code has been largely praised as an anti-hegemonic reaction to the power relations of print literary (cf. Derrida

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[1] Already in 2001, David Crystal (2001) identified twenty-seven languages evidently represented on the Net, accompanied by various additional languages trying to impose themselves. According to more recent estimates, English is used by 55.6% of all websites, with a number of other languages — such as, in descending order, Russian, Spanish, German, French, Japanese, Turkish, etc. — used by the remaining 44.4% (W3Techs 2023).

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1967, 1978), because of its visual characterisation and the emphasis it puts on collaborative creativity (Danesi 2016; cf. Danesi 2020).

What is more, communication and interaction on the various platforms arisen within the digital sphere has resulted in a number of Special Internet Language Varieties (SILVs), intended as

> highly playful, nonstandard variant of a standard language which has arisen in a sub-cultural online context that involves frequent ingroup interaction, and which is characterized by a desire on the part of the participants to make their writing humorous, decorative, and/or obscure (Herring 2012a).

A popular example of SILV is the so-called *LOLspeak*, which originated in 2005 on 4chan, as a result of the increasing trend to post funny images of cats (i.e. LOLcats) accompanied by short captions written in a non-standard English variety[2] — which became known precisely as *kitty pidgin*[3] (Dash 2007) or *LOLspeak*. Among its recurring characteristics, LOLspeak includes intentional "errors" of morphology (e.g. deviate or phonetically-motivated spelling, e.g. «hab» instead of «have», «egspected» instead of «expected», «nawt» instead of «not», «menneh» instead of «many», «laydees» instead of «ladies», «cheezburger» instead of «cheeseburger»; miss-declined verbs, e.g. the use of the third person singular «has» or the first person singular «am» instead of the infinite form; etc.) and syntax (e.g. the subversion of the common structure of question forms: «I can has X?» instead of «can I have X?»; the ellipsis of auxiliary verbs like «do» or «have» and other grammatical elements that are syntactically necessary in standard English, especially in interrogative and negative sentences, e.g. «it nawt maek you feel good?» and «at start, no has lyte»), as well as other peculiar practices, such as word reduplications, inversions, suffixations, lexicalizations, neologisms, etc. (for further details, see in particular Herring 2012b; Gawne and Vaughan 2012; Fiorentini 2013; Bury and Wojtaszek 2017).

While certainly not exhaustive of the features of computer-mediated communication, these examples effectively show that, despite any concern, «technology often enhances and reflects — rather than precipitating — linguistic and social change» (Baron 2003: 88). Moreover, it should be noted that, alongside such a creative and playful impulse, a real movement of "resistance" to the various systems of control that have been imposed over online communication has emerged, further highlighting the variability and importance of linguistic practices on the Internet. In the aim to foster the reflection on such dynamics, as well as on the fundamental issue of the relationship between language and power, the following paragraphs will deal with a more detailed analysis of two emblematic case studies: *1337* (or *leet*) and *algospeak*. This will allow us to show how online communication has not undermined, but rather enhanced, the diversity of linguistic codes and their possible uses and values.

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[2] Interesting examples have arisen also as related to languages other than English, as exemplified by the case of the *padonki jargon* for Russian, *fataska* for Hebrew and the so-called *Martian language* for Chinese (Herring 2012a).

[3] In fact, LOLspeak recalls typical pidgin traits, such as word reduplication (Fiorentini 2015) — i.e. the repetition of a word or a part of it «resulting in a distinct lexical item with a slightly different meaning» (Holm 2000: 121). However, its features do not completely match the usual characteristics of a pidgin language. Indeed, as Lauren Gawne and Jill Vaughan (2012) maintained, LOLspeak emerges purely from a manipulation of English, which makes it impossible to conceive it as a creole or a pidging.

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## 1. Leetspeak: control avoidance, community belonging, and creativity

Also known as *eleet* or *leetspeak*, *leet* (or *1337*) is a codified form of English characterised by the substitution of letters with non-alphabetic characters, and a series of other orthographic variations. It originated in the 1980s as an attempt to avoid the systems of control[4] used in bulletin board systems[5] (BBSes), and was then rapidly adopted in forums and other multi-user computer systems, finally becoming popular among online videogame players and other digital communities too. Its denomination derives from the word *elite*, used to describe particular skills or accomplishments, especially in the fields of computer hacking or gaming:

> The status of BBS users who gained access to elite areas or features of BBS systems led to the creation of an "elite" label. Subsequently shortened to leet (rhymes with beat) or "el leet," the slang and anti-authoritarian attitudes accompanying elite status remained an element of leet communication as BBS users migrated to the Internet in the 1990s and leet expanded into online gaming communities (Mitchell 2005).

Leet allowed users to evade text filters and restrictions created by BBS or other chat system administrators to discourage the discussion of forbidden topic — such as cracking and hacking, among others (Rhoads 2007). Still widespread forms from that era, in fact, include expressions such as «hack0r» or «h4cker», as well as terms like «pr( )n» or «pr0n» (used to make reference to pornography).

As it can be easily inferred from these examples, the character replacements used in leetspeak are based on the similarity of their glyphs via reflection or other (generally less intuitive) forms of resemblance. While rather basic (and therefore easily readable by the human eye[6]), this soft encoding system has proved able to frustrate automated text scanners and various systems of control over time because of its variability and mutability[7]. In fact, the substitution of alphabetical characters with numbers and other symbols is generally paired with a number of other variations, such as the removal of letters (e.g. «u» for «you»), the use of phonetic equivalents (e.g. «duz» for «does»), intentional misspellings (e.g. «teh» instead of «the») and random capitalisations (e.g. «tHiS»). Sometimes, moreover, combinations of such procedures are used, resulting in more complex structures (e.g. «73h» for «the», «prot3k» for «protect», «Pr0n» for «porn», etc.). "Harder" forms of leet encryption also exist, involving almost no letters or numbers and mainly combining symbols (e.g. «@$$» for «ass», «$#!+» for «shit», «H4x0r» for «hacker», etc.). What is more, a system of suffixes (such as «-x0r», relating to «er» and «or» in English, or «-&», recalling sounds such as «-and», «-anned» or «-ant» at the

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[4] Leigh Lundin (2020) described it precisely as «an ever-changing language deliberately intended to obfuscate and evade grokking and detection».

[5] Also known as computer bulletin board services (CBBSes), bulletin board systems are telematic systems that allow remote computers to access a central terminal to share or withdraw data. Once logged in, the user can upload and download software and other resources, read news and bulletins, and exchange messages with other users through public message boards and sometimes direct chatting. Very popular in the 1980s and early 1990s, such platforms were progressively replaced by systems using the Internet for connectivity towards the end of the 20th century, with some of the larger commercial BBSes evolving into Internet service providers.

[6] In this regard, see in particular Duñabeitia, Perea and Carreiras (2008).

[7] Evidently, the development of increasingly sophisticated algorithmic control systems has resulted in an augmented capability of "modeling" the dissonant uses of language supposed by leet, and especially the most common ones, "outdating" some of them. This explains the ever changing and highly variable character of leet, as well as the progressive adoption of more complex and articulated codes, such as "hard" leetspeak and algospeak (see *infra*).

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end of words) and alternate meanings is frequently at play too. While regulated by some sort of "grammar", in other terms, leet remains anchored to a very high degree of individual creativity[8], as well as to the influence of group dynamics (i.e. power relations, public reconnaissance, approval, etc.). As a result, multiple encoding systems still coexist with each other, and only partial, non-univocal alphabets (Fig. 1) are available, involving a great variability[9].



Figure 1. An example of leet non-univocal alphabet (source: Wikipedia).

## 2. Algospeak: from orthographic replacements to figurative associations

Another interesting example of "linguistic resistance" online is the so-called *algospeak*, sometimes also referred to as *Voldemorting*[10], or *slang replacement*. Originated in the last few years, mainly to bypass TikTok automated content moderation restrictions[11], it features leet-like orthographic substitutions (e.g. «$3X», «H3zb0lla», «P4ndemik», etc.), in combination with a series of other variations, such as a peculiar use of synonyms (e.g. «unalive» for «dead» or «killed», «accountants» for «sex workers», etc.), the inclusion of figurative expressions (e.g. «spicy eggplant» for «vibrator» or «penis», based on the phallic form of the eggplant and the association between spiciness and eroticism), emojis (e.g. 🍆, as a further variation of the previous example) and other encoded words «in an effort to create a brand-safe lexicon that will avoid getting … posts removed or

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[8] Especially when it is used for creating nicknames or passwords (see Li and Zeng 2021).

[9] Indeed, some forms of "normalization" of leet do exist, as exemplified by the popular case of the Italian rapper Davide Matei, alias Thasup (previously Tha Supreme), whose pseudonym, as well as song and album titles, evidently play on the substitution of letters with non-alphabetic characters (and especially numbers: e.g. *23 6451*, meaning «de basi»; *6itch*, «bitch»; *5olo*, «solo»; *Oh 9od*, «Oh God»; etc.) and orthographic variations and contraptions (such as his very denomination, and especially its recent variation, and titles such as *M8nstar*, «Monster»). However, as the examples provided clearly show, this is the case of basic alterations. On the contrary, the "subversive power" of more elaborated forms of leet is much harder to neutralize, precisely because of their greater complexity and variability.

[10] Introduced by Emily van der Nagel, a social media researcher and lecturer at Monash University (who in turn credited a 2013 discussion forum comment by user Eugene for coining the term), this expression is derived from the terrifying villain Voldemort in Joanne K. Rowling's *Harry Potter* novels. In fact, being afraid to mention his name, the other characters replace it by using expressions like «He Who Must Not Be Named».

[11] Unlike other social platforms, content on TikTok is distributed through an algorithmically curated feed («For Yo»). As Taylor Lorenz (2002) put it, in other terms, «having followers doesn't guarantee people will see your content. This shift has led average users to tailor their videos primarily toward the algorithm, rather than a following, which means abiding by content moderation rules is more crucial than ever».

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down-ranked by content moderation systems» (Lorenz 2022). Combinations of these techniques are also frequently used, as exemplified by the use of the emoji representing an ear of corn (🌽) to make reference to «porn» (based on an intersemiotic translation[12], in combination with a previous substitution of the initial «p» with letter «c»), or the adoption of the expression «le dollar bean» to say «lesbian» (based on the reading performed by TikTok text-to-speech feature of the already varied form «le$bian»).

It must be noted that the use of slang variations in communication is not new at all, but finds a series of previous occurrences in offline exchanges. Let us consider, for instance, the interesting case of Cockney, an English dialect originated in the late 1300s and mainly spoken by working-class and lower middle-class Londoners, within which "rhyming slang" emerged towards the 1800s, remaining one of its distinctive features up to present times:

> Its origin dates back to its use among dock workers and criminals in 19th century London, eventually finding its way to merchants who served goods in various East End marketplaces like Billingsgate Fish Market and Covent Garden's various fruit and vegetable stands. These deviant people would speak in code to dodge the police officers, police informants, and rival gangs that were after them (Adler 2015).

Rhyming slang is based on the substitution a common term with a phrase of two or more words, the last of which rhymes with the original one; in most cases, the rhyming word is then dropped from the end of the phrase, leaving only the previous terms. The popular expression «I'm going up the apples», meaning «I'm going upstairs», is emblematic in this respect, as it is obtained precisely by replacing «stairs» with «apples and pears» (*step 1*, based on the rhyme «stairs» – «pears») and then omitting «and pears» (*step 2*), thus making the origin and meaning of the phrase elusive to listeners who are not familiar with the code. Similarly, the word «syrup» is used as a synonym for «wig», based on the rhyme «syrup of figs» – «wig» (*step 1*) and the subsequent dropping of "of figs) (*step 2*). Likewise, «dog and bone» (*step 1*), then shortened to «dog» (*step 2*), is still widely adopted to say «telephone».

 The so-called Aesopian languages might also be thought of as some sort of antecedent of algospeak, inasmuch as they rely precisely on cryptic or ambiguous expressions to convey concealed meaning to informed members, while maintaining the appearance of a neutral meaning to outsiders (so as to avoid censorship). As a matter of fact, the expression was coined by the Russian writer Mikhail Saltykov-Shchedrin (1826-1889) precisely to describe the writing technique he used in his late career, which he compared to the allegorical writings of ancient Greek fabulist Aesop, as it aimed as satirizing the social problems of the time while evading the harsh censorship of the late Tsarist Russia. The use of this technique then remained common among writers under Soviet censorship (Loseff 1984), who made large use of rhetorical and expressive tricks such as allegories, metaphors and circumlocutions to mask the real ideas underlying their texts under apparently neutral meanings.

Given the reach of social media, however, algospeak has spread well beyond the limits of the groups concerned by Cockney and Aesopian languages, becoming a mass phenomenon (which is extending also beyond English-speaking contexts) and acquiring the capability of affecting everyday offline language too. Like leet, moreover, it plays not only on semantic associations, but also on the morphology of language itself, that is to

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[12] Intended as the «interpretation of verbal signs by means of signs of nonverbal [i.e. in the specific case mentioned here, visual] sign systems» (Jakobson 1959: 233).

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say, on the way words are formed, as well as on their relationships to other linguistic elements and forms. We will focus more specifically on these aspects in the following paragraph, in order to draw some general conclusions on the impact of such innovations on the relation between language and power.

## 3. Conclusion: leet and algospeak as "forms" of "linguistic guerrilla warfare 2.0"

As we showed above, both leet and algospeak have originated and evolved in the attempt to avoid particular limits and control systems imposed to users by digital media. The former involves mainly variations at the orthographic and morphological level, resulting in more ("hard" leet) or less ("soft" leet) altered lessemes, which can be recognised by human readers but are not easily readable by automated control systems. While acting on lexical transformation too, the latter also "plays" on syntactical inversions, intersemiotic translations and more elaborated manipulations to avoid algorithmic constraints, requiring even higher levels of interpretative cooperation (see Eco 1979).

In both cases, like in other linguistic variations arisen on the Web (and particularly in the above-considered case of LOLspeak) users act as *bricoleurs* (see Lévi-Strauss 1962; Floch 1995), as they incessantly re-process the linguistic tools at their disposal, adjusting them to their communicative needs and purposes.

In this sense, their linguistic performance can be conceived as a continual construction of a particular *persona*, in strict relation to group dynamics: leeters and algospeakers, like LOLspeakers and other netizens, «construct the language of the group they want to be identified with and take part in the construction of meanings within it» (Bury and Wojtaszek 2017: 40). This inevitably entails a high degree of *metalinguistic awareness* — intended as «the ability to think about language and manipulate its structural features, treating language itself as an object of thought, as opposed to using language to understand and produce sentences» (Tunmer and Herriman 1984: 12) — on their part. Regularising irregular forms, and sometimes also including further modifications (as various examples observed especially for hard leet and algospeak effectively show), in other terms, online users demonstrate their *metalinguistic ability* (Benveniste 1974), that is to say, «the possibility of raising [them]selves above language, of abstracting [them]selves from it, of contemplating it, whilst making use of it in [thei]r reasoning and observations» (Gombert 1992: 2).

However, a crucial aspect makes leet and algospeak differ from LOLspeak and other Special Internet Language Varieties, with interesting effects on the level of meaning-making processes and the specific relation between language and power. As research has shown, in fact, LOLspeak and similar varieties are «above all playful in nature»[13] (Gawne and Vaughan 2012: 103). Their users, in other terms, «do not use grammatically incorrect English because they can't use Standard English; they are doing it because they are *playing* with the rules of English» (*ibidem*, our emphasis). Leeters and algospeakers, by contrast, *have to* incessantly operate on language to avoid the automated control systems and constraints imposed by the online systems within which they operate. In this sense,

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[13] It must be noted that, on a general level, forms of playful manipulation of language are not uncommon, and are particularly relevant. In fact, language play is a vital component of cognitive development, which is strictly related to the development of imagination and ideas, as well as to inclusion and exclusion processes (Cook 2000; see also Sherzer 2002). This also explains the great variety of artificial and hermetic tongues developed across time for different purposes (for a detailed analysis, see in particular Heller-Roazen 2013).

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therefore, language variations in leet and algospeak might be conceived as "forms" of a *linguistic guerrilla warfare (2.0)*[14], that is to say, as concurrent acts of *parole* (cf. Benveniste 1966) that constantly question — and alter — the *langue* itself, making it possible for online users to overcome its limits (and hence to avoid the control and regulative systems that strictly adhere to it). This interestingly shows that not only Internet communication has resulted in the exact opposite of a «death of diversity» (as maintained by Erickson 1998, mentioned in the opening of this paper), but it has provided us with new means of linguistic empowerment, precisely by virtue of the variability and especially the creativity[15] it fosters. Definitely, the affirmation of new codes and grammars on the Web has resulted in new forms of power, which are no longer to be thought of in terms of vertical relations, but rather of multiple horizontal powers, which in turn establish new forms of exclusion and inclusion with respect to different social and cultural groups — sometimes also extending beyond the limits of digital communities themselves.

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[14] We draw here on the idea of "semiological guerrilla welfare" introduced by Umberto Eco (1973), pushing it further and adapting it to the specific contexts taken into consideration in this paper.
[15] On the crucial role played by linguistic creativity in Internet communication, see also Crystal (2005).

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