

# Rassegna taliana di Linguistica Applicata

ESTRATTO

BULZONI  
EDITORE  


Anno XLII

Settembre-Dicembre 2010 / 3  
ISSN 0033-9725

**THE HEADACHE FROM HELL: WWW.ASPIRIN.COM  
BETWEEN MARKETING AND SCIENCE COMMUNICATION**

**KIM GREGO**  
*Università degli Studi di Milano*

***Abstract***

*Lo studio analizza il sito [www.aspirin.com](http://www.aspirin.com) quale esempio di commercializzazione online di prodotti e/o servizi medico-sanitari. Dopo aver delineato lo scopo comunicativo generale del sito, segue l'analisi linguistica di due testi tratti dal sito, condotta secondo prospettive di Critical Discourse Analysis, attenta alla collocazione socio-culturale del testo, e di Genre Analysis, interessata alla natura ibrida di testi che coniugano divulgazione scientifica e marketing di prodotti medici. La ricerca disegna quindi alcune conclusioni in itinere circa lo stato attuale e le tendenze emergenti di questo tipo di comunicazione, dove il confine sottile fra medicina ed etica è messo in discussione da un mezzo che pone in contatto gli attori del campo medico-farmaceutico-sanitario con un numero potenzialmente enorme di pazienti/utenti/consumatori.*

**1. *Web-based healthcare communication***

The relevance in today's society of business-to-consumer – or rather corporate-to-citizen communication, with a change in the perspective from purely marketing to social aspects is apparent, all-pervading and has long and thoroughly been studied (Catenaccio 2007). This research

intends to follow on and detail what happens when medicine meets web marketing, i.e. when the web-marketed product is a medical product or service.

## 2. Healthcare web-marketing: *www.aspirin.com*

Aspirin® is possibly the best-known drug in the world, East and West, and falls well within the above-mentioned scope of according social relevance a key role in research into healthcare web communication. Originally patented in Germany in 1899, it is now sold as a generic product, though still under a registered trade mark “in Germany and more than 80 countries” (Bayer 2001:27). Bayer markets it worldwide under a variety of slightly different names and packages, designed to target users with varying health problems. For several years now, in the wake of the widespread diffusion of computer technology and web usage, and the current global trend of marketing products online, Bayer has been running an Aspirin®-dedicated ‘brand website’, in the phase in which brand websites

are starting to move beyond the stage of providing only the facts. [...] Consumers expect to be able to speak directly and individually to brands, but also that brands will respond sincerely and with interest (Taylor 2009).

As it deals with Aspirin® alone and no other Bayer product, *www.aspirin.com* is a single product website. Its content, layout and language, target an international, audience which is English-speaking (no other language is available), and obviously with Internet access. It presumably includes Aspirin® users or potential users, i.e. people with Aspirin®-treatable conditions or conditions they believe to be such.

## 3. Issues in corporate-to-citizen web based healthcare communication

The aim of this research was to outline *www.aspirin.com*’s intended and actual communicative purpose and how this is reflected in the genres and multimodal features adopted in its corporate-to-citizen communication. The research was conducted through a linguistic analysis of a sample text taken from the website, and working from the perspective of critical discourse-analysis (Fairclough 1993, 2001, 2003); tools from corpus linguistics were also used (WordSmith 4.0). Once the results had been obtained, it was hoped they would contribute to the ultimate objec-

tive of identifying trends in the web-based communication used to market healthcare.

## 4. The headache from hell: A sample text

The sample text selected for analysis, entitled *The headache from hell* (HfH, Fig. 1), belongs to the new web-based e-brochure genre. A PDF format document, it was downloaded from *www.aspirin.com/hp\_backup/aoi/hfh/e...rial\_en.html* on 20 March 2009, has 27 pages (word count: 5,988), and is dated 2001. The code is a basic bi-modal mix of verbal (English text) and visual (images) language. There is no known author, though it is specified – corporate-style – that the *owner* of the document is Bayer AG. Its intended target audience is, presumably, the same as the website’s: international English-speaking non-specialists, with various non-professional motivations for downloading/ reading it. This document was chosen as a good example of the website, as it functioned as a summary of the information *www.aspirin.com* provided on Aspirin® as a painkiller. It refers, in particular, to one specific pathology: migraine. Thus, it deals with a medical topic while simultaneously operating as a corporate-to-citizen promotional web tool. Furthermore, its portable document format (PDF) makes it easily spread, both in the electronic and printed forms, purposefully meant to constitute a vehicle for circulation.

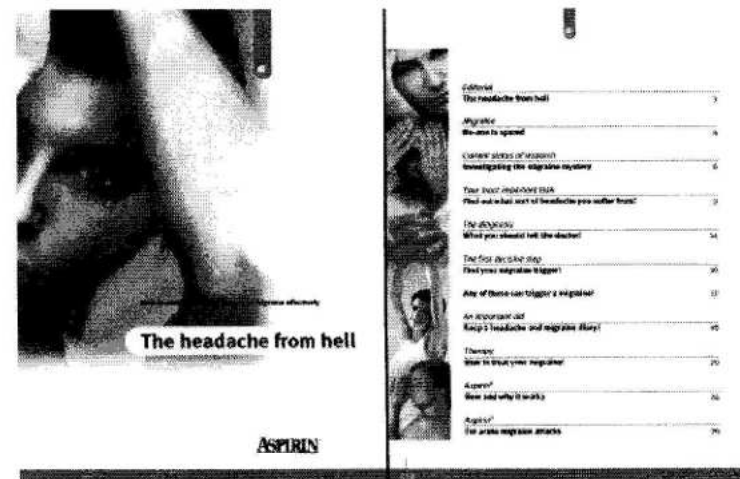


Fig. 1 *The headache from hell* Aspirin brochure, cover and content page

## 5. Linguistic analysis

The linguistic investigation made use of Corpus Linguistics (Word-Smith Tools 4.0) to analyze the file (35,738 spaces, 5,944 tokens, 1,459 types, type/token ratio 25%), create frequency lists, and identify keywords (vs. the BNC World corpus). It also used tools from genre, text and discourse analyses to isolate and categorize frequent non-keywords (fn-k); identify linguistic phenomena behind them; verify the text's level of specialization; confirm the realization of the communicative purpose and, more broadly, detect any trends in corporate-to-citizen healthcare web communication.

N	Key word	Freq	%	RC. Freq.	Keyness
1	<u>MIGRAINE</u>	89	1,48	177	1392,04
2	<u>HEADACHE</u>	50	0,83	757	597,32
3	<u>HEADACHES</u>	45	0,75	380	587,84
4	<i>PAIN</i>	34	0,56	7040	231,04
5	<u>MIGRAINEURS</u>	10	0,16	1	187,67
6	<u>ACETYLSALICYLIC</u>	10	0,16	2	183,56
7	<u>YOUR</u>	66	1,10	134393	161,77
8	<u>ASPIRIN</u>	12	0,20	312	130,64
9	<u>SUFFER</u>	17	0,28	3422	116,42
10	<u>BRAIN</u>	18	0,30	4580	114,96
11	<u>YOU</u>	109	1,82	588503	98,75
12	<u>TRIGGERS</u>	9	0,15	229	98,35
13	<u>ATTACK</u>	19	0,31	9282	97,14
14	<u>OR</u>	79	1,31	370166	87,05
15	<u>SUFFERERS</u>	9	0,15	731	77,76
16	<u>MEDICATION</u>	8	0,13	486	73,71
17	<u>NAUSEA</u>	7	0,11	279	70,32
18	<u>UNBEARABLE</u>	7	0,11	338	67,67
19	<u>ATTACKS</u>	11	0,18	3348	66,37
20	<u>STRESS</u>	12	0,20	4828	65,86

Table 1. Keywords (vs. BNC World)

Table 1 above shows the first 20 keywords retrieved by comparing the text against the BNC World corpus. Keywords, as is well known, represent the terms that stand out as most 'unlikely' to occur if compared to a standard reference corpus or put differently, those specific to the text, or words that one *expects* to find in a text of a given topic/genre. In Table 2, terms have been highlighted according to semantic classification: the words underlined include those relating to 'migraine', the words in italics refer to 'aspirin', the other words are all connected to the semantic field

N	Word	N	Word	N	Word	N	Word
1	THE	24	FROM	47	<i>SUFFER</i>	70	<u>ATTACKS</u>
2	OF	25	CAN	48	<u>THERE</u>	71	<u>HOW</u>
3	TO	26	<u>ONE</u>	49	<u>THEM</u>	72	<u>OUT</u>
4	AND	27	<i>PAIN</i>	50	<u>TIME</u>	73	<u>SHOULD</u>
5	A	28	<u>IF</u>	51	<u>ONLY</u>	74	<u>SO</u>
6	IS	29	<u>MORE</u>	52	<u>THAN</u>	75	<u>T</u>
7	<u>IN</u>	30	AN	53	<u>THEY</u>	76	<u>TYPE</u>
8	<u>YOU</u>	31	<u>BUT</u>	54	<u>DOCTOR</u>	77	<u>ABOUT</u>
9	<u>MIGRAINE</u>	32	<u>BY</u>	55	<u>ITS</u>	78	<u>ACETYLSALICYLIC</u>
10	OR	33	ON	56	<u>WHAT</u>	79	<u>BLOOD</u>
11	<u>YOUR</u>	34	EVEN	57	<u>AFTER</u>	80	<u>BODY</u>
12	IT	35	AT	58	ASPIRIN	81	<u>CERTAIN</u>
13	AS	36	<u>DO</u>	59	<u>CENT</u>	82	<u>FIND</u>
14	FOR	37	NOT	60	<u>HAS</u>	83	<u>LIFE</u>
15	THIS	38	<u>ALL</u>	61	<u>MANY</u>	84	<u>MIGRAINEURS</u>
16	WHICH	39	ALSO	62	<u>MOST</u>	85	<u>S</u>
17	ARE	40	WITH	63	<u>MUCH</u>	86	<u>SEVERE</u>
18	THAT	41	SUCH	64	<u>NO</u>	87	<u>SYMPTOMS</u>
19	<u>HEADACHE</u>	42	THESE	65	<u>OVER</u>	88	<u>THEIR</u>
20	<u>HEADACHES</u>	43	<u>ATTACK</u>	66	<u>PER</u>	89	<u>THEN</u>
21	#	44	<u>WILL</u>	67	<u>STRESS</u>	90	<u>TREATMENT</u>
22	<u>HAVE</u>	45	<u>BRAIN</u>	68	<u>TAKE</u>	91	<u>UNDER</u>
23	<u>BE</u>	46	<u>OTHER</u>	69	ACID	92	<u>WAS</u>

Table 2. Frequency list ( $f \geq 10$ )

of 'suffering'. It is to be noted that all the lexical keywords pertain to the medical but not business field: while healthcare words were naturally to be expected, so were marketing or promotional terms. However, the latter do not feature among the first 20, which seems to go in favour of this text being conceived to appear as a scientific / medical document rather than a promotional one. The only instance of any marketing language is provided by the keywords *your* and *you* (not highlighted), appealing directly to the reader. But these could also be the surface realization of the dissemination purpose inherent in any popular level communicative event, establishing inclusiveness by using the second person singular

Table 2 is a frequency wordlist showing the first 92 most frequent words in HfH, i.e. those that occur at least 10 times. The keywords identified earlier in Table 1 also appear here, highlighted in the same way. They are, as to be expected, almost all lexical, while the remaining are chiefly grammatical. The next step in the analysis was to take out the keywords from the Table 2 frequency list, look at the remaining words one by one, and then pick out those that seemed to be of linguistic relevance for the study. Namely, the unhighlighted words were taken out, and those chosen among the words left were emphasized in bold. The result of this operation is shown in Table 3 below.

Fr. No.	Word	57	AFTER	36	DO	73	SHOULD
7	IN	59	CENT	38	ALL	74	SO
8	YOU	60	HAS	44	WILL	76	TYPE
11	YOUR	61	MANY	46	OTHER	77	ABOUT
22	HAVE	62	MOST	48	THERE	81	CERTAIN
23	BE	63	MUCH	49	THEM	82	FIND
25	CAN	64	NO	50	TIME	83	LIFE
26	ONE	65	OVER	51	ONLY	86	SEVERE
28	IF	66	PER	52	THAN	88	THEIR
29	MORE	68	TAKE	53	THEY	89	THEN
31	BUT	71	HOW	55	ITS	91	UNDER
32	BY	72	OUT	56	WHAT	92	WAS

Table 3. Frequent non-keywords (fn-k)

This table gives a full list of previously selected terms, which turn out to be frequent words other than keywords, i.e. frequent non-keywords (fn-k). Although grammatical words are usually less interesting than lexical ones – and grammatical words abound here – some patterns could anyway be identified, and categorized into four main groups.

Fr. No.	Word	Use in context
60	HAS	<u>has</u> identified 165 different types of headache
22	HAVE	even though you <u>have</u> had a good night's sleep
92	WAS	acetylsalicylic acid, <u>was</u> first synthesized in a stable
32	BY	has been recommended [...] <u>by</u> international migraine and headache experts
28	IF	<u>if</u> medication were taken in time
57	AFTER	<u>after</u> it passes through the stomach it is rapidly absorbed
66	PER	In about 50 <u>per cent</u> of all cases
59	CENT	over 70 <u>per cent</u> of the populations complains of occasional headaches.
55	ITS	Aspirin® which has proved <u>its</u> worth millions of times over

Table 4. fn-k Group 1: Specialization

The first group points to the specialized nature of the text. In context these fn-k describe linguistic phenomena typical of medical / scientific texts. For example, *have* and *has*, seen in context, are used in present perfect forms to give rhematic information, while *was*, on the other hand, is an instance of the simple past used for narration. Their alternating presence is to be expected in a methodological structure such as IMRAD<sup>1</sup>, involving a 'background', 'history', 'experiment' (theme, simple past), 'results' (rheme, present perfect). *After* is also found as a signpost in temporal structures, typically in descriptions (experiments, instructions). The preposition *by* appears to introduce the agent in the passive voice, which in scientific

<sup>1</sup> The "Introduction, Methods, Results, Analysis, Discussion" argumentative structure recommended by the International Committee of Medical Journal Editors (see <http://www.icmje.org/>).

texts is often preferred to the active voice for hedging purposes. The possessive adjective *its* also expresses de-personification: it means most names mentioned in the text denote inanimate entities (e.g. body, Aspirin®, migraine), as natural in scientific research. *Per* and *cent* must of course be considered together as a collocation. The presence of data and figures is proper to scientific language. However, the presence of pseudo-figures (“over 70 per cent of the populations complains of occasional headaches”), with no references to their sources, designates pseudo-scientific texts.

The second group of fn-k, made up of modal verbs (Table 5 below), also reports typical features of scientific texts.

Fr. No.	Word	Use in context
23	BE	You will not <u>be</u> able to avoid them completely
25	CAN	which <u>can</u> be relatively easily avoided
44	WILL	<u>will</u> be therefore more difficult and take longer to treat
73	SHOULD	you <u>should</u> consult a doctor

Table 5. *fn-k* Group 2: Specialization

The infinitive *be* is, of course, no modal but as a non-finite form it is used with modals and to construct passives, and therefore is included in this group as an indicator of possible modals and the passive voice. *Can*, *will* and *should* are the actual modal verbs. Looked at in this context, *can*, here indicating possibility and not ability, reflects the indeterminacy and uncertainty of medical research. *Will* is employed mainly in its epistemic use (Gotti 2003), to make inferences about cause-effect relations (“the few minutes you invest in your headache diary will be repaid by countless pain-free hours”, HfH:18). *Should*, also frequent, is found, as to be expected, when healthcare advice is given, and so is connotated with certainty, objectivity, authority of medical experts. The high use of modality, whether for hedging purposes or because the uncertainty of ongoing medical research requires modulation through modality, confirms the presence of features typical of the scientific language identified in the analysis of Group 1.

Fr. No.	Word	Use in context
56	WHAT	<u>What</u> was the diagnosis?
71	HOW	<u>How</u> severe is the pain?

Fr. No.	Word	Use in context
36	DO	<u>Do</u> you sleep poorly?
31	BUT	a number of factors [...] can trigger an acute migraine attack, <u>but</u> don't necessarily do so
74	SO	<u>So</u> , the closer you look at yourself and your migraine attacks
89	THEN	<u>Then</u> you are most likely one of the unfortunate victims of cluster headaches
48	THERE	But <u>there</u> is one thing you need to remember
8	YOU	And are <u>you</u> then pain-free for months at a time?
11	YOUR	<u>your</u> doctor will prescribe you medication

Table 6. *fn-k* Group 3: Popularization

Groups 3 and 4, comprising the other fn-k isolated (Table 6 above), are more numerous, include more frequent terms and tend to indicate the popularising nature of the text. For instance, the interrogative pronouns *what* and *how*, and the verb *do* as an auxiliary appear in direct questions, which are not normal in specialized texts. The high frequency of *but* shows a preference for the more informal register of parataxis, as do the most recurrent conjunctions in the text, *but*, *so* and *then*. Informality is stressed again in the auxiliary *do*, used in direct questions, and obviously in the second person. Personalization is underscored with the high frequency of the pronoun *you* and its possessive *your*. Finally, the repeatedly found expletive subject *there + be* is commonly used for the openly didactic moments in the text. All this tends to bring about reader involvement and reinforce the persuasive function.

It is Group 4 (Table 7 below), though, that shows the most interesting results. It contains the largest number of non-grammatical words (though still relatively few) and with most of its elements expressing concepts of quantity, it provides an insight into the text's lack of scientific data.

Fr. No.	Word	Use in context
61	MANY	there are <u>many</u> millions of other migraine sufferers
62	MOST	Because <u>most</u> of them have considerable side effects!
63	MUCH	<u>much</u> more effective remedies are available nowadays

Fr. No.	Word	Use in context
64	NO	They leave <u>no</u> room for doubt as to the efficacy and safety of acetylsalicylic acid.
65	OVER	these types of secondary headache account for well <u>over</u> 100 of the headache types
77	ABOUT	In <u>about</u> 50 per cent of all cases, alcohol is the trigger
81	CERTAIN	(mutations) of a <u>certain</u> gene are also responsible for the occurrence of migraine
91	UNDER	That is just <u>under</u> 60 million people.
26	ONE	<u>one</u> in twelve people are migraine sufferers
7	IN	
50	TIME	A short <u>time</u> later the blood vessels dilate again
29	MORE	These symptoms become <u>more</u> and <u>more</u> severe
38	ALL	about 50 per cent of <u>all</u> migraine attacks could be considerably reduced
52	THAN	Women are much more badly affected <u>than</u> men
46	OTHER	changing sleep patterns only trigger an attack in conjunction with <u>other</u> risk factors
51	ONLY	<u>only</u> 0.5 per cent of all men and 0.1 per cent of all women who suffer from headaches
88	THEIR	Sufferers encounter more problems in <u>their</u> private lives
49	THEM	migraineurs have the feeling that "others" do not understand <u>them</u>
53	THEY	most migraineurs say that <u>they</u> only experience the infernal headache

Table 7. *fn-k Group 4: Popularization*

Again, we find an argumentative strategy of persuasion, albeit paradoxical. Figureless comparisons are used, vagueness takes precedence over precision and no real data is provided anywhere. Yet this non-data is repeated numerous times, as if its many occurrences could somehow make up for the absence of references. As to be expected, Group 4 also shows linguistic usages supporting popularization rather than specialization as the main nature of the text.

From the linguistic perspective, then, the marketing purpose with its persuasive argumentation is obtained following a definite strategy. Features of both specialized texts (fewer) and popular ones (in larger

quantities) are skilfully mixed to create a hybrid genre sharing the characteristics of both. An IMRAD-like structure is thus adopted, in which the argument must persuade as in specialized texts, but without its receivers having the necessary specialized knowledge to process a real medical research article. The specialized discourse community has to adopt a series of popularising moves in order to succeed in the kind of communication it requires: hence the linguistic strategies highlighted in the analyses of Groups 3 and 4. HfH then carries out its function by gaining receiver trust without recurring to didactic or popular tones, which could well sound dull or worse still patronizing. On the contrary, the text appears scientific yet approachable, and satisfies potential reader desire for information coming from a scientific source. This hybridization of the specialized and the popular is, of course, no new expedient in marketing, where it is used daily to promote products/ services that are best advertised when supported by technical or pseudo-technical detail, e.g. cosmetics or cars. What relevance it acquires in healthcare marketing and what the social and ethical implications are will be discussed in the next paragraph, in which the investigation returns to the main object of research, [www.aspirin.com](http://www.aspirin.com), of which HfH was taken as a sample.

### 6. *The headache from hell and the new [www.aspirin.com](http://www.aspirin.com)*

The first consideration to make following the above analysis is about the Aspirin® website itself. Since the date *The headache from hell* was downloaded for this study (20 March 2009), [www.aspirin.com](http://www.aspirin.com) has been redesigned, undergoing substantial changes in both content and style, and the e-brochure no longer features there<sup>2</sup>. This is of course an ordinary event in the World Wide Web, where volatility is the rule and web pages are commonly updated even more often than daily. The question then arises of whether the reflections expressed on this document still hold, given the disappearance of the reference text from the WWW. They probably do, for two main reasons. The first is that if, as specified on the back cover of the e-brochure (see Appendix 1), this was created in 2001, then it has been around, *unchanged*, for at least 8 years, which is a very long life indeed for a contemporary e-document, in fact almost a record. That alone makes it a key document in recent Aspirin® marketing, and therefore still a relevant one to investigate. The second stems from the question of why HfH was

<sup>2</sup> The original e-brochure is available from the author on request.

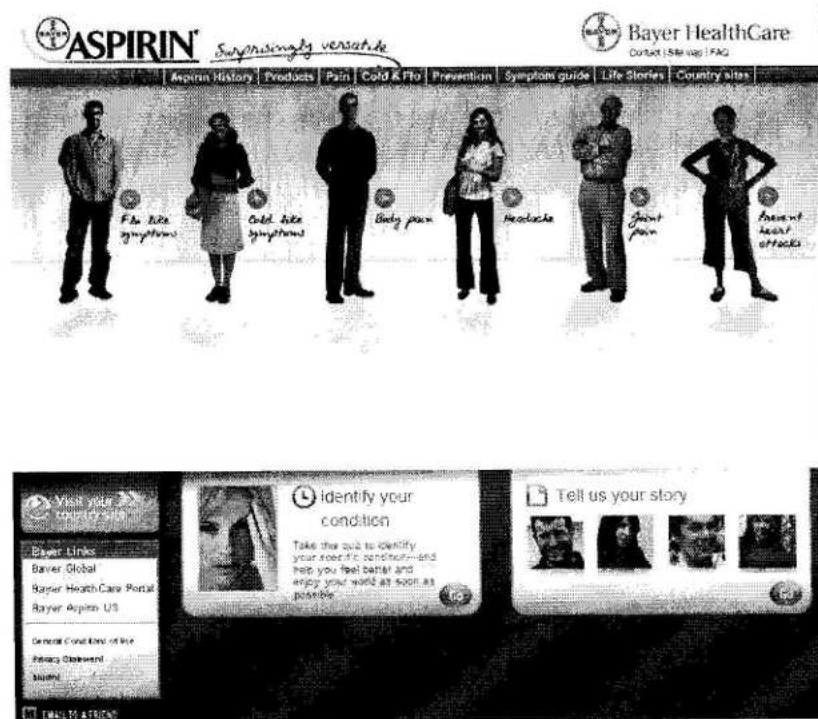


Figure 2. [www.aspirin.com](http://www.aspirin.com), Homepage.

dismissed as a website's feature e-document and whether all the information it contains was discarded as outdated or where, if anywhere, it has been moved. The PDF brochure – perhaps the most basic type of multimodal text, “frozen” by nature (Garzone 2007:22) – was poured entirely into the new [www.aspirin.com](http://www.aspirin.com) website, its content fragmented and scattered under different forms, at times reformulated into different semiotic systems, at others into new and ‘dynamic’ (as opposed to frozen) web genres. For this reason, HfH still appears significant for its content too, since this has not been lost, but has merely changed location. In fact, a short term diachronic perspective involving a comparison between HfH and the new website could also be added to any analysis of it. A brief outline of how HfH relates to the new [www.aspirin.com](http://www.aspirin.com) is what follows below.

The homepage of the current [www.aspirin.com](http://www.aspirin.com) looks as in Figure 2.

The new, completely restyled website gives more space to visual communication and less to traditional written text. It is also the most generic,

international ‘aspirin website’, coexisting with its 20 customized national versions<sup>3</sup>, and hosts about 20 web sections as shown in the site map. It has furthermore adopted Web 2.0 technology, a paradigm that allows active participation and exchange by website users, with new formats such as blogs, videoblogs, forums and chats, which encourage shared authorship. The highly interactive and multimedia Adobe Flash technology is also featured, for instance in the homepage itself, highlighting in turn various profiles of Aspirin® users of different sex, age, ethnic group and conditions. The information in the now broken-up brochure sections features in new sections or subsections, for example in the “Symptom guide”, so that almost no content of the original e-brochure is lost, while new parts are added, e.g. the Aspirin® History section, which further extends the audience to include people with a cultural interest in the product.

But the most interesting aspect is perhaps how the key feature of HfH, its hybridized specialized/popular nature, is transported into the new website, where it undergoes transformation. The first thing to observe is that the e-brochure written text often appears with slight reformulations in the website, but the combination of popular and scientific language remains. To be noted is also the appearance of references for some of the data quoted: e.g. “According to the US National Institutes of Health”, “Wonk HK. Diagnosing low back pain. *Singapore Med J.* 1992 Feb; 33(1): 74-8”. This makes the communication undoubtedly more grounded, though vague references such as “the US National Institutes of Health” could also result in adverse effects. Additionally, the tools provided by the web allow further experimenting with genres and genre hybridization: one such example is the section called “Life Stories”. Decidedly on the popular end of the specialization continuum, it reports prototypical stories that have literally been “created to illustrate how everyday lives can be changed thanks to Aspirin”<sup>4</sup> and are therefore, by authorial admission, fictional. Here there is a further instance of hybridization: that of the real (i.e. proven, scientific) and the fictional (i.e. unproven, fantastic), resulting in the *likely*. A likely story is indeed the communicative item successfully sought after and manufactured. However, this too, like the pseudo-scientific brochure genre HfH belongs to, is no new genre, and again its use in healthcare marketing gives rises to at least a few ethical concerns. Not only, in “Life Stories” there is a further subsection host-

<sup>3</sup> “Country sites”, <http://www.aspirin.com/scripts/pages/cn/home.php#>, retrieved on 1 November 2009.

<sup>4</sup> “Life Stories”, retrievable at [http://www.aspirin.com/scripts/pages/en/life\\_stories/index.php](http://www.aspirin.com/scripts/pages/en/life_stories/index.php).



ing “Stories sent by users”, where real stories can be sent in by any web surfer and published at the discretion of Bayer (“We are choosing a few stories to share with our readers, we will let you know in case yours is published”<sup>5</sup>). At the time of writing (November 2009), there was only one story in it, as reported below.

A true story by Kate

On July 22nd, a Saturday morning, my husband and I were sharing an intimate moment when he experienced chest pain. He said he was having trouble breathing. He got up and took a **Bayer Aspirin®**. I called 911. He was so calm that the responders (police and first-aid squad) did not think he was having a Myocardial Infarction. My husband was calm because he had taken an aspirin and he knew it would help him. After considerable time the paramedics also arrived and we did get him to the ER at Morristown Memorial Hospital. The cardiologist advised us that had my husband not taken the **Bayer Aspirin®** he would not be here today. Thank you, Bayer!<sup>6</sup>

This account – which, according to what is stated, *should* be true – cannot actually be verified. It is left up to the reader to believe it fully, partially, or not at all. However, real(istic) details have been placed throughout the text, to reinforce or to refute, depending on interpretation, an aura of authenticity: the name of the writer (“Kate”) and of the really existing hospital (“Morristown Memorial Hospital”), the date (“July 22nd, a Saturday morning”), the US emergency number (“911”). Speculation aside, nothing actually disproves the story, in which the details may have been rightfully changed to protect the protagonists’ privacy<sup>7</sup>. The text’s authenticity may be tested scientifically by means of forensic linguistic analysis, weighing the document against a corpus of *realia* from the same ‘medical account’ genre, and comparing lexical features, syntactic and stylistic patterns (see, e.g. Coulthard 1994, Coulthard & Cotterill 2004) – but this is not the issue at stake here. From a linguistic viewpoint, it would be particularly significant to investigate the ‘life story’ genre as used on [www.aspirin.com](http://www.aspirin.com). In particular, the question of where – taken for granted that a ‘true story’ genre already exists and is attested – these Aspirin® accounts belong. Do they belong to the known ‘true story’ genre but with

<sup>5</sup> “Life Stories” > “Tell us about your own story” > Submit, [http://www.aspirin.com/scripts/pages/en/life\\_stories/user\\_story\\_1/index.php](http://www.aspirin.com/scripts/pages/en/life_stories/user_story_1/index.php), retrieved on 1 November 2009.

<sup>6</sup> “Life Stories” > “A true story”, [http://www.aspirin.com/scripts/pages/en/life\\_stories/user\\_story\\_1/index.php](http://www.aspirin.com/scripts/pages/en/life_stories/user_story_1/index.php), retrieved on 1 November 2009, emphasis in the original.

<sup>7</sup> Another interesting issue in a localization perspective would be if and how to translate these stories and the details they contain.

the peculiarity of being fictitious, or should they be under the oxymoronic classification of ‘fictitious true stories’? The issue is undoubtedly fascinating. From the wider ethical and social viewpoint, however, it is the fact that declaredly fictional and genuine reports – neither verifiable as such but both sharing the same linguistic features – are being associated *within* the same healthcare marketing web site *and* section. The evident implication is that non-specialists may easily get confused as to which is which. This is not a problem when the information provided is correct and suitably communicated, but potentially dangerous if partially or totally understood. By means of example, from “Kate’s story” (the ‘true true story’), we are led to understand that, if we feel a stroke coming on, we should take an Aspirin®, call the emergency number and wait calmly for medical help. The order of these instructions is already questionable if understood correctly, but the problems that could arise if the message were not wholly grasped are immeasurable. This specific event is an instance of one-sided web communication, so that partial understanding is possible and even probable. But should we understand that, in the case in which we feel a stroke coming, we should *just* take an Aspirin® and wait calmly. Not only, it ought to be remembered at all times the item this website markets: despite Aspirin® being an OTC drug, it is still a pharmaceutical product that could, for instance, prove lethal to those allergic to it, or those who misguidedly overdose.

### Conclusion

The results of this analysis show how the shift towards the popularization of science (already attested for instance in Garzone 2006) has clearly come to affect the field of healthcare and medicine, even and especially as communicated from corporation to citizen on the web. Based on the sample website and text investigated in this study, the communicative strategies most frequently adopted to carry out this move include heavy forms of hybridization: of purposes (information and persuasion), of discourses (marketing and medicine), of genres (the e-brochure and the fictional real story) – and the linguistic phenomena used to realize them all.

This study furthermore suggests that the type of multimodal analysis illustrated here can prove useful in analyzing similar single product marketing websites, irrespective of the item being promoted. However, when this is medicine-related, the underlying and all-pervasive social dimension – in line with the critical discourse analysis perspective set out at the beginning – is present with ethical implications that affect the

marketing of this type of product. In other words, the medical nature of a marketed product implicitly defines tighter limits to the ethically and socially acceptable persuasive strategies adoptable for its promotion among non-specialists. When employed to achieve such persuasive purposes, the hybridization of discourses and genres, enhanced by the tools allowed by web-based communication, has the same ethical connotations. As such, it is a linguistic phenomenon requiring careful consideration in its use and well worth observing in its development.

## References

- Bayer, 2001, *The headache from hell*, downloaded from [www.aspirin.com](http://www.aspirin.com) on 30 April 2009, no longer available online.
- British National Corpus, 2001, *BNC World*, retrievable on *Mike Scott's Web* at [http://www.lexically.net/downloads/BNC\\_wordlists/BNC\\_World.zip](http://www.lexically.net/downloads/BNC_wordlists/BNC_World.zip).
- Catenaccio P., 2007, "New(s) genres and discursive identity: The changing face of press releases in the age of the Internet", in G. Garzone, G. Poncini, P. Catenaccio (eds), *Multimodality in Corporate Communication. Web genres and discursive identity*, Franco Angeli, Milano, pp. 55-71.
- Coulthard M., Cotterill, J., 2004, *Introducing Forensic Linguistics*, Routledge, London.
- Coulthard M., 1994, "On the use of corpora in the analysis of forensic texts", in *The "International Journal of Speech Language and the Law"*, 1, 1, pp. 27-43.
- Fairclough N., 1993, "Discourse and Cultural Change in the Enterprise Culture", in D. Graddol, L. Thompson, M. Byram (eds), *Language and Culture, Multilingual Matters*, Clevedon.
- Fairclough N., 2001, *Language and Power*, Longman, Harlow.
- Fairclough N., 2003, *Analysing Discourse: Textual analysis for social research*, Routledge, London, New York.
- Garzone G., 2006, *Perspectives on ESP and popularization*, CUEM, Milano.
- Garzone G., 2007, "Genres, multimodality and the World Wide Web: theoretical issues", in G. Garzone, G. Poncini, P. Catenaccio (eds), *Multimodality in Corporate Communication. Web genres and discursive identity*, Franco Angeli, Milano, pp. 15-30.
- Gotti M., 2003, "Shall and will in contemporary English: A comparison with past uses", in R. Facchinetti, M.G. Krug, F.R. Palmer, 2003, *Modality in Contemporary English*, Mouton de Gruyter, Berlin, pp. 267-300.
- Taylor S., 2009, "The evolving role of brand websites", in *iMediaConnection*, 17 November 2009, retrieved at <http://www.imediaconnection.com/content/25041.asp> on 20 December 2009.