REFERENCING CULTURAL CONTENTS ON THE INTERNET, PRESCRIBING CULTURE?

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Referencing cultural contents on the internet, prescribing culture?

On digital networks, content, references and prescription are inseparable
To reference a cultural good on the Internet, it is sufficient to evoke its existence through a text, a photo, a sound recording or a video, or to signal the existence of digital cultural content with a hyperlink, a website address, the name of a Facebook profile, a Twitter account name or hashtag, or a keyword to use on your favourite search engine. Each unit of content can refer to other references and other cultural artefacts that have not only an online presence, but also a physical existence: the address of a historic building or a neighbourhood bookstore, the date and venue of a concert or a ballet, the title of a CD, DVD or a book. On the Internet, culture-related content is de facto a reference to cultural artefacts and to artists.

Natural referencing is a set of best practices that allows website administrators to ensure that their contents are visible to and accessible by Internet users. These best practices include, among others, the ability to create direct links to other content within the pages of the same website, ensuring that the pages and content of a site can also be referenced directly by other web sites and by all channels and Internet media (email, photos, videos, games, news media), and generally by all forms of media: TV, radio, print media, advertising displays, mobile services, etc.

Free search engine referencing is a process in which software programmes known as robots create dynamic references based on the contents of web pages so that they can present these references in response to queries launched by users via keyword searches. Each reference consists of a hyperlink and a summary, placed inside a new web page created dynamically in response to each user query. On the Internet, the best references are in themselves regarded as valuable content and as an important source of traffic for web sites and search engines.

Paid referencing includes publishing online advertising references, either by associating the references with content (Display Advertising), or by associating them with search terms on search engines (Keyword Advertising). Keyword advertising enables advertisers to place commercial references in the results pages generated by search engines based on the keywords selected by users when formulating their queries.

References to cultural goods and services carry a de facto form of prescription, such as an educational value for Wikipedia articles, a community and social value for recommendations on Facebook and Twitter or a commercial value for sponsored links. According to Bruno Racine, a cultural player who operates on a global scale must aim for comprehensive referencing, as the prescription of any material published on the Internet is the result of a constraint linked to this goal of comprehensiveness.

The referencing and prescription of cultural content on the Internet follows the rules laid down by the Internet leaders
As it currently stands, cultural players have not yet developed specific rules for referenc-
ing and prescribing their content on the Internet. The rules that apply to cultural content are the same as those that apply to all other content available on line. They were developed and implemented by the stakeholders who are most invested in the digital economy.

Google has been in existence since 1998. Its contribution to the development of the Internet and digital networks can be estimated at about $100 billion, expressed as the sum of its operating costs between 2001 and 2010. This figure represents, in a sense, the effort expended by the company in its bid to climb to number one in terms of traffic and audience.

Amazon has been in existence since 1994. Its contribution to the development of e-commerce and the digital economy in general can be estimated at about $132 billion, expressed as the sum of its operating costs between 1995 and 2010. This figure represents, in a sense, the effort expended by the company in its bid to climb to number-one position in terms of online retail sales.

Many experts in culture, technology and the economy are in agreement in thinking that the traditional cultural players have not always been successful in innovating to meet the changes brought about by the Internet revolution. In interviews given for the 2011 Forum d’Avignon, two players in particular stressed this fact.

Some media are still finding it difficult to innovate in the digital environment
Marc Tessier recalled that during the early years of the Internet revolution, the media as a whole were effectively paralysed by the fall in prices inherent in the digitisation of their content. They allowed the leaders in the new digital environment to develop new practices without their input. These new global players, driven by their long-term strategic focus, have invested heavily in developing and implementing the new rules of the game. This holds true for all traditional media, but unlike the book and music industries, whose online product referencing is now fairly exhaustive and for whom legal and profitable distribution models are now operational, the film and video industries in particular are still struggling to promote their products via the Internet. The VoD sector has not understood how (or has failed) to innovate to any significant degree in terms of referencing or prescribing its products via the Internet; for the distribution of legal online videos, the main business models have in general have remained very traditional, despite some breakthrough initiatives such as that of Netflix in the United States.

The digital strategy of traditional cultural players remains immature
Mats Carduner notes that the Internet strategy adopted by traditional cultural and media players is not yet mature, as it is still essentially based on attempts to transpose traditional models to the new channel and is designed to maintain established positions in the very short term. Many players have adopted an attitude of defiance and rejection of the new mechanisms, which cannot, in his view, bear fruit in the long term “as it is essential for them to embrace the subject, to know how to take risks and to adopt a dynamic approach of permanent experimentation.”

But many players within the cultural ecosystem have a clear vision of the new rules of the game.
In 2011, many cultural players have visibly taken the measure of the digital revolution on board. According to Marc Tessier, the Internet has become in itself a form of cultural heritage. As for Bruno Racine, he believes that we need to fundamentally rethink the referencing tools and access to resources if we are to participate in developing the new rules of the game. The French company MyMajorCompany\textsuperscript{16} demonstrates that it is possible to develop a traditional music production business using the mechanisms of the social web (crowd funding).

Simon Istolainen\textsuperscript{17}: “MyMajorCompany is a record label\textsuperscript{18} in the traditional sense, but it uses the mechanisms of the web community to launch and develop the careers of its artists. It remains in essence a record label, but it has developed a unique business model to exploit the opportunities presented by an Internet platform.\textsuperscript{19}”

**Comprehensive content, ease of use and attractive prices are the three golden rules of Internet referencing**

For Andrew Cecil\textsuperscript{20}, comprehensive referencing is the number one objective in order to offer customers the best possible online experience. For Annina Svensson\textsuperscript{21}, this is the only way to establish credibility in the face of piracy websites – a conviction that is also shared by Marc Tessier. According to Maxime Tiran\textsuperscript{22}, comprehensively referencing the entire contents of the web is an impossible goal; yet this is Google’s mission.

Annina Svensson: “Access to music should be as simple as possible in order to capture and retain users. These principles, which were set out in 2006, remain the basis of Spotify’s strategy.”

Making life easier for users at acceptable prices is one of the laws of the Internet economy, largely supported by the U.S. innovation ecosystem through significant financial investments. The majority of the current Internet leaders are companies that have, first and foremost, developed services that have attracted users *en masse*, prior to identifying their business model.

Google’s total revenues between 2001 and 2010 were approximately $144 billion, and its net profit was about $31 billion. Google’s profit margin is significant, but it is achieved primarily through B2B services\textsuperscript{23} with online advertising. Its Internet services provided to the public are predominantly free.

Amazon’s cumulative net income between 1995 and 2010 was approximately $1.3 billion. Its net profits were negative between 1995 and 2002. Its business, the majority of which is generated through B2C sales\textsuperscript{24}, produces a very low profit margin. In 2010, the company reported a profit of $1 billion on sales of $35 billion.

**Automation is essential for referencing all online content**

Free search engine referencing is an industrial mechanism in which search engines create dynamic references from all of the web pages that they access. Google has become the world’s leading search engines thanks to the performance of its algorithms and computing centres. Historically, its ability to automatically manage very large volumes of information enabled it to take an early advantage over its main competitors, particularly Yahoo!, whose initial service was a directory assembled from a selection of sites by specialised personnel.

Today, dynamic search engine referencing has established itself as an essential tool for cultural access, whether through large generalist

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16- cf. www.mymajorcompany.com
17- Simon Istolainen, co-founder of MyMajorCompany.
19- As opposed to the German website www.sellaband.com, which is an online record production platform.
20- Andrew Cecil is Public Policy Director at Amazon EU
21- Annina Svensson is France Country Manager at Spotify
22- Maxime Tiran is an engineer at Google France
23- Business To Business.
24- Business To Consumer.
search engines\textsuperscript{25} or via the specialised search engines that are now integrated as standard into the majority of content provider websites.

**Content sites are the main referents and prescribers of cultural goods on line**

Natural referencing consists of publishing content on a website and creating links to this content, or allowing links to be created by all Internet applications.

Direct links are probably those that drive the majority of traffic to websites: in other words, references between pages within a site. But there are also links stored by Internet users themselves; for example, by using a website address as the home page of a browser, via bookmarks stored in a browser, inputting a URL\textsuperscript{26} directly into a browser’s address bar, and through links stored in personal applications installed on a user’s PC, tablet or smartphone.

In 2011, Google (Search, News & Maps) was the entity that drove the most traffic to the 25 largest news sites in the United States\textsuperscript{27}, with rates of between 20% and 40% for the seven leading sites – but it was not the dominant source of traffic. Direct links represented an average of 60 to 65% of traffic, against 35 to 40% for indirect links to external sites (including links from search engines)\textsuperscript{28}.

On the Internet, websites provide the majority of cultural references. These include pages by artists who create their own sites and allow these sites to be hosted on community and social internet platforms such as MySpace, Daylimotion, YouTube, Facebook and Twitter, and those of their fans who spontaneously create newsgroups, forums, wikis, blogs, Facebook groups and Twitter accounts, through which through billions of references to artists and their favourite works are published. Finally, there are sites of publishers, institutions, information portals operated by leading media companies, Internet access pages by companies such as Orange in France, and sites from the new leaders in the distribution and sale of artistic goods on line (YouTube, Netflix, Amazon, iTunes, Spotify, etc.).

In 2008, Google’s crawler\textsuperscript{29} scanned more than 1,000 billion pages to index several billion of them. It thus created several billion new pages per day\textsuperscript{30}. Between June and September 2011, the estimated size of Google’s index ranged between 40 and 50 billion web pages (the equivalent index created by Bing varied between 6 and 18 and billion, while Yahoo! Search ranged between 10 and 18 billion)\textsuperscript{31}. It is not unusual for these web pages to contain dozens of indexed URLs\textsuperscript{32}, which are themselves references to Internet content. It is not possible to count the references included in the form of non-clickable content (text, images, video, animations etc.), but they probably increase the total number of references on the Internet several-fold. Among these uncountable references are those referring to non-digitised resources (titles of paper books, the addresses of monuments, dates of events etc.).

Despite their goal of comprehensiveness, search engines cannot index all Internet

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\textsuperscript{25} Cf. Google, Yahoo!, Baidu, Bing, Ask, Yandex
\textsuperscript{26} - Unique Resource Locator: a unique address that provides a means of locating content on the Internet
\textsuperscript{27} - With the exception of: The Wall Street Journal, BBC News, Reuters and Bing News.
\textsuperscript{29} - This is a generic term for any programme (such as a robot or a spider) that automatically discovers and scans websites by following links from one website to another in order to generate a list of search results
\textsuperscript{30} - http://googleblog.blogspot.com/2008/07/we-knew-web-was-big.html
\textsuperscript{31} - Source: www.worldwidewebsize.com
\textsuperscript{32} - Over the years, the www.majesticseo.com website claims to have crawled through around 353 billion different web pages and to have identified around 3 billion URLs, which represents an average of 10 URLs per page
content, and in consequence their prescription service is extremely basic compared to the types of prescription in place on content sites. Although they represent the most popular brands on the Internet, they are not the main prescribers of culture on line.

**Search engines are the gateways and intersections of Internet traffic**

In May 2011, the audience for all Google sites combined reached **one billion users**33, or approximately half of the total number of Internet users worldwide34.

By way of comparison:

Microsoft has served more than 900 million Internet users
Facebook, more than 700 million
Yahoo! more than 690 million
Wikimedia35 approximately 400 million.

According to Mats Carduner, Google acts as an air traffic controller, and search engines in general have become key players with respect to referencing not only because of their technical performance and unmatched operational excellence, but also because they are an important, and sometimes dominant, source of traffic for sites with cultural content. But search engines are not the main source of traffic for websites in general, and a number of issues will challenge their performance in the coming years, including issues related to video36, real time, social networks and mobile services.

In March 2011, the Internet traffic generated by Netflix on fixed networks in North America exceeded that of all other Internet applications37. In addition, four of the five most popular types of streams were video streams: Netflix accounted for 25% of the streams; Bit-torrent38: 17%; YouTube: 10%; Flash Video: 4%. In third place, web (http) traffic represented 17% of Internet streams.

Facebook, which is currently the dominant social network, has not achieved the same level of influence as Google in terms of traffic generated for websites. However, its historical progression is very similar to Google’s, and social networking could eventually become the world’s most popular Internet service, overtaking Google.

In September 2011, Facebook was generating just under 0.64% of the references on the web (for every 10,000 links followed, 64 were from Facebook), against just over 0.1% for YouTube, 0.02% for Twitter and 0.001% for Google+.39

While social networks have not yet reached the level of influence achieved by search engines, their progress is rapid and they are already the most important players in terms of traffic sources for entities whose business model relies on community mechanisms.

Annina Svensson: “Facebook is the number one source of traffic for Spotify, ahead of the search engines”.

In 2010, Facebook generated up to 10% of the quarterly video traffic for online media sites (against 1% for Twitter and 60% for Google)40.

In March 2011, Facebook was already an important source of traffic for the 25 largest news sites in the United States41, with rates ranging from 1% to 8% of the traffic for leading sites. Facebook was the second or third most important source of traffic for Huffingtonpost.com (8%), AOLNews.com, MSNBC.com, Topix and The New York Times.

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33- According to www.comscoredatamine.com
34- In March 2011, the number of Internet users globally amounted to over 2 billion people. Cf. www.internetworldstats.com/stats.htm
36- The leading search engines have essentially been designed to analyse pages of text
37- According to www.sandvine.com
38- A file-sharing platform predominantly for video and audio files
39- According to www.netmarketshare.com
40- According to the study conducted by BrightCove and Tubemogul in the United States
In addition, social networks are already distribution platforms for cultural goods. Like Lady Gaga, many artists already have an online shop on Facebook, where they not only sell branded merchandise, but also transact direct-to-customer sales of their albums.

**Search engines prescribe cultural players more effectively than cultural goods**

Because they must make choices in order to reference the whole of the content of the web, search engines place themselves, *de facto*, in the role of prescribers. But they are technical prescribers, which focus primarily on showcasing the best practitioners of natural referencing. Their results pages direct users to the websites of content providers, who are the real prescribers of culture, rather than to the cultural goods themselves. By contrast, other tools, such as comparison or recommendation sites, seek to prescribe the cultural goods directly. Some independent players, such as Twenga, aim to reference and prescribe all of the goods available for sale on the Internet. But for the time being, their audience is small compared to that of leading search engines, and the number of cultural references is far fewer than the number of references available on the main distribution sites.

As of late September 2011, Twenga had listed more than 420 million products. Although approximately 30,000 references from the Amazon catalogue were included, Amazon itself has nearly 30 million book references, more than 17 million songs, 1.7 million music albums, 900,000 video references, and more.

**With the advent of paid keyword searches, marketing directors are becoming active auction participants**

Thomas GUIGNARD: “AdWords functions as a marketplace where prices, at equilibrium, are indexed at the level of the profitability of the e-commerce platforms to which sponsored links are directed (the maximum cost of the click is determined by the advertiser based on the profit margin generated by the client on each e-commerce platform). These levels of profitability are standardised by sector of activity. AdWords’ rates are stable and correspond to the platforms’ level of profitability by sector of activity”.

Paid search consists of publishing advertising references on line, either by associating them with content (*Display Advertising*), or by combining them with search keywords on search engines (*Keyword Advertising*). Keyword advertising, perfected by Google with the development of a marketplace algorithm for the auction of keywords, allows advertisers to place commercial references in the results pages of search engines according to the keywords Internet users enter into their search queries. Following Google’s success in the online advertising market, this particular mechanism was adopted by the main search engines and by many content sites offering it to advertisers under a generic trademark, making it a global keyword referencing standard. Keyword advertising is currently the world’s leading mechanism in online paid referencing. Marketing directors who adopt this system become traders simply by using an application developed by Google. According to Cédric Naux, the role of marketing director is in the process of changing from negotiating publishing contracts to trading in a marketplace.

**The Internet has given rise to the disintermediation and reintermediation of the relationship between the general public and cultural goods**
Thomas Paris draws attention to the fact that cultural prescription is absent from debates concerning the Internet and suggests several areas for discussion, not only in order to highlight the reasons for this absence, but also in order to heighten awareness of its consequences within the culture ecosystem. The prescription of culture is masked by several myths and, in particular, the myth that the Internet will link the general public directly to the artists and their work. In fact, one increasingly widespread trend on the Internet is the disintermediation of the relationship created by traditional cultural players between the general public and cultural goods, which is being replaced by the reintermediation of this relationship by the major players in the digital economy. According to Thomas Paris, a collection of myths associated with the Internet mask the fact that the development of the economy on digital networks tends to be influenced by the competition between the players, who are each vying for a dominant position.

### The issue of the neutrality of technical players on the Internet is not a question of bias, but the independence of the prescription

While the industrial approach is necessary in order to understand the world’s new digital memory, the leading technical platforms, which have become essential for access to cultural goods, have inherited an entirely new level of power and responsibility. While Google, Amazon and iTunes are unanimous in asserting that their services are limited to providing a technical form of prescription of culture, the majority also have activities in which they exercise prescriptions for their own commercial benefit, even if only to fill gaps in the current ecosystem where a demand exists that no content provider is able or wishes to meet. The dominant positions taken by some technical intermediaries are a cause for concern for many of the players in the cultural ecosystem, especially where there is a risk of collusion linked, on the one hand, to an activity based on the provision of technical prescription available to all, and on the other hand to commercial activities that are competing with those of customers or users of the technical platform. Some players are raising the question of governance, in order to ensure the independence of the activities carried out by these key technical players. In France, the report “Creation and the Internet”, commissioned from Patrick Zelnik by Frédéric Mitterrand, the French Minister of Culture, recommended that regulations be put in place to ensure the diversity and legality of music platforms on the Internet, and in general to ensure the diversity of the offer and compliance with artists’ copyrights online.

Patrick Zelnik: “Regulation implies a transfer of wealth from the new technical operators - who have the means - to the content industries.”

### The new referencing mechanisms promote the diversity of the products available to the public

We should start from the principle that all cultural goods are referenced on the Internet, or that they rapidly become so as soon as they have a public existence, either because the authors, their fans, publishers, distributors etc. prescribe them, or because someone searches for them. If a keyword search on the major search engines is not sufficient to locate a reference, a question asked in a forum
or in a specialised community usually does not take long to provide, or even to create, valid references. In addition, for very precise and specialised queries, references to blockbusters generally rank lower than those of the artists or works that precisely match the query, including references on the generalist search engines. In this sense, the Internet promotes the diversity of cultural products. We can say this in an absolute sense if we measure the number and variety of cultural references available online and the ease with which it is possible to access them (for those who have a Internet access).

In end-September 2011, the search engine integrated into the Amazon website in the United States returned more than 33 million book references. A search of the Kindle catalogue returned more than 900,000 references, including more than 500,000 eBooks. The Video & TV category returned nearly 900,000 references. The MP3 Downloads category returned more than 17 million titles and more than 1.7 million album references. The Music category returned nearly 4 million CD references.

The new mechanisms for referencing and prescription can also contribute to the concentration of demand around best sellers
Not all cultural content is equally visible to all Internet users. The visibility of cultural references on line depends on the determination of the Internet users, their interests and their ability to use these mechanisms effectively to access content. Alternative works are visible primarily to users who are interested in alternatives to blockbusters, as the leading broadcast and online distribution platforms seek to give prominence to the catalogues of the major book, CD and DVD publishers (video on demand is less advanced at the present time). The concentration effect traditionally found in these markets is thus reproduced on the digital networks.

If the increase in the size of the catalogues available online can be interpreted as an effect of the “long tail” phenomenon described by Chris Anderson in 2004, industrial referencing methods and recommendation mechanisms that combine automation software and user reviews also promote the phenomenon of “hits”. The vast majority of technical players leave the prescription of the artists and their work contained in catalogues to the publishers and content producers. Understandably, these publishers and producers focus on their best sellers for reasons of cost and profitability. On line distributors also promote their best sellers (the references most frequently requested by users), either automatically or by enabling their customers to make recommendations about their purchases. Ultimately, the convergence of these mechanisms can create a “snowball” effect that concentrates demand on a few references rather than on all of the references in the catalogue. This phenomenon is exacerbated by the fact that the current offer concentrates demand around a small number of platforms with global reach.

Patrick Zelnik: “It’s not the Internet itself that prevents the growth of a diversity of offers, but the phenomenon of industrial concentration in general”

The performance of new online prescription mechanisms is still difficult to measure
The measurement of the comparative per-
formance of online and off-line prescription mechanisms does not yet exist a priori, because although, for the time being, it is theoretically possible to measure everything on the Internet, there is no reliable method for measuring the performance of online campaigns. However, the technical performance of certain platforms and the level of integration of their services make it possible to immediately focus all of the different types of media on a prescription, creating a commercial hit.

Patrick Zelnik: “During the Victoires de la Musique in 2011, Benjamin Biolay was competing. He was ranked at no. 60 on iTunes. At the end of the ceremony, when Benjamin Biolay had won, he was ranked at no. 1 on iTunes.”

Apple is a case study illustrating how the integration of services throughout the prescription chain makes it possible to direct the public from cultural references to cultural goods, without breaking the chain. However, this level of control is not the standard for online services today – far from it.

Mats Carduner: “Paid referencing by advertising services, particularly those provided by search engines, enables advertisers to acquire traffic relatively efficiently, but does not convert that traffic into sales. In a context where acquisition channels are becoming more numerous, porous and complex, it is necessary to help companies to understand which acquisition channels it should use, at what price and with what return on investment in terms of conversions”.

This discipline is all the more difficult in that it is continuously disrupted by new mechanisms, such as the social web.

Mats Carduner: “The social web is changing the face of the ecosystem, and it may dramatically alter the dominance of the Internet “air traffic controllers” by changing the balance of power between the transmitters and the receivers of messages. The new mechanisms of the social and community webs, such as recommendations from friends, effectively encourage the reach of Internet web sites (the long tail phenomenon) in the form of micro-visits motivated by the search for micro-content. Facebook, whose visitors remain on the site for approximately 55 minutes per day, has two key strengths: the instantaneous spread of messages, and the site’s capacity to convert its users. The observed conversions are very highly coloured by prescription, which has a very strong capacity to spread to other audiences and to redirect traffic to other sites”.

To promote cultural diversity on the Internet, some players are playing the open access card

In his role as content distributor and service aggregator for Orange, David Lacombled proposes bringing players from the Internet, print media, radio, TV and mobile services industries together around a common, open platform, in order to address the whole of the market.

David Lacombled: “It is a question of providing an alternative for users who do not want to depend on a closed ecosystem, whether with respect to terminals or services, and to ensure diversity in terms of access to content ... it’s a commitment against format obsolescence in the digital domain: a right purchased over content must be adapted by the operator to operate on all of the terminals on the market. A digital book, for example, must be accessible on the user’s PC, mobile or tablet, regardless of brand ... this is also about creating a diverse ecosystem: facilitating the dissemination and identification of content, bringing players together around common projects with the aim of helping them to spread beyond the European platforms, to counterbalance market concentration where companies will always tend to promote the dissemination of blockbusters. Because we are all aware that many artists and product creators are needed for a blockbuster to emerge that finances the entire ecosystem.”

The use of alliances among players appears to be fairly well perceived within the cultural ecosystem

Many players also believe that alliances should be welcomed, and that they may even be essential, in order to guide the online culture ecosystem towards a balance that favours cultural diversity.

Bruno Racine: “The collective approach is attractive because dominant positions make access to resources very expensive,
particularly those whose shelf life is very short. It may be necessary to establish consortiums to give “so called cultural academies” bargaining power with respect to digital content suppliers.”

Mats Carduner: “Alliances between players in the same sector should not be overlooked, as they can act as a counterbalance to the dominant players, as well as influencing regulators’ decisions.”

The risks of dominance exist, but dominant players do not stand the test of time
In order to address the dominant positions of certain players, the culture ecosystem naturally seeks to redress the balance, building alliances as needed. But dominant positions do not last forever, and new players, such as Facebook and Wal-Mart, are already threatening the dominance of Google and Amazon.

Bruno Racine: “New dominant players are certainly emerging, but this trend towards monopoly is not sustainable over time ... the game is just beginning, and in twenty years’ time this digital revolution may well have been replaced by something new.”

Mats Carduner: “The social web is in the process of rebalancing the ecosystem, and social networking platforms can become allies of cultural entities.”

Annina Svensson: “Facebook is the number one source of traffic for Spotify, ahead of the search engines”.

The next digital revolution will replace the point of sale, and physical cultural goods will be at the heart of these challenges
With approximately 1% to 2% of its sales carried out online, Wal-Mart is already one of the leading e-commerce entities worldwide in terms of revenues. This year, the retail giants have begun to integrate digital technologies into their distribution networks. The challenge of e-commerce is now shifting to the use of digital applications at the point of sale. Mobile services already allow access to online references from a physical point of sale, and in emerging markets mobile networks are developing the majority of uses for digital technology. However, the integration of services between cultural goods, or their physical references, and their digital references has still barely begun. The players who know how to exploit the new opportunities offered by the entire set of distribution networks will define the rules of the next digital revolution – for example, by not allowing the consumer to systematically return to the search engines, in the absence of an alternative. In addition, in a competitive environment in which the leading players in the bricks-and-mortar mass retail sector are able to capture the core of consumer demand, leading Internet players may be seen as vectors for widening the diversity of the offer.

What will be the future major “brands” of culture on the Internet?
Marc Tessier: “The professionals believe in the power of brands as prescribers. But which brands are we talking about?”

Google, Facebook and Twitter are three words that are likely to be the core around which the three most important Internet webs will be woven.

At end-September 2011, a Google search using Facebook as the keyword returned nearly 18 billion hits; Google and Twitter received nearly 12 billion hits each. Each of these references returns exclusively to each of the relevant companies, a priori, since these terms are not used outside of these specific contexts. By way of comparison, the keyword Bible returned just under 420 million hits, Beatles 206 million and Shakespeare 34 million hits. Louvre returned nearly 40 million hits.

57- Wal-Mart’s 2010 revenues were approximately USD 420 billion (cf. www.wal-mart.com)
58- The number one position goes to Amazon
59- Dynamic references created by search engines in response to keyword queries
hits, and *Parthenon* slightly more than 1.5 million. In an Interbrand\(^{60}\) ranking of global brands, six of the ten largest brands are technology companies. Microsoft is in third place, and Google ranks fourth. Apple is no. 6. The ten largest global brands are American. The two largest companies in the media sector, Disney and Thomson Reuters, rank in 9\(^{th}\) and 37\(^{th}\) place respectively. Disney’s\(^{61}\) visibility on the Internet is significantly lower than that of other brands in its category.

The best-known brands on the Internet are technology company brands. The majority of these companies did not exist fifteen years ago. Among the top ten are two Chinese companies; the others are American. China and the United States are the two largest Internet markets.

**Returning cultural goods to the heart of our thinking, creating a web around each one**

Bruno Racine: “*One of our projects is to create a web around an object, based on additional layers of information, to recreate the need for order and organisation that will support queries based on the technical tools of the web: for example, in response to a question like “Who is Victor Hugo?”*”

We have already begun to weave webs around cultural goods, but in a disorganised and probably unconscious way. Returning cultural goods to the heart of our thinking is a matter of giving each one an existence and a weight on the Internet, not only in the form of digital copies, but also in the form of an Internet graph – in other words, a collection of mutually referencing content that together create meaning that can be detected by the tools of the semantic web.

Some content providers have had a tendency, in recent years, to neglect the fundamentals of the “customer experience” on the Internet in favour of an easy solution that lets users find their way on their own, using the tools provided free of charge by technical players. Because it now includes digital tools, the evolution of business at the point of sale gives us an opportunity to return real cultural goods to the heart of our thinking about referencing and prescription, in order to correct the balance of power between traditional cultural players and the new players of the digital economy. The phenomenon of dematerialisation and re-materialisation of our everyday objects is an ongoing process that will engender, with each new cycle of innovation, new opportunities and new challenges.

Find the full version of the study at


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60- www.interbrand.com
61- The keyword Disney returned approximately 188 million hits on Google
Référencer les œuvres sur internet, prescrire la culture ?

Sur les réseaux numériques, les contenus, les références et la prescription sont indisociables.

Pour référencer un bien culturel sur Internet, il suffit d’en évoquer l’existence par un texte, une photo, un enregistrement sonore, une vidéo… ou de signaler l’existence d’un contenu culturel numérique, à l’aide d’un lien hypertexte, d’une adresse de site internet, d’un nom de profil Facebook, d’un nom de compte ou d’un hashtag sur Twitter, ou encore d’un mot clé à utiliser sur son moteur de recherche préféré... Chaque contenu peut renvoyer vers d’autres références ou d’autres biens culturels présents en ligne mais surtout vers des biens réels, l’adresse d’un monument historique ou d’un libraire de quartier, les dates et lieu d’un concert ou d’un ballet, le titre d’un disque ou d’un livre… Sur Internet, les contenus à caractère culturel sont de facto des références aux biens culturels et aux artistes.

Le référencement naturel consiste en un ensemble de bonnes pratiques qui permettent aux administrateurs des sites Internet de veiller à ce que leurs contenus soient visibles et accessibles par les internautes. Ces bonnes pratiques comprennent, entre autres, le fait de créer des références directes aux contenus à l’intérieur des pages d’un même site web, en faisant en sorte que les pages et les contenus d’un site soient également référencés directement par d’autres sites web, par l’ensemble des canaux et supports d’Internet (email, photos, vidéos, jeux, médias), et d’une manière générale par l’ensemble des médias : TV, Radio, Presse, affichages publicitaires, services mobiles etc.

Le référencement gratuit par les moteurs de recherche est un processus dans lequel des logiciels appelés robots, créent des références dynamiques à partir des contenus des pages web, de manière à présenter ces références en réponse à des questions d’internautes formulées à l’aide de mots clés. Chaque référence consiste en un lien hypertexte et un résumé placés à l’intérieur d’une nouvelle page web créée dynamiquement en réponse à chaque requête d’internaute. Sur Internet, les meilleures références sont elles-mêmes considérées comme des contenus de valeur et une source de trafic important pour les sites web et les moteurs de recherche.

Le référencement payant consiste à publier des références publicitaires en ligne, soit en les associant à des contenus (Display Advertising), soit en les associant à des mots clés recherchés sur les moteurs de recherche (Keyword Advertising). Ce dernier mécanisme permet auxannonceurs de placer des références commerciales dans les pages de résultats des moteurs de recherche en fonction des mots clés choisis par les internautes pour formuler leurs requêtes.

Les références aux biens et services culturels véhiculent de facto une forme de prescription, avec par exemple une valeur pédagogique pour des articles Wikipedia, une valeur communautaire et sociale pour des recommandations sur Facebook ou Twitter, et une valeur commerciale pour des liens sponsorisés. Selon Bruno Racine, un acteur de la culture d’envergure mondiale doit viser