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THE EXPLOITATION OF “SICKO-CHATting” BY THE PHARMACEUTICAL INDUSTRY : A STRATEGY FOR THE NORMALIZATION OF DRUG USE

“Sicko-chatting” and the formation of illness identities

Health has always had an important place in popular culture : dramatic television series', films, talk shows, health expositions, etc. Popular discourses on health, self-care, and medication define how people think of themselves in a stressful world that overvalues competition and individual performance. The Internet -- and more specifically, social media such as YouTube or Facebook -- contributes to the formation of collective identities based on specific illnesses through what I call the practice of “sicko-chatting”. The term “sicko-chatting” refers to the uses people make of forums and interactive websites in order to share stories about their health and wellness problems and, hence, to locate themselves in public narratives to which they will in turn contribute as a resource for the formation of a collective identity. The narratives of suffering posted on these interactive sites allow the organization of dissimilar symptom trajectories into a unified illness identity (This is in line with Kristin Barker's claim that the self-help literature has boosted illness affiliation around contested pain syndromes such as fibromyalgia [2002, p. 280]). One can see in the practice of sicko-chatting all the necessary ingredients for the emergence of these “new social movements”, characterized by their anchorage in informal networks and by their capacity to produce an autonomous cultural sphere (Melucci, 1996). The disability-culture movement exemplifies this. By contrast, others see in sicko-chatting a fertile ground for marketing 2.0 ; that is a set of processes that differs from traditional marketing techniques insofar as the Internet is not only considered as a space for socialisation, but also as a public forum in which individuals can define and differentiate themselves through their consumption (Simmons, 2008, p. 304). Direct consumer advertising of prescribed drugs is forbidden everywhere in the world with the exception of two countries, the United States and New-Zealand, where it is, however, highly restricted, including use of it on the Internet. For this reason, the activity of pharmaceutical companies on Web 2.0 is supposed to be strictly informative. Their contribution to various social media is presented as a service to the public. Under these circumstances, one can see why it is in the pharmaceutical industry's best interest to equate stories of suffering with illness narratives and hence to foster the making of illness identity. Accordingly, the questions to be asked are : “In a context of acute commercial exploitation of Web 2.0, how can we discriminate whether sicko-chatting is a collective emancipatory practice or whether it is dominated by pharma-sponsored front organisations that use the voices of sufferers to widen the boundaries of illness (and in doing so, giving credence to the allegations of disease-mongering)?”, “Which methodology is best suited to address this question from a communicational perspective?”. Prior to answering these questions, one needs to understand the rationale behind the use of social media by the pharmaceutical industry.

SOCIAL MEDIA FOR PHARMA MARKETING

Pharmaceutical drugs are consumer goods. As such, they inscribe the transition from normality to pathology within the ambit of health marketing (Duclos, 2008, p. 109). It is now widely acknowledged that this pathology is not just a mere quantitative modification of the normal state, but that it also implies the patient's qualitative assessment of his or her experience (Canguilhem, 1943). This representation of pathology involves a certain degree of autonomy of action in the constitution of oneself as a suffering subject (Ehrenberg et al. 2005/6, p. 115). The level of subjectivity involved in evaluating one's own health is no less dependent on the normative expectations of the social environment, expressed in terms of relief, comfort, welfare, productivity or performance. To be sure, the individual internalizes and codifies his/her discomfort, but the language he/she uses corresponds to the one that is conveyed in the media representations of sickness, through journalistic and fictitious medical narratives (Rose, 2007, p. 701). The pharmaceutical industry, well aware of the subjective and social nature of the meanings attached to the definition of a pathology, ensures that the marketing of its products is based not only on the dissemination of information but also on the media construction of a shared symbolic value. In a context where the advertising of health products is highly constrained -- and in some cases prohibited -- pharmaceutical communication penetrates the market in two ways : first, it contributes to naturalizing standards of well-being and performance of the body and mind (as if they simply emanated from biological nature) and secondly, it normalizes the use of drugs. Convincing the audience that pharmaceuticals can help one reach an optimal level of physical and mental condition is not enough : consuming pharmaceuticals must be a way of life, and be part of the collective imagination. The daily uses of medication must become a shared practice. Beyond the inherent regulatory function of the remedy, the creation of normative discourses on the uses of the drug, within social networks, requires serious attention.

More than ever, the insertion of pharmaceuticals in social processes is a central concern for the professionals in pharmaceutical marketing. Influencers marketing is still prominent. But there is a decrease in direct-to-prescriber activities (in this case, for the physicians) in favor of activities aimed at peer influencers. The marketing departments of many major biotechnology and pharmaceutical companies have begun to focus more on multi-channel approaches to promote their products. The creation and maintenance of social networks quickly became a necessity for them. It is not coincidental that, in recent years, there has been a rapid growth of associations of health care users' and of patients' groups, as well as of countless health-chat forums (or should we say “sicko-chat” forums). The industry's contribution to the development of these associations is often direct. Thus, Johnson & Johnson created the site “BabyCenter”, McNeil Pediatrics -- also a subsidiary of Johnson & Johnson-- has created two Facebook pages, and UCB has partnered with the site “PatientsLikeMe” to create an online community about epilepsy. These initiatives

fall within the scope of “conversational marketing”, a branch of marketing 2.0 which aims to establish a “dialogue” with online forum participants through conversational agents in order to make “friends” and to turn those friends into customers (Tuten, 2008, p. 33-54). The role of conversational agent is played by a real person, hired to interact with Internet users, or by a software mimicking human conversation. The possibility of creating a pseudo dialogue allows advertisers to provide Internet users with a list of arguments that can be used in discussion with their families, thus transforming them into brand evangelists or also called “brand ambassadors”. Johnson & Johnson registered the word “mombassadors” as a trademark in the category “Advertising, Business & Retail Services” to designate the mothers who act as partners in raising awareness about a child mental-health condition. The mothers’ market is particularly important for the pharmaceutical industry because women are more likely to be the care-givers in their family. In the U.S., they are responsible for 80% of the healthcare decisions (U. S. Department of Labor, 2011). Moreover, since they are particularly active in social networks, chances are high that they talk about prescriptions on their Facebook page or on other social-media platforms. In October 2011, a eMarketer survey estimated that 23 million American females with children in the home -- that is two-thirds of US online mothers -- are on Facebook, and use it at least once each month. It is expected that in 2013, 83,5% of US Internet female users with children in the home will use social networks, including Facebook, via any device at least once a month (eMarketer, 2011).

The use of incentives to increase drug consumption is a cause of concern for public-health departments, but very little is known about the pressures experienced by individuals in their daily lives. Even less is known about how these pressures are related to the new so-called conversational marketing strategies. To study the formation of normative discourse on drug use in the context of conversational marketing, the analyst needs a grammar of action capable of relating linguistic agency to sociological agency. The method should also allow one to identify, within the content of the exchanges, the shifts in the registers of information, social support and advertising. A sentence like “Since my son is on medication, I know I am a good parent” could have been written with or without financial sponsorship. The reason why it might be considered as promotional depends on its inclusion in a set of clear representational patterns of the curative treatment, of the actors involved, and of the transformations that occurred.

RESEARCH DESIGN

In the wake of works in critical analysis of discourse (Fowler, 1991 ; Van Dijk, 1993 ; Fairclough, 1995), especially that of Karmen Erjavec (2004), which aims to identify journal articles written for purely commercial purposes (“advertorials”), I deployed the systemic functional grammar of transitivity of Michael Halliday (2004) to compare the contributions of Internet users to two different Facebook pages. This included the first interactive Facebook page sponsored by a pharmaceutical company -- and in this case, by the leading manufacturer of a drug for the treatment of Attention Deficit Hyperactivity Disorder (ADHD) -- and one Facebook page created by an individual user to form a discussion grass-roots group on ADHD. The pharmaceutical Facebook page was specially intended for mothers -- and exclusively mothers -- whose child seems hyperactive or suffering from some sort of attention deficit.

For legal and ethical motives, I won’t reveal the names of these two sites. I will call the pharmaceutical Facebook page “ADHD Mummy”, and the grass-roots group page “Grass-Roots ADHD”. No nominative information will be given. Concretely, in more operational terms, my research question for this study is formulated as follows :

How different is the discourse on medication in a Facebook page sponsored by a pharmaceutical company compared to what is said about pharmaceutical drug use in grass-roots communities?

The content of the Grass-Roots ADHD page is similar to that of any other online support group on Facebook. The group members post their texts on the wall of the page, and the other members may comment on the texts, answer questions that have been raised, or simply show their appreciation by clicking “I like” or “I don’t like”.

The contributions on ADHD Mummy are not posted on the wall of the website, but in a special box. These contributions consist of answers to questions raised and controlled by the administrators of the web site. A different question is raised every month. For this study, I focus on the answers to two questions :

1. “When your child began treatment for ADHD, when was the first moment you realized your child was on the right track?”
2. “How are you working with your child’s teachers, mentors and healthcare professional to prepare for school?”

It is evident that the first question is biased in favour of medication, and both questions imply that the child is ADHD positive. Absolutely no medication brand is mentioned on ADHD Mummy. However, one can read on the first page of the site, namely, the “wall” the name of the pharmaceutical company sponsoring the page.

The grammar of Michael A. K. Halliday, and more specifically his study of a system of representation called “transitivity”, is familiar to scholars involved in critical discourse analysis, but this theoretical frame is almost totally unknown in the francophone academic

community. According to Halliday (2004), human experience is made of a flow of events "chunked into quanta of change by the grammar of the clause" (p. 170). The study of transitivity involves analysing the types of transformation processes represented by :

- the verbs in a grammatical clause ;
- the way participants relate to one another through these processes ;
- the circumstances in which action takes place.

Who recommends what to whom? What is good for whom and under which circumstances? What is appearing and on what? Who knows what's best?

Six types of processes have been identified by Halliday. For this study, I focus on three types of processes : the material, the mental and the verbal processes.

ANALYSIS OF DATA

Material processes

The material processes takes place :

- in clauses that represent the happening of something (in this case, the material process is said to be a creative process) ;
- in clauses that represent an actor doing something to an entity (this kind of material process is called a transformative process).

According to Halliday, the quantum of change in material processes is construed as unfolding through time. Some "true transformations" may be more fundamental than others (p. 186). In ADHD Mummy, the material processes clearly takes the form of a narrative pattern : clauses describing the child's difficulties are generally followed or preceded by clauses about taking medication. The child is the main "Actor" of clauses related to medication. The mother herself or the two parents may also be the "Actor" of such clauses, e.g. "When we started the meds". Therefore, in Halliday's terms, one may say that the child and the parents are the main "Actors" bringing about the change in the flow of events, and that the "Doing" which causes the most fundamental transformation is directed at the medication. Furthermore, the outcome of the unfolding succession of material processes is always positive. The narratives end with a clause expressing that the child is improving.

Compared to the ADHD Mummy Facebook page, the material processes in the Grass-roots ADHD page reveal a greater variety of types of processes, of actors, and of persons or things affected by the action. The nature of the unfolding of material processes through time is less predictable. In short, it seems that the whole system of social agency is much more complex in a non-commercial setting. Here are some observations about the specificities of the material processes in the Grass-roots ADHD page :

1. As for the types of processes, the creative clauses -- used when a solution is found -- apply not only to medication, but also to books, food, exercises, etc. We can also read complaints about the impossibility of having an appointment with a physician, or the impossibility of affording the cost of medication. "ADHD Mummies" never complain about these kinds of problems.
2. As for the actors, the use of the plural form "the physicians" -- to talk about the corporate body of physicians as a whole -- is exclusive to the Grass-roots ADHD group. These clauses are generally used to criticize the medical profession. Once again, "ADHD Mummies" never complain, not even about their doctors. Because people in the grass-roots group are more likely to address issues of collective interest rather than strictly focusing on their personal experience, "Actors" of the material processes are more likely to be a nominal group that denotes a collective entity such as "the physicians", "the school", "the government", etc.
3. The children's behavior is not polarized in terms of "before and after medication." Overall, the medication does not appear at the main "Goal" at which "the Action" is directed.
4. The 2nd-person form of address is used, which is not the case for the contributions in ADHD Mummy. For instance, one can read sentences such as "Search by yourself, by try and error", or "Try to get a second opinion". There is a real sense of interactivity in the Grass-roots ADHD group. "ADHD Mummies" never tell one another what to do. In pharma social media, for legal reasons, only the authorized experts can give advice to others, or should we say, "only the authorized experts paid by the pharmaceutical sponsor can give advice to others".
5. The other grammatical actors of the material process in the Grass-roots ADHD clauses generally consist of treatments experienced by members of the group. One can read for instance "Homeopathic supplements work well for my child". The treatments suggested are not limited to allopathic medicine. "ADHD Mummies" are not very adventurous as it concerns other treatment than prescribed pharmaceuticals. It is understandable that in commercial settings, the competing products or services are less likely to be suggested.
6. Finally, there is also a greater variety of persons or things affected by the action. For instance, in the Grass-roots ADHD group, one can read clauses in which the 2nd-person is affected by someone else's action such as "Your child does not do that to bother you". This is another indication that the interactivity is much more effective in grass-roots groups than in commercial ones.

MENTAL PROCESSES

The mental process takes place in mental clauses that are related to the experience of one's own consciousness. A mental process can be :

- cognitive such as in the clause "I know that all I needed was a label" ;
- desiderative such as in the clause "I would like my son to calm down" ;
- perceptive such as in the clause "We immediately noticed a change" ;
- emotive such as in the clause "I felt frustrated".

The transformation occurs into one's own consciousness. Therefore, the "Subject" of the mental clause -- or, in Halliday's terms, the "Senser" -- is necessarily human-like, that is endowed with consciousness. Any entity can be treated as being conscious if its experience of the world is part of a story construed by a human-like "Subject". For instance, the clause "even the cat thinks my kid is too wild" can grammatically function only if it is known that it is the speaker -- the owner of the cat -- who credits the animal with consciousness.

In the ADHD Mummy Facebook page :

1. The mother is the main actor of the mental clauses : she "realises that medication helps", "notes a change", "might see many changes", she "knows she is on the right track". Because the contributions in commercial settings are more focused on personal accounts of experience, the "Senser" of the mental clauses is often the speaker. In the case of a commercial interactive platform aimed exclusively at women with children at home -- and which invites them to take the role of the speaker -- the "mothers" are necessarily framed as the main protagonist whose consciousness is transformed.
2. The mental clauses in which the child is the "Senser" stress his or her perceptual and cognitive progress. In mental clauses, when the "Senser" is someone else than the speaker, it is mainly because the clause carries an interpretation formulated by another "Actor" than the "Senser". This other "Actor" could be the speaker herself, such as a mother writing "my son pays attention", or an expert who had said to the mother "this child knows how to focus". In both cases, the mental clause in which the child is the "Senser" is part of a story construed by the speaker. The risk is high in the case of mental clauses of this type that the reader will overlook its interpretive nature and will tend to take what the speaker says at face value.
3. The teacher and the paediatrician -- that is the so-called "experts" -- are more often "Actors" of mental processes and verbal processes than of material processes. They notice changes, they know, they think, they say that they can't believe "it's the same kid" but they don't do anything to anyone.
4. There is a quasi absence of the "you" in the users' contributions, except for the wall in where the "you" is used by the web administrators to invite the readers to "learn" what they have to know or to do.
As for the Grass-roots ADHD page, what is most noticeable is that one can read negative judgments about the mothers, such as "I am disappointed to read so many mothers saying that they know better than others and that medication is bad". Contributors also complain about their lack of knowledge. Moreover, one can read some desiderative clauses such as "I just need to scream" and "I need to see the light at the end of the tunnel". Absolutely no blame would be addressed to mothers in ADHD Mummy. The mother is the main market target of the pharmaceutical web site ; she is necessarily the heroine. She can't make any mistake. She knows better than anyone else what is best for her child, and, above all, she "never never" complains.

VERBAL PROCESSES

The verbal process takes place in :

- clauses in which someone (a "Sayer") says something to someone (an "Addressee") ;
- clauses in which someone (a "Sayer") attributes a passage to a source, whether an authority, an expert or a witness.

Verbal clauses are used to insert quotes in a narrative or to develop accounts of a dialogue. That's why other processes are often embedded in a verbal one such as in "The doctor said he thought my son was not the same kid". Actually, very few accounts of a dialogue are developed in both Facebook pages examined, no matter how interactive is the platform. Most of the time, verbal clauses are used to report quotes from experts.

In the ADHD Mummy Facebook page :

1. The expert is an authority. A great weight is given to what teachers and doctors say, in the evaluation of the child's behaviour problems or improvement. This is the case in verbal clauses such as in "Our pediatrician said that last time we came to his office, my child was in crisis" or "The teacher used to complain about his behavior".
2. As for the material processes, a pattern is noticeable in the chronology of the reported events :
 - The experts' evaluation of the child's behaviour is generally negative when expressed before any reference to medication ;

- The evaluation is positive when expressed after any mention of the child's taking medication.

3. Moreover, the impression is given that all education professionals share the same view on ADHD, which is not at all the case, according to Martine Quesnel's study of the social representations of ADHD among school professionals (2008).

In the Grass-roots ADHD Facebook page, as with the ADHD Mummy page, the verbal clauses relate often to what the experts might say. What differentiates the two pages as it regards the verbal process is the critical tone adopted toward the experts in the grass-roots site. For instance, one might read "What I'm saying is that you should not rely on just one piece of advice", "Don't let anybody tell you what your child needs", "Ask for a generic drug price list before talking to your doctor". Moreover, the Grass-roots ADHD group Facebook page includes many calls for help such as "give me some advice, please". In ADHD Mummy, the calls for help are rare ; who would need help since all the questions the mothers have in mind are answered in a special section of the Facebook page called "Advice" and written by physicians and other consultants paid by the pharmaceutical company?

To summarize, in the pharma-sponsored Facebook page :

1. For the material processes, the parents and the child, namely the consumers of pharmaceutical drugs, are the ones that transform the situations or make things happen.

2. The mother is the main actor of the mental processes : she sees and she notices what's going on with her child, and she knows what to do about it. By offering the consumer an image of herself and of her child as being totally responsible for most of their actions in their environment, ADHD Mummy maintains the dominant liberal individualist ideology : the image of an individual who is autonomous -- or at least potentially autonomous -- and who is perfectly capable of changing an undesirable situation without any influence by social institutions. The moral significance of mothers' decisions to give medication is nevertheless reduced to an assessment of the practical effects of drugs upon the child's behaviour and his or her cognitive progress at school. Because the mother is represented as the most important "Actor" of the mental processes, she appears as the main person responsible for doing something for her child, preferably in accordance with expert judgment. She appears as the key witness of the child's difficulties and changes, and consequently, she is considered as knowledgeable about the necessity of doing something.

Surprisingly, the experts have little real agency. Their role consists mainly of evaluating the situation and saying what they think to the parents, in confidence that the parents will do as they are told. Clearly, as explained by Marotta (2008, p. 203), the expert in the pharma-sponsored page is the voice of the prescriptive texts that shapes the physical care mothers give to their children. Because these texts provide descriptions of "good mothering", they make the women feel morally inept if no action is taken.

3. Concerning verbal processes, it is striking that quite contrary to the grass-roots page, no critical judgement is formulated in the pharma-sponsored Facebook page about health-care services and -- understandably due to legal issues -- about treatments. Many texts in ADHD Mummy insist on the importance to the parents that their children become eligible for the professional resources that are exclusively provided by schools for children who have been officially diagnosed with a mental problem such as that of ADHD. Absolutely no fear is expressed that children, once diagnosed with ADHD, may become stigmatised. Finally, it is noticeable that the numerous invitations to contribute on the wall of the ADHD Mummy Facebook page contrast with the total absence of requests for help or for information by the women who participate in the online community.

CONCLUSION

In conclusion, one can say that the invitation to share one's thoughts and experiences in the pharma-sponsored Facebook page is specious since no real dialogue is made possible. The main lesson learned from this study concerns the modes of indoctrination deployed in pharma-sponsored "sicko-chatting" sites. It permits us to reflect on how the commercial use of social media may standardize both our understanding of contemporary pain and our treatment of it. Furthermore, the modes discussed in this presentation can be extended to the way commercial influence is exercised in face-to-face relationships. "Vocalpoint", a word-of-mouth marketing extension of Procter & Gamble, offers women with children in their home to join its online community of 500 000 members, and to advocate for products in their own personal online and offline social networks in exchange of gifts and coupons. Taking into account this marketing exploitation of our closest relationships, the study presented in this paper leads one to reflect on how -- through our everyday conversations on health care -- each of us can potentially become the evangelist for magical promises from the pharmaceutical world.

References

- Barker, K. (2002), "Self-help literature and the making of illness identity : The case of fibromyalgia syndrome (FMS)", *Social Problems*, vol. 49, no 3, pp. 279-300.
- Canguilhem, G. (2005), *Le Normal et le Pathologique*, Paris, Presses Universitaires de France, 224 p.
- Duclos, V. (2008), "Science, marché, subjectivités : Considérations critiques sur l'action normative des discours scientifiques", *Altérités*, vol. 5, no 1, pp. 108-126.
- Ehrenberg, A. et al. (2005/6), "L'autonomie, nouvelle règle sociale", *Informations sociales*, no 126, pp. 112-115.
- eMarketer Digital Intelligence (2011), "Moms continue flocking to Facebook", <http://www.emarketer.com/Article.aspx?R=1008649>, last accessed 25th February 2012.
- Erjavec, K. (2004), "Beyond advertising and journalism : Hybrid promotional news discourse", *Discourse & Society*, vol. 15, no 5, pp. 553-578.
- Fowler, R. (1991), *Language in the News : Discourse and Ideology in the Press*, London, Routledge, 272 p.
- Fairclough, N. (1995), *Critical Discourse Analysis*, London, Longman, 265 p.
- Halliday, M. A. K., revised by C. M. I. M. Matthiessen (2004), *An Introduction to Functional Grammar*, London, Arnold, 689 p.
- Marotta, M. (2008), "Relentless rebuke: 'Experts' and the scripting of 'good' mothers" in J. Nathanson and L. C. Tuley, *Mother Knows Best : Talking Back to the Experts*, Toronto, Demeter Press, p. 203-212.
- Melucci, A. (1996), *Challenging Codes : Collective Action in the Information Age*, Cambridge, U. K., Cambridge University Press, 456 p.
- Quesnel, M. (2008), *Une étude exploratoire : Psychostimulants et le trouble déficitaire de l'attention avec ou sans hyperactivité (TDA/H) dans le contexte scolaire des enfants au primaire*, thèse de doctorat en sciences humaines appliquées, Montréal, Université de Montréal, 428 p.
- Rose, N. (2007), "Beyond medicalisation", *The Lancet*, vol. 369, no 9562, pp. 700-702.
- Simmons, G. (2009), "Marketing to postmodern consumers : Introducing the Internet chameleon", *European Journal of Marketing*, vol. 42, nos 3-4, pp. 299-310.
- Tuten, T. L. (2008), *Advertising 2.0 : Social Media Marketing in a Web 2.0 World*, Westport (Connecticut) and London, Praeger Publishers, 202 p.
- United States Department of Labor (2011), "Women as major health care consumers", Fact Sheet. <http://www.dol.gov/ebsa/newsroom/fshlth5.html>, last accessed 25th February 2012.
- Van Dijk, T. (1993), "Principles of critical discourse analysis", *Discourse & Society*, vol. 4, no 2, pp. 249-283.
- Van Leeuwen, Theo (2009), "Représenter les acteurs sociaux", *Semen*, no 27, <http://semen.revues.org/8548>, last accessed 25th February 2012.

Websites

- BabyCenter L.L.C., <http://babycenter.com>, last accessed 25th February 2012.
- PatientsLikeMe, <http://babycenter.com>, last accessed 25th February 2012.
- Vocalpoint TM, <http://vocalpoint.com>, last accessed 25th February 2012.

Table 1
Transitivity: Six types of transformation processes
(Halliday, 2004)

Process	Types	Semantic roles
material	creative transformative	actor goal + scope recipient client attribute
mental	cognitive desiderative perceptive emotive	senser phenomenon
relational	attributive : intensive possessive circumstantial identifying : intensive possessive circumstantial	carrier and attribute carrier and attribute carrier and attribute token and value token and value token and value
behavioural		behave
verbal	conative signifiant	sayer, target, verbiage, receiver
existential		existent