Sensitivity of the Chinese Web: A Techno-Semiotic Perspective into the Scriptural Economy of Chinese Computerised Media

Allan Bahroun

This article intends to create a dialogue between ongoing discussions in French techno-semiotics and the contemporary debates about the 'Chinese Internet'. Resorting to Yves Jeanneret's interpretation of Michel de Certeau's scriptural economy, the author demonstrates that a techno-semiotic approach to computerised writing yields conceptual resources to disentangle the research on the Chinese Web from its ideological polarisation. The text articulates three explanatory matrices to address the profound semiotic mutations characteristic of the development of computerised media. The first matrix discusses the applicability of the scriptural economy to the domain of computerised writing; the second produces a critical definition of the popular notion 'sensitive words' and more generally elaborates on the construction of 'web sensitivity'; the third offers a series of documented observations into the political economy of China's Internet-Service Providers and presents hypotheses on the dynamics of technological surveillance. These three matrices, interwoven around the specific case of China's computerised media industries, allow the author to make a tentative contribution toward a broader reflection on the semiotics of the Web.

KEYWORDS scriptural economy; techno-semiotics; web sensitivity; computerised devices; Chinese web

Introduction

> There is neither a first nor a last word and there are no limits to the dialogic context [...] Nothing is absolutely dead: every meaning will have its homecoming festival. (Bakhtin 1986)
>
> … this is the last fragment written by Bakhtin in 1974 (Todorov 1981)
>
> The story is written in the form of a diary, and the last entry, from 2025, ends with the announcement: Comrades, in all online language there is only one term left: 'sensitive word!' (同志们，现在所有网上的汉字只剩下'敏感词'啦!). (*GFW Story* — GFW历史) (Li 2012)
>
> A satire posted by a netizen on a social media site (Ash 2014)

On June 25, 2012, an Internet blogger published a short story about an augmented version of the 'Great Firewall'. The 'GFW Turbo' escapes the power of the authorities and starts censoring keywords automatically. The agents of the 'Anti-GFW Ministry' are unable to regain control over the machine, which forbids the use of the entire Chinese language, except for this very last phrase: 'sensitive word'. Set against Bakhtin's pithy last word, the fictionally anticipated suppression of a whole language highlights the governmental hubris of trying to block the dialogic character of language itself. The utopia implied in the former is the dread of the latter, and this tension between infinite semiosis and the coercive management of meaning through technology, sets the tone for our discussion.

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China's Internet is said to be one of the fastest-growing on a global scale. According to the 35th report of the national institution responsible for issuing the Internet's development statistics, China, 'as of December 2014, had an Internet user base of 649 million and an Internet penetration rate of 47.9%' (CNNIC 2015). Given its spectacular growth over the past 20 years, the Chinese Web has been attracting worldwide scholarly attention. The field of the so-called 'Chinese Internet Research' is at the intersection of numerous disciplines. Social psychology, political science, cultural studies and communication science all are interested in 'China's digital revolution' (Brown 2012).

In the midst of such intense and cross-disciplinary concern, censorship and surveillance, the 'Great Firewall', ICTs, and social change, have constituted the major and somewhat restrictive topics of interest. As David Herold and Gabriele de Seta pointedly observe, in their recent meta-review of research, the 'Chinese Internet' has constantly been portrayed as a highly agonistic environment (Herold and de Seta 2015) with 'surveillance" and "control" being the most often recurring keywords in discussions about it. Concomitantly and paradoxically, 'a general paradigm of revolutionary change focused on "China's political transformation" still appears to be one of the main drivers of research' (75). For the past ten years, sociological contributions have been made to this expanding area of study. In this context, however, semiotic investigations have been almost non-existent, leaving an important space of inquiry untouched: the social and symbolic significance of computerised media's emergence in contemporary China. Bridging the gap between two distinct research communities, this paper wishes to open a dialogue between French techno-semiotics and the contemporary research approaches to the 'Chinese Internet'. In doing so, I aim to demonstrate how the techno-semiotic perspective can yield conceptual resources capable of disentangling the research on the 'Chinese Web' from its characteristic ideological polarisation.

This paper will engage in a synchronic overview of the material forms and social activities associated with the Chinese computerised media, attempting, at the same time, to test the heuristic value of the techno-semiotic approach. The originality of this perspective lies in its consideration of the complex articulation of the technical, logistic, cultural, and symbolic strata that constitute computerised media. Unlike most contemporary approaches to what is commonly called 'digital media'—such as web-design, ergonomics, cognitive psychology, online marketing or even engineering sciences—the techno-semiotic perspective refuses to regard them either as mere technical instruments or as exclusively cultural and social artefacts. Its theoretical stance draws from an epistemology of representation according to which the forms produced in media textualities 'create a signifying universe that does not simply reflect the social reality but instead participates in its construction' (Souchier and Jeanneret 2009). The theoretical development of techno-semiotics, based on more than twenty years of empirical investigation and collective elaboration , as well as its related lexicon have been extensively discussed by Yves Jeanneret in his recent *Critique de la Trivialité* (Jeanneret 2014; Jeanneret et al. 2013), where he also refers to a number of researchers sharing a similar theoretical orientation. Following the techno-semioticians, I refer to computerised media (*médias informatisés*) as media devices (*dispositifs médiatiques*) which enable the production and circulation of writings on computer networks and across a whole range of materials. Jeanneret contrasts the term computerised media with the problematic notion of Information and Communication Technology (ICT) so as to emphasise the 'patterning' character of computerised media, perceivable in their capacity to mobilize historical forms and to integrate a broader media culture (Jeanneret 2007). In one of the rare English-language articles on techno-semiotics, Estrella Rojas develops the 'staging device' metaphor to highlight the framing effect of computerised writing. Rojas suggests borrowing the term 'device' from its theatrical context to underscore the particular 'setting' of relations at play in digital textualities. She argues that'[t]he screen may be flat but behind it, there is a complex interplay of calculations, event combinations, interferences and flows whose effects must be considered for proper analysis of onscreen texts. That which is visible at the surface and all that is coded for machine-readable language belong to two separate domains' (Rojas 2008). Onscreen texts or computerised writings are, therefore, better described with the term *écrits d'écran* in French, which I translate as screen scripts: a form of writing which associates individualized *semiotic* production

on the screen, with multiple *technical* inscriptions into computer language (Emmanuel Souchier and Jeanneret 2005).

The Scriptural Sophistication of Censorship

The 'Cat and Mouse' Game Behind the Great Firewall

In February 2015, six months after China's Cyberspace Administration organised a *World Internet Conference* in Wuzhen—arguing for a national model of governance—the state-owned newspaper *China Youth Daily* unveiled the 'new anthem' of China's Internet. Especially styled 'Cyberspace Spirit' (网信精神), a grandiloquent musical performance openly praises the 'cleanliness' and 'safety' of China's controlled Internet (Chin and Wong 2015). This glorification of the geopolitical ambition to become an 'Internet Power' (网络强国) arises as a continuation of historical measures adopted by the government to 'civilize' the social activities occurring in the cyberspace.

As early as 1999, four years after the emergence of an Internet infrastructure in China, the National Computer Network and Information System Security Administration Centre utilised the technical capacities of computer scientists and engineers to develop a global architecture, in order to monitor the productions of Chinese Internet users (*The Economist* 2013). With President Hu Jintao's initiative, Internet management was referred to as an instrumental element to foster a 'Harmonious Society', thus requiring 'Web control to be strengthened' (Bandursky 2011). From the very beginning of its existence, China's Internet has been, in fact, the object of considerable investment to equip governmental agencies with new instruments of surveillance, also discursively framed as 'Opinion Monitoring' (Wang and Zhu 2015).

Early occurrence of the expression 'Great Firewall' can be traced back to an article published in *Wired* by Geremie R. Barme and Sang Ye. This metaphor has served to define the most widespread understanding of China's Internet model: '[u]nder construction since last year, what's officially known as the "firewall" is designed to keep Chinese cyberspace free of every kind of pollutant , by merely requiring ISPs to block access to "problem" sites abroad' (Barme and Ye 1997). Since then, the phrase has acquired a great deal of popularity, and however problematic the term could have been, it remained an object of fascination for Western academics and foreign commentators.

At the core of the continuous reference to the 'Great Firewall' is the agonistic notion of *contention* between the strategically planned actions of the government and the tactical reactions of always more 'savvy netizens'; resulting in the common metaphor of the 'cat-and-mouse game' (Morozov 2009). Torn between the euphoric pole of 'empowerment' and the dysphoric one of 'censorship', the 'Chinese Internet' has been described as a global arena within which little space was ever left to non-teleological conceptions of politics and cultural practices (Marolt and Herold 2014).

Even more problematic is that such binary oppositions have fostered a unifying representation of the 'Chinese Internet', whose main characteristic was the risk affecting 'sensitive' activities to be obliterated by governmental procedures. This totalisation of the 'Chinese Internet', under the oppositional terms strategy/tactic, has hindered the development of more accurate explorations of surveillance operative modes. It persists today with the eschatological announcements of 'China's Self-Destructive Tech Crackdown' (NYT Editorial Board 2015). When faced with the homogeneous Internet Censor, one needs to be reminded of the complexity of Internet technological surveillance:

> China's filtering regime is pervasive, sophisticated, and effective. It comprises multiple levels of legal regulation and technical control. It involves numerous state agencies and thousands of public and private personnel. It censors content transmitted through multiple methods, including Web pages,

> Web logs, on-line discussion forums, university bulletin board systems, and e-mail messages. (OpenNet Initiative 2012)

This research report from 2012 produced by the OpenNet Initiative concludes with the unambiguous yet sceptical statement: 'This combination of factors leads to a great deal of supposition as to how and why China filters the Internet. These complexities also make it very difficult to render a clear and accurate picture of Internet filtering in China at any given moment'.

Similar to the 'Great Firewall' and its discursive trajectory, the conceptual dyad strategy/tactic, introduced by Michel de Certeau in his *Practice of Everyday Life*, also became a popular concept. In the third part of his *Critique de la Trivialité*, Yves Jeanneret places those seemingly oppositional terms into the broader inquiry of the *scriptural economy*. By contrast to their frequently simplistic use, however, Jeanneret discourages us from taking them as representing a rigidly bipolar opposition between the panoptic strategies of power, on the one hand, and heroic resistance to them, on the other. Certeau's conception is not reducible to a theory of linear domination and therefore, the relationship between strategy and tactic must be understood as a dialectical one (Jeanneret 2014: 377-378). Certeau described *writing* as a 'project to rationalize social life' and Jeanneret specifies that 'while power is written as fiction, it unfolds through material devices; yet no distinction between a fully virtual world on one side and the real social mechanism on the other is possible' (364).

From Obliterative Censorship to Topographical Control

In this section, I explore the definition of strategy and tactic presented in the *Practice of everyday life* and interpreted by Jeanneret. I argue that the *obliterative predilection* of censorship should be completed with a *topographic conception* of computerised control. This shift of perspective primarily implies a greater consideration for the techno-semiotic properties of computerised media, designated by Jeanneret as a *new scriptural economy*: 'a controlled environment where the force of the power of writing and reading intersects with the ruse of practices, which are able to deal with this power' (378). Let us recall the terms of strategy and tactic from Michel de Certeau's own words.

> [Strategy] postulates a *place* that can be delimited as its *own* and serve as the base from which relations with an *exteriority* composed of targets or threats […] can be managed.
>
> The space of a tactic is the space of the other. Thus it must play on and with a terrain imposed on it and organised by the law of a foreign power. (Certeau 1988: 36-37)

Building on this seminal distinction, Jeanneret expands the Certalian inquiry by applying two critical modifications. Those interpretive alterations are all the more critical, since they address the very distribution of *writing* and *reading*, as dynamic practices, between the poles of strategy and tactic in the specific context of computerised media.

Jeanneret reminds that '[t]he political operativity of writing is at the junction of its logistic dimension and its symbolic reach' (375). As originally explained by Certeau, writing is a 'space with the dual ability to establish a frontier and to create a representation' Consequently, 'writing is a process, a machine, which has the capacity to entangle a technical, a semiotic, and a political dimension' (375). In spite of the critical value of this perspective, the contemporary dynamic of computerised media implies the reconsideration of the logic of the scriptural economy, so as to highlight its new and highly specific techno-semiotic configurations. Therefore, 'provokingly and yet seriously', Jeanneret contends that 'in the domain of computerised media, the power is in the capacity to *read*, while the usage is under obligation to *write*' (386). This considerable reversal of perspective accounts for one of the most profound metamorphoses in the sphere of semiosis. Firstly, unlike most interpretations, with an oral communicational trope, along the lines of tools for *expression* and spaces of free

speech, computerised media combine a blurring of writing, reading and working activities. Secondly and maybe most importantly, 'a number of non-inscribed social practices are today the object of writing and inscriptions (referred to in a convenient way as *traces*)' (387).

Applied to our discussion of China's Internet censorship, such specification provides critical insight. Indeed, instead of perceiving censored words as the expression of a hunt between creative netizens and government agencies, one should recognise that *obliterating* actions reveal the efficiency of a far-reaching *topographic* monitoring. In his commentary of the technological conditions of possibility for Internet control in China, Nathan Freitas states this idea in very concrete terms: 'it means that they can read what people write both on a global scale and at a small level' (Freitas 2014). In a similarly manner, Clément Renaud compares traditional media with computerised ones in China: coercive practices in the latter, he argues, 'are not only focused on the order of discourse but are also increasingly interested in the process of individuation, notably through the multiple acts of utterance that form up the practices and uses of the web' (Renaud 2014). In what could also be read with a Certalian inflexion, Renaud concludes that the 'strategic goal of computerised media is located today in the definition of fragments of spaces for utterance' (41). A topographic conception is inherent to the dynamics of the *scriptural economy*. It allows to adopt a micro-level observation for computerised media. Additionally, it is more fruitful to 'localize' censorship *within* the realm of computerised writing, rather than leaning toward the subsumption of the latter under China's expressed political aspirations. With that perspective, censorship may well be one of the many modes of intervention on ordinary practices into the text of computerised media. The examination only of their techno-semiotic properties can shed light on the existing forms of governementality: in other words, and to paraphrase Jeanneret, the rationalisation of social conducts is irremediably linked to the computerisation of text.

Sensitive forms: Dealing with visibility?

Weixin is a computerised media application promoted and exploited by the *Tencent* communication corporation. There are currently more than 100 million users of what is called *WeChat* in its English version outside of China. The 'messaging app' presented as an efficient and technically richer alternative to *Viber*, *What's App* or *Line* has been subject to intense marketing campaigns and has been expanded considerably in Brazil, Spain, Thailand, and even India (Kemp 2015). All countries, in which *WeChat* is present as the fastest 'growing messaging app', have distinct policies as regard to Internet governance. Interestingly enough though, *WeChat* has enabled Chinese authorities to monitor and alter the visibility of certain productions, beyond the national borders of China:

> If you are in San Francisco, and you join a WeChat group that is sympathetic to Tibetan self-immolations or the Uighur community, and some members of that group are located in Tibet, Xinjang, and China, then all of your messages and the fact that you are participating in that group chat are communicated to servers managed by Tencent, licensed under the authority of the Chinese government. Since your WeChat account is tied to your real phone number and SIM card, and your full address book is accessible by the app, then your real name and entire community are now flagged as being sympathetic to groups that China considers as harmful, such as the Islamic State or al-Qaida. (Freitas 2015)

We note here the problematic encounter between topographies of computerised media and national territories. The attempt of the corporation to distinguish between the Chinese version of the appplication (*Weixin*) and its international brand (*WeChat*) has served to attract greater attention to the semiotic dimension of the device while, on a technical level, as Freitas remarks, 'what we've seen is that there are more and more

features for domestic tuning, keyword censorship lists, based on sim card or geography or carriers' (Freitas 2014).

If the central *modus operandi* in the scriptural economy consists of shaping sites and delineating terrains—where modes of observation, inscription, and collection are to be systematically developed—then 'sensitivity' can rightly be understood as a 'management of visibility' (Yang 2014). We arrive, therefore, at a first specification of the techno-semiotic phenomenon contained in the popular idea of 'sensitivity'. 'Sensitive', here, not only refers to the textual and discursive dimension of a digital objects (the so-called 'sensitive content') but also to what one could call the horizon of circulation, the projected range of audience, the potential reach across different spaces, constructing specific media topographies. In other words, the sensitive degree of certain forms depends on their thematic value as much as on their 'assumed visibility'. This 'management of visibility', as we've seen, transcends national borders. The computerization of text, in itself, renders both polymorphic and polytopic observation of ordinary media practices possible and efficient. This example, among many other cases of sophisticated surveillance in the post-Snowden context, highlights the need to pay greater attention to the socio-political dimension of computerised media's 'features'. Ultimately, the suggested understanding of computerised media broader scriptural economy, as exemplified by *WeChat*, leads us to question regionalising discourse on nationally or culturally bounded 'Internets'.

A New Scriptural Era? Micro-media and micro-power

Ambivalent Features of China's Internet Giants

Born at the turn of the 2000s, computerised media corporations in China have grown so prominent that they currently constitute the underlying texture of everyday practices for hundreds of millions of individuals. *Baidu* (a search engine), *Tencent* (a messaging and communication group) and *Alibaba* (an online market-place) have reached a level of ordinary presence in China that could have baffled even Certeau's most astute predictions. The three giants are now commonly referred to as the BAT, a geopolitical competitor of the Silicon Valley's GAFA (Google, Amazon, Facebook, and Apple). At the very top of 2014's Chinese ten largest fortunes, the BAT were ranked in the following order: Jack Ma ($19.5 B) CEO of *Alibaba*, Robin Li ($14.7 B) CEO of *Baidu*, and Ma Huanteng ($14.4 B) CEO of *Tencent* (Flannery 2014).

In a recent article published by *China Xinhua News Agency* on its English Website, one would read the perplex statement from the editor: 'Booking a taxi, ordering food, reading the news, watching movies and playing games—the seemingly infinite number of apps on the Chinese market, gives the illusion of an open, competitive market' (Xu 2015). When faced with such oligopolistic configurations, an investigation into the techno-semiotic conditions of possibility for China's Web Services industry becomes more necessary than ever. Besides, one easily understands why the euphoric terminology ('start-ups', 'social media', 'digital platforms', 'apps' etc.) fails to signify the political amplitude, the social reach, and the financial dimension of this category of actors, pillars of the new scriptural economy.

Chinese officials are nowadays eager to credit China's Internet control system with the worldly success of the domestic champions. At a recent press conference, an official from the Ministry of Industry and Information attributed this success to the 'good policy environment' and, more explicitly, to the 'Great Firewall' policy, implemented by the Chinese government (Zhao 2015). Undeniably, the 'Great Firewall' has played an instrumental role, particulalry at an early stage, in diverting traffic from the established foreign corporations to the emerging domestic ones. Recent ethnographic observations, however, reveal that Chinese Internet users are highly reflexive about their activity of *fanqiang* ('wall-leaping') which constitutes a series of small logistic arrangements such as the use of a VPN (de Seta 2014b, Valentine 2015). Additionally, the cultural relevance and the plethoric diversity of content in Chinese are to be found on *Baidu*, *Tencent*, or *Alibaba,* to cite just a few, and not on their international counter-parts.

Nonetheless, China's computerised media corporations have to face a paradoxical choice and adapt their strategic development to the 'good policy environment' while retaining their users within their scriptural fields. In exchange for its protectionist policies, the Chinese government expects the Internet corporations to implement censorship and self-censoring practices. The most extreme case of this tension 'between market and politics' (Pang 2015) is *Weibo*, the micro-blogging company created by *Sina Corporation*. Within three years after its creation, in 2012, it has become the most popular Web company, attracting 309 million of the 420 million China's Internet users (CNNIC 2013). Concentration of visibility has subjected *Weibo* to intense control and since the beginning of the 2010s user accounts have started to be deleted. In early 2014, the CNNIC declared that *Weibo* was losing 10% of its users (He 2014). Today, some commentators even predict the 'death of *Weibo*':

> Weibo has never been a pure social media platform; it has always been a form of media, and its vitality arose from disseminating and commenting on public events. […] A user becomes a criminal, punishable by law, when a rumour is shared over 500 times, and reposting a 'rumour' can be a liability too. One constantly hits on 'sensitive words' like hitting on nail snags. (Bei 2014)

In November 2014, the State Internet Information Office (SIIO) obliged 29 computerised media companies to 'sign a pledge, promising that they would "discipline" online comments'. SIIO's Deputy Director declared that, '[We must] use the law to manage online comments in order to direct public opinion online […].' The companies agreed to suppress 18 categories of online comments including: 'information that endangers state security or undermines national unity', 'rumours that disrupt social order', 'vulgarity and pornography' or the 'use of languages other than commonly used languages' (Bei 2014). In a highly competitive scriptural economy, computerised media's main purpose is to maximise the retention of users, whose 'traces' constitute the principal source of symbolic and economic value (Candel 2013). While they are commonly taken for granted, it is remarkable that the commercial 'indicators of visibility' (*likes*, *retweets*, *views*, etc.), produced within the techno-semiotic environments of computerised media, become the gauge and the instrument of government interventions.

The Invisible Makings of the Archtitext and the Textware

While *Weibo*'s user population has decreased, *Weixin* has seen a growth previously unseen in the global industry. Also called 'China's messaging app', *Weixin* has reached a total number of 440 million monthly active users by January 2015. 'An average day sees more than 3 billion webpages shared on Moments. Some 76.4% users check Moments regularly to share or consume content shared by their contacts' (Xiang 2015a).

Wei-bo and *Wei-xin* share the same prefix (*wei*), respectively translated as 'micro-blog' and 'micro-message'. Gabriele de Seta situates the proliferation of the prefix into the larger contemporary imaginary called the 'micro-era' (*weishidai*) 'prophesizing the developments of communication technologies in China'. According to him, '[a]fter *Weibo* and *Weixin*, everything Internet-related seems to require miniaturisation: from commercial transactions, with *weihuo* (micro-goods), *weiguanggao* (micro-advertisement), and *weizhifu* (micro-payments); through business, with *weiguanli* (micro-management), and *weitouzi* (micro-investment); to cultural consumption, with *weidianying* (micro-movies), *weixiaoshuo* (micro-fiction), and other *weimeiti* (micro-media)' (de Seta forthcoming).

In the context of techno-semiotic investigation the first term to be developed was the architext (*architexte*). Its emergence at the end of 1990s expressed the desire to shed light on a situation where, as Certeau would put it, social subjects had to *deal with* computerised media. Overcoming the idealist conception of the hypertext, the architext emphasised the instrumented visibility constructed on the space of the screen (Guichard 2010; Jeanneret 2014; Jeanneret and Davallon 2004). The architext was conceived as the origin of the writing

practice and as the power imposed on it (*arkhein* in Greek both signifies to begin and to command). In other words, when speaking of the architext, one refers to 'the presence of devices preceding and regulating the user's writing, conditioning both its format and its resources' (Jeanneret 2014: 427).

When looking more closely at *Weixin*'s techno-semiotic architecture, one notices the disposition of various writing spaces: the device articulates four major components 1) instant messaging 'chat', 2) contact list and group discussion list, 3) list of publication called 'moments' ('friend roll' in Chinese 友圈), 4) series of extra-devices such as online games or geo-localization of individual users. *Weixin* operates a strategic combination of previous standardised models, commonly identified on *Facebook* and *Twitter* as the timeline, by adding an efficient and pragmatic instant messaging competing with *Viber* or *What's App*. This micro-scriptural environment hosts daily practices and connect itself to the preexisting *QQ* account system, an extremely popular forum belonging to the same *Tencent* group. Recent updates include the possibility to use account details as payment information for commercial services (Xiang 2015b). If *Weixin* has been widely compared to *Weibo*, the central *Micro-blogging* media created in 2009 by the group *Sina,* major differences in their techno-semiotic construction have been suggested to explain distinct degrees of 'sensitivity':

> *Weibo* is a logical target for the government, since everyone can see almost all of other users' tweets, make comments on them, or forward them to others. On *WeChat*, by comparison, you can only see a post after subscribing to a public account or becoming friends with a private user. And the post can only be forwarded to your own circle of friends. (He 2014)

Such statements mistakingly infer from the semiotic level, the so-called 'interface', certain technical properties in terms of surveillance. However, counter-intuitive and reverse engineering analysis of the *WeChat*'s technological protocols proved that the degree of inscription and monitoring was comparable, if not more accurate, than that of *Weibo* (Freitas 2015). Such misinterpretation of the articulation between 'technical and semiotic strata' highlights the need for a greater consideration of the architextual property of computerised media (Cotte 2004).

A second techno-semiotic concept, the 'textware' (*textiel*), was later coined to mitigate the limitations of the architext by redefining the distribution of roles between industrial agents and users and primarily by emphasising the extreme plasticity of the scriptural economy. If the architext led to a greater consideration for the conduct of users' writing, the textware highlights the constant remobilisation of users' traces in the interconnected fields of computerised media. Constant modifications in the 'visible order' of semiotic productions are enabled by the proficient exploitation of 'meta-data', whose presence in computational code enables the qualification and re-contextualisation of 'user-generated traces'. In short, the notion of textware points to the dual status of screen scripts, the very fact that they operate 'both at the technical and logistic level of inscriptions as well as at the cultural and semiotic level of writing' (Jeanneret 2014: 437).

Sensitive Emergence: Uncertain Governmentality?

Building on the first characteristic defining sensitivity—the management of visibility—we will proceed to redefine our understanding of this techno-semiotic phenomenon. There is need to integrate a second characteristic, based on the very *mediative* logic of computerised writing. 'Sensitivity' may indeed refer to the uncertainty of the monitoring process. The very plasticity of the scriptural fabric is conditioned by its multiple and heterogeneous layers—let us not forget that *textum* in Latin means inter-woven (Rojas 2008). Government agents, as well as Internet Service Providers, need to adjust to the emerging models of 'user traces' promoted by computerised media, and on which they base their political interventions and economic expansion, respectively.

The social activities government agencies want to monitor and control are far from being spontaneous and natural as the idea of *data* might suggest. In agreement with Jeanneret, we insist that 'the importance of the

scriptural economy prevents us from reading social practices without considering the properties of writing that are associated with them, *prescribes* them in the etymological sense of term (or, in Greek, *programs* them), and thus, configures the space within which they unfold and the tools they may use' (Jeanneret 2014). Computerised media define a space of collection,while providing also modes of interpretation for the social activities they authorize and condition. This problematic emergence of social activities, technically transmuted into apprehensible 'traces', does not undermine the importance of the semiotic inquiry; quite the contrary, according to Jeanneret: 'when faced with plasticity of inscriptive phenomena, generating the transformation of *signs* into *traces*, we need not to do *less* semiotic and documentary analysis, we in fact need *more and better* semiotic investigation to understand the contemporary scriptural economy' (2014: 411).

An (Impossible) Escape from the Scriptural Forces

The New Vocabulary of Dissent

Central to Certeau's project of the scriptural economy are the various ways social subjects *deal with* media and circumvent their forces: such 'ways of doing' (*manières de faire*) might be described but do not form a grammar. In the context of computerised media, those operations are conditioned by the properties of computerised writing, not only from the strictly technical level of the 'features' but according to the semiotic decision to 'use the architext and publicize social utterances' (Jeanneret 2014: 426). In the particular case of 'sensitive words' much attention has been devoted to the dynamic morphology and temporal transformation of keywords under constraint. However, most commentaries emphasized the creativity of 'heroic and savvy users' tweaking China's Online Censors' (Wines 2009). Commentaries have thus largely neglected the contingency of the techno-semiotic resources mobilized in those practices of 'circumvention'.

The specific interrelation of language and technology occurring in computerized media has given birth to surprising media artefacts, which in turn have generated a series of interpretations by foreign commentators. Under specific conditions where 'keywords' were targeted by coercive procedures or techno-semiotic regulations, some Internet users found ways to avoid hindrance of visibility and maintain interaction by altering the forms of their utterances. In the Chinese Internet research field, a theoretical category describes this changing phenomenon with the term 'morphs': alternate forms of pre-existing words or phrases to prevent the discussion from being censored (Le Chen 2013).

Those morphs have been a perpetual object of fascination for Western scholars and media analysts. An entry of the English *Wikipedia* is even dedicated to what has become the fetish of Chinese Internet resistance:

> The Grass Mud Horse or Cǎonímǎ (草泥马), is a Chinese Internet meme widely used as a form of symbolic defiance of the widespread Internet censorship in China. It is a play on the Mandarin language words cào nǐ mā (肏你妈), literally, "fuck your mother", and is one of the so-called 10 mythical creatures created in a hoax article on Baidu Baike in early 2009 whose names form obscene puns. It has become an Internet chat forum cult phenomenon in China and has garnered world-wide press attention, with videos, cartoons and merchandise of the animal (which is said to resemble the alpaca), having appeared.

The case of the Grass Mud Horse reveals the creative and transforming character of *triviality* (Jeanneret 2008). In other words, the visibility of such a *cultural being* is actuated by its very circulation across various social spaces in and beyond the Chinese Web. Additionally, its semiotic value is enriched by the diverging interpretations and the distinct appropriation of the sensitive word in its mutable forms. I purposely refer to a Web encyclopedia to underline the processes of indexation and lexicalization to which sensitive forms are perpetually exposed. Several of the most prominent English language websites on the Chinese Internet display

their own 'dictionary' of the online language. Each of them elaborates the 'lexicon of dissent' and discusses the precarious encounter of the hindering forces of censors and the creative circumvention of users.

A recently edited e-book called 'Grass-Mud Horse Lexicon' was explicitly entitled *Decoding the Chinese Internet: A Glossary of Political Slang*. The e-book compiled by *China Digital Times* conveys this particular struggle of 'creative netizens' against 'internet censorship':

> Know your grass-mud horse from your river crab. Organised by broad categories, 'Decoding the Chinese Internet' will guide readers through the colorful, raucous world of China's online resistance discourse. Students of Mandarin will gain insight into word play and learn terms that are key to understanding Chinese Internet language. But no knowledge of Chinese is needed to appreciate the creative leaps netizens make in order to keep talking. (Henochowicz 2015)

China Digital Times, as well as *China Media Project* or *ChinaSMACK glossary*, all provide their readers with valuable documentation on the semiotic and discursive practices of Chinese Internet users. Nonetheless, their portrayal of this antagonistic relationship between censors and users contributes to the formation of an extended politicization of media practices.

Translating the Chinese Internet

The discursive formation of a lexicon of dissent goes along with intense practices of inter-semiotic translation. Analyses of the 'sensitive forms', and of their transformations, operate as a reversed hermeneutics of power. To borrow the words from the ONI Report quoted above, the complexity and pervasiveness in the modes of control create an irreducible uncertainty as to 'how and why China censors the internet?' (OpenNet Initiative 2012). Consequently, this encounter embodies itself most visibly in the new terms arising in the process of 'morphing' and 'changing sensitive forms'.

The use of the term 'inter-semiotic translation' explicitly evokes Paolo Fabbri's semiotic conception of language understood as more than 'a mere sum of words' (Fabbri 2008). The act of translating, consequently, needs to be seen as a discursive and political operation which associates reading and writing, not in search for mere equivalence but instead to produce new material and symbolic realities. Translations of the 'Chinese Web' are to be found in an exemplary device promoted on *Bloomberg Business* website in March 2013. The reader could read the following sentence before activating the so-called *Skype's Watch List*: 'These are 20 of the more than 2,000 words and phrases, compiled by computer scientist Jeffrey Knockel, that prompt Skype in China to intercept written messages. Roll over the phrases to reveal the words the hackers were targeting' (Silver 2013).

White characters are juxtaposed on a black screen and by 'rolling over' each term a small caption, at the bottom of the figurate screen, appeared to *translate* the 'sensitive terms'. This meta-semio-political device deserves to be *seen*. Each group of Chinese characters functions as a signifier of a political crisis or event ('Jasmine Revolution', 'College Students to Make Trouble', 'Diaoyu Islands' etc.). The linguistic mutation (when rolled over the Chinese terms change to English) conveys the feeling of a 'revelation' as the article promises. *Skype* is transformed into a space of contentious discussions and political involvement becomes the defining regime of everyday practices. The device forges a strong semiotic predilection and draws from the orientalizing effect of Chinese words, which refer metonymically to China as a whole in a renewed form of the *ideographic modernism* brightly described and documented by Christopher Bush (2012). This effect is even converted into a techno-orientalism when accompanied by the presence of the expert. The *computer scientist* embodies here the contemporary version of the Western moral consciousness (de Seta 2013; Lozano-Méndez 2010). The *Skype's Watch List* intends to show what is happening on the other side of the 'Firewall', hence enacting the perpetual struggle against China's censorship.

The rudimentary aspect of the black square with white words seems like an experiment. It reveals three of the major techno-semiotic logics that characterise computerised media and the issue of topographic control. Two of the dynamics I already explained are exemplified here. Firstly, the device plays with the dual character of screen scripts articulating visually their technical and semiotic strata. Secondly, this editorial composition reveals the variation of visibility conditioned by the operations of the *architext* and the *textware* in the scriptural economy.

The last dimension of computerised writing I have yet to explore is a highly dialogic one. By focusing on the obliterated words—those terms caught in the nets of the scriptural fields—the device also leads us to perceive the proper absurdity of obliterative censorship, which can and will only capture *signifiers*. This brings us back to the two contradictory epigraphs of the beginning: the infinite semiosis of Bakhtinian dialogism and the absolute reduction of signifiers in a user-generated speculative sci-fi.

Heterographic Practices and Reflexive Communication

> There used to be a time when Chinese netizens invented new words or slang as part of aconstant effort to keep ahead of government censors. But the latter, particularly over recent months, seem to be winning, expanding the zone of forbidden speech and driving the noncompliant further into the shadows. Perhaps it was inevitable that a new word would emerge that simply meant nothing at all. (Allen-Ebrahimian 2015)

These are the last disenchanted words of a contributor to *Tea Leaf Nation*, an influential blog covering Chinese new media trends and topics. The extract describes the emergence a word called '*duang*' that spread 'like wildfire throughout China's active Internet after 'fake advertisement [for herbal shampoo] remixed actual footage of [Jackie] Chan with a voice-over, 'describing the sound reverberating from his flowing tresses'.

The statement 'a word would emerge that simply meant nothing at all' radicalizes the political determinism that characterised years of analysis of the Chinese Internet. The over-interpretation of the contentious character of media practices now abdicates in front of the apparent senselessness of *trivial* media objects. The ambivalence of these terms, their 'polysemic availability', as Peytard argues, challenges the political assumption surrounding media practices, while reinforcing at the same time the power of the constraining forces (Peytard 1993). The techno-semiotic conditions of the new scriptural economy produce 'alternative' forms at the intersection of industrializing regulations and appropriating practices of media users. Their discontinuous process of transformation is commented, indexed, translated, and assigned with specific functions by the devices and the meta-textualities; in a word: they are stabilized. Profoundly influenced by Bakhtin, Jean Peytard suggests that unstable, ambiguous, and problematic interpretation is not an exceptional mode of *semiosis* but its essential dynamic (Peytard 1993). When faced with the impossibility of finding an interpretative *telos* to a changing form, the commentator resorts to the 'absurdity' of the term. To overcome this tension between a political determinism and communicational nihilism, I would like to present an alternative dialogic category, the only way to account for the techno-semiotic variations and social alterations at play in the scriptural economy of computerised media.

Bakhtin's notion of *heterology,* as taken up and modified by Todorov (1981), refers to the expansion of the dialogic principle to language itself, beyond the boundaries of literary analysis. In an equally expanded semiotic conception, *heterology* implies that all utterances are anticipated by previous discourse, as well as preceded by future utterances. There 'is neither a first nor a last word' in the dialogic context. By virtue of the intricate relation between meaning and context, *heterology* (*raznorechie*) refers to the coexistence within a language of a diversity of discourses. Producing an utterance necessarily means to appropriate discourse in relation to others.

In order to get closer to the scripturality of computerised writing, we need to alter the suffix *–logy* and invest the category with a scriptural conception of communication: this is achieved by the term *heterography*. It

allows us to avoid the reductionist, deterministic and transitive approach of sensitive forms and their mutational modes. Any type of scriptural activity necessarily confronts itself to the alterity of an *architext* and to the various semiotic regimes of the *textware*, on and beyond the screen. Heterographic practices never escape the field of the scriptural economy and yet as Certeau says, they always *deal with* the multiplicity of coercive forces. Variability and mutability are the major semiotic dynamics of heterographic practices, which might not necessarily be in search of political dissent through technical circumvention.

Techno-semiotic variations, because of their dialogic character, always challenge the process of signification. The diversity of discursive forms and media artefacts resulting from the so-called 'sensitive' context exemplifies another Bakhtinian intuition, which Jeanneret mentions in a commentary of Paolo Fabbri's 'semiotic provocations': the notion of 'specific mutability': 'The element that characterises the linguistic form as a sign doesn't lie with its identity as a signal, but lies instead with its specific mutability: [...] to perceive the orientation given to a word by a certain context and a specific situation, an orientation toward evolution not toward immobilism' (Bakhtin 1977 in Fabbri and Jeanneret 2005). In other words, heterographs challenge the instrumental rationality of the media devices that condition their very existence. Jeanneret proceeds to evoke the role attributed to semiotic analysis by Fabbri: 'anthropological and semiotic approaches should not attempt to study codes and signs, but instead should investigate the systems and the processes of signification that characterize cultures by (re)producing their subjects, objects, practices and passions' (Fabbri 2002; Jeanneret 2006). The new scriptural economy condenses various regimes of communication within the same techno-semiotically ruled spaces. Signs are maximized in their potential variability. And finally, interpretation and gestures are superposed. In order to avoid turning all computer-mediated practices into a 'semiotic guerilla-war', one needs to always remind (and attempt to analyse thoroughly) the techno-semiotic properties of computerised media.

Conclusion

By adopting a techno-semiotic perspective we aimed to emphasize the need for a shift in our apprehension of Web censorship from a strictly obliterative orientation of control to a topographic understanding of surveillance. In this context, Jeanneret's productive reconceptualization of Michel de Certeau's *scriptural economy* proved useful to envision a more pluralized reality in the coercive forces formatting, collecting, and capturing ordinary practices within computerised media. Our reflection has evolved along three thematic moments: the scriptural *reading* of a sophisticated *surveillance*, the description of *micro-media* in a scriptural era, and the exploration of *heterographic practices* at hands with the scriptural forces. A greater consideration for the political operativity of computerised writing is essential to display the ambivalent construction of media devices in China. By highlighting the depth of what is commonly referred to—in a levelling metaphor—as 'platforms', one makes clear that governmental strategies are materially dependent on the techno-semiotic properties of 'digital media'. Such conclusions suggest an alternative conception of power, which avoids the pitfalls of the binary oppositions that largely dominate 'Chinese Internet Research'. Finally, they may open the way to non-teleological conceptions of semiosis and correlatively to non-instrumental understandings of media. In that sense, the thematic notion of 'sensitivity' allows to delineate three major contributions of the techno-semiotic study of computerised media, within and beyond the admittedly specific context of the 'Chinese Internet':

(a) Instrumented visibility or the fabrication of data as 'traces'

The popular notions of 'sensitivity' and 'sensitive words' can be read as a local and epistemological problematization of how computerised media affect the realm of semiosis. As argued in the first section, computerised writing—or screen scripts—combine a technical level of computer coding with semiotic

phenomena on the screen. This dual character renders possible the variable 'visibility' of texts. The semiotic definition of 'web sensitivity' can be read as the uncertain possibility for mediated forms to enter (or exit) the 'domain of the visible'. More than just a discursive property of the 'content', as it is usually perceived to be, it is the ruling principle of computerised writing to regulate this 'sensitivity'. Additionally, more than simply describing the encounter of China's governmental forces with the 'creative practices of the netizens', the category also serves to illustrate a major semiotic process of computerised media devices: the fabrication of computer *data* into *traces* of social activities.

Concluding her study on the cognitive and political properties of digital textualities, Estrella Rojas explains how 'numerical thinking is a rationality arising from computing technology that generates and inflects symbolic configurations'. Implicitly referring to Ivan Illich (1991), she argues that '[g]oing from *visible to invisible*, value moves from the text itself to (1) the processes that manufacture and present it as well as instrument its reading, and (2) the upstream processes of data management and computational manipulation'. This procedure of 'invisibilization' signifies and reveals concomitantly what Jeanneret calls the 'increasing integration of the usage at the very core of the scriptura economy' (443). In spite of their regional differences and their competing economic ambitions national media industries all develop their media devices in order to derive economic growth from the fabrication of social visibility.

(b) Instrumentalizing trivial (micro-)practices

This configuration of 'visibility' is also at the core of the global political economy of computerised media. The shaping of user activities into a diversified range of 'social traces' relies on the possibility to semiotically convert computerised inscriptions into visible and actionable writings (e.g. *followers*, *fans*, *repost*, *comments*, *likes*, *views*). '[*T*]*races*', argues Jeanneret, 'correspond in fact to strata of codes whose visibility is variable, communication status is altered, and place is modulated between the pole of the computer commands and that of the social interactions' (2014: 397). 'Sensitivity', in this second dimension, conveys the uncertainty of governmental reason in learning how to *deal with* the 'traces' of those users who themselves *deal with* the media's injunctions to write. Therefore, it becomes more vital than ever to articulate the understanding of the techno-semiotic properties of media devices with the consubstantial technological imaginaries, the 'communicational pretentions', as Jeanneret calls them, of media corporations and other social agents involved in the mobilization of the micro-practices. Hence, the techno-semiotic analysis can develop into a semio-political critique.

(c) Industrialising reflexive communication

Finally, 'sensitivity' epitomizes the dialectical tension between strategy and tactics within the scriptural economy of computerised media. 'Sensitive forms' are also trans-forming objects, and where meaning has been ascribed, meaning can be withdrawn and displaced. This specific 'mutability of signs', characteristic of what we called heterographic practices, reveals the reflexivity of mediated communication on the Web as an eminently semiotic and social activity. The scriptural economy, however, nourishes itself from the proliferation of the everyday practices it conditions and fosters. Their textual creativity is the very resource of its functioning. With this *modus operandi* of computerised media in mind, I conclude with a last prospective line of exploration: the necessary combination of a techno-semiotic analysis of media prescriptions with the close ethnographic observation of how social practices poetically appropriate and *deal with* the devices in materially situated and individually experienced contexts.

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Allan Bahroun, Phd Candidate, Applied Social Sciences, Hong Kong Polytechnic University, Hong Kong
E-mail: allan.bahroun@gmail.com