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**Abstract**
Drawing upon the developing literature on dispositive analysis, we examine the effects of pharmaceutical industry discourse on the subjectivities of nurse opinion leaders in the field of Multiple Sclerosis (MS) who have taken on the role of advocates of disease modifying therapy. Specifically, we draw attention to the '*technologies of the self*' MS nurse opinion leaders engage in as they promote the financial interests of the pharmaceutical industry. Accordingly, we demonstrate how the *ordering* of the management and treatment of people with MS regulates the time, activities, and actions of nurse opinion leaders to promote disease modifying therapy despite less than convincing evidence for its efficacy and cost-effectiveness. By focusing our description on the '*self-technologies*' nurse opinion leaders in the field of MS engage in, we problematize the relationship between the pharmaceutical industry and nursing.

**Key Words** instrumentality, knowledge (*savoir*), pharmaceutical industry, subjectivation, '*technologies of the self*'

# 'Technologies of the Self' as Instrumentality: Becoming Instruments of the Pharmaceutical Industry through Normative Practices

*RUSLA ANNE SPRINGER & MICHAEL E. CLINTON*

## Introduction

The primary focus of this paper is on how the subjectivities of opinion leaders among Multiple Sclerosis (MS) nurses become ordered in regularities of time, activities and actions that promote the interests of the pharmaceutical industry through participation in discursive practices that assume uncritically the efficacy and cost-effectiveness of disease modifying therapies. The paper draws upon a Foucauldian dispositive analysis of the discursive effects of pharmaceutical industry discourse on nurse subjectivities which revealed the '*technologies of the self*' nurses engaged in to modify themselves to become both object and subject of the pharmaceutical industry.[1] Our starting point is the following quotation in which Foucault clarifies how we are to understand 'ordering':

> …an order reigns in the simple sense of a never ending, permanent regulation of time, activities, and actions: an order which surrounds, penetrates, and works on bodies, applies itself to their surfaces, but which equally imprints itself on the nerves, and what someone called the "soft fibers of the brain". An order, therefore, for which bodies are only surfaces to be penetrated and volumes to be worked on, an order which is like a great nervure of prescriptions, such that bodies are invaded and run through by order.[2 p2]

In the early 1990s three classes of interferons (Avonex, Betaseron and Rebif), and glatiramer-acetate (Copaxone), collectively known as the disease modifying therapies (DMTs), were heralded into the marketplace as new '*breakthrough*' therapies that claimed to alter the fundamental course of MS by reducing disease activity and burden. However, despite extraordinary cost and the

elusiveness of long term protection from disability [3 - 13] the promulgation of the effectiveness of these therapies in the treatment of MS persists. Our empirical clarifications will bring out the relevance of Foucault's notion of order to demonstrate the subjectivation of MS nurse opinion leaders, and to reveal how they may be implicated in the drive of the pharmaceutical industry for evermore widespread use of DMTs. However, no grand narrative is intended, and we do not claim that every nurse opinion leader is subjectivized in the same way, or to the same extent. Rather, our more modest claim is that some opinion leaders among MS nurses are subjectivized in ways that perpetuate an unquestioned discourse about the advantages of DMT in the management and treatment of patients with MS.

We define MS nurse opinion leaders (NOLs) as those nurses in the field who are selected by the manufacturers of DMTs to play key roles at industry sponsored conferences and events and otherwise to engage in the education of MS nurses in the use of DMTs. Nurse opinion leaders are recruited following the direct observation of nurses who speak at company sponsored conferences and events about the treatment, care and monitoring of MS patients. Nurses who show sufficient affinity with DMT discourse are seduced into taking on leadership roles to facilitate a wide assortment of discursive mechanisms aimed at expanding the market for DMTs. For example, nurses may be approached and asked to speak at other conferences. They may also be asked to develop standard patient care plans and other similar materials for use by other MS nurses, or by patients. They might even be asked to host mini conferences or other educational events at their practice settings. Financial inducements in the form of honoraria are typically offered in return. Although the amounts involved are small in comparison to those paid to physicians, they are usually sufficient to encourage interest and maintain motivation.

Pharmaceutical company representatives are another source for the recruitment of NOLs. Nurses who are identified as suitable for further training and for taking on NOL roles are groomed by company representatives and encouraged to attend industry sponsored Speaker Training Bureaus and other like indoctrinating continuing education initiatives where further engagement of their interest can be developed. Although the NOLs actively engaged in promoting the interests of the manufacturers of DMTs are our main focus, we refer to MS nurses as well because they are the wider group from which NOLs are recruited by the pharmaceutical industry.

## Theoretically speaking: Dispositive or apparatus?

Before continuing, we need to say something about our use of the term, dispositive analysis. What, it may be asked, is 'dispositive analysis'? And why do we prefer this formulation, which may at first sight seem somewhat idiomatic, to the more common translation of Foucault's 'dispositif' as 'apparatus'? We offer two points in our defense. First, far from being idiomatic the term 'dispositive analysis' is used increasingly in the secondary and tertiary literature on Foucault and discourse analysis. A simple Google search will return more than two million hits in a fraction of a second. A common characteristic of this literature is a preference for '*dispositive*' over 'apparatus' when translating the French, '*dispositif*' into English.

Our argument from common usage is sufficient for us to avoid accusations of idiomaticity. However, there is a more conceptual reason for our preference for 'dispositive'. Bussolini[14] has noticed that the appearance of new lectures by Foucault in translation has brought to attention a previously unnoticed conceptual distinction that has for the most part been passed over without comment in the secondary literature on Foucault's researches, writings and conversations. For Bussolini[14] there are strong reasons to favor the use of '*dispositive*' over 'apparatus' when translating the French '*dispositif*', or its Italian equivalent '*dispositivo*', into English. The problem with rendering '*dispositif*' as '*apparatus*' is that this translation collapses distinct etymological, and therefore conceptual lineages in French and Italian, thereby creating something of a false identity in English. Bussolini[14] points out that Foucault was careful to differentiate between '*appareil*' (*apparatus*) and '*dispositif*' (*dispositive*) when writing about power relations in *The History of Sexuality*. At this stage in his researches, Foucault used 'appareil' to refer to State and state affiliated power, and 'dispositif' to refer to the wider and changing relations of power that function beyond the State through normalization, law and control rather than punishment.[14] State systems and mechanisms of power conceived as 'appareil' are therefore a subset of wider relations among forces. In other words, to over simplify, to conflate '*appareil*'' with '*dispositive*' is to mistake a part for a whole, and to fix a conception of the wider relations, institutions, and practices of power in a less dynamic and strategic form than Foucault intended.[14]

Foucault's usage of '*dispositif*' in this sense was made clear in a conversation with Alain Grosrichard.[15] When asked specifically about the meaning or methodological function of the term '*dispositif*', inserted parenthetically immediately following the translators' "*apparatus*', Foucault replied:

> What I'm trying to pick out with this term is, firstly, a thoroughly heterogeneous ensemble consisting of discourses, institutions, architectural forms, regulatory decisions, laws, administrative measures, scientific statements, philosophical, moral and philosophical propositions – in short, the said as much as the unsaid.[15 p194]

Our dispositive analysis is therefore focused on bringing

to the fore that heterogeneous ensemble that conditions DMT discourse, the institutions that produce it (science and scientific research, market economics, medical education, clinical practice, and consumer empowerment); and the organizations that are the sites for practice, (research laboratories, the pharmaceutical industry, medical and nursing schools, and sites of clinical practice). This focus on the non-discursive as well as the discursive permits us to bring to light the 'unsaid' in the management and treatment of people with MS. More particularly, our approach enables us to problematize the involvement of NOLs in promoting DMTs as an indispensable response to the urgent need to find more effective treatments for people with MS while serving the dominant strategic function of BigPharma profitability.

We use dispositive analysis, analysis of the dispositive; that is, our analysis of the wider formation that produces the discursive effects of pharmaceutical industry, to problematize the subjectivities of nurses engaged in uncritically promoting DMTs as effective in the management and treatment of MS.[1] Consequently, this paper unravels and reveals the '*technologies of the self*' NOLs as subjects engage in to modify themselves by what they know as they become both object and subject in DMT discourse. Using specific examples, the '*technologies of the self*' nurses as subjects apply to themselves as they become '*expert thought leaders*' and '*key opinion leaders*'[16] for the pharmaceutical industry will be made visible. At the same time, and importantly, we examine what these nurses, as agents of the pharmaceutical industry, want to become as subjects in the sense of the kind of clinicians, professional leaders and patient advocates they aspire to be. By revealing the performances NOLs engage in to become objects and subjects of DMT discourse, we demonstrate how 'BigPharma' works towards the imposition of social uniformity on the practices of health providers to achieve its fiduciary goals.

## Raising ethical questions about the omnipresence of 'BigPharma'

The concerns we advance about NOLs in the field of MS raise ethical questions about the increasing presence and influence of the pharmaceutical industry in healthcare practice generally, despite over a decade of radical criticisms of its omnipresence and questionable practices by ethicists[17-20], economists[21] healthcare providers[22-26] and a number of other social commentators[27-38]. Our intention is to raise awareness among MS nurses, and the profession of nursing as a whole about the insidious infiltration of the pharmaceutical industry into nursing practice.[39-42] Our paper is intended to break the conspicuous silence on this topic on the part of the profession of nursing[25] as is reflected in the dearth of nursing literature available on the relationship between the pharmaceutical industry and nursing. Of the literature that is available, there is very little expressing concern about the role the pharmaceutical industry plays in influencing nursing practice and nursing behavior.[39] However, as nurses increasingly acquire prescriptive authority in their expanding roles as nurse practitioners, a deeper understanding of nursing's relationship with the pharmaceutical industry, and the effects of those relationships on the subjectivities of nurses is required.

## Uncritical acceptance

Based on the empirical work that is available on pharmaceutical industry's infiltration into the practice of nursing, it appears that nurses accept promotional material produced by the pharmaceutical industry, sometimes with the assistance of nurses, uncritically.[39] This disconcerting finding suggests that nurses are ill prepared to deal effectively with the tactics and strategies the pharmaceutical industry engages in to promote its products. This lack of insight into these seemingly benign strategies and tactics positions nurses as extremely vulnerable to exploitation. As Thomas Beauchamp and James Childress[43] argue, the pressure for drug companies to find positive results of new medicines positions nurses as particularly vulnerable when working in industry sponsored research environments. In situations such as these, much of nurses' vulnerability stems from their relative meager training in pharmacology, statistical inference, and critical appraisal.[39]

Of particular relevance is that nurses generally have a poor understanding of the marketing and persuasion strategies used by the pharmaceutical industry.[39] As such, this paper attempts to remedy these knowledge deficits by increasing nurses' awareness of the mechanisms of persuasion employed by the pharmaceutical industry to achieve its goals. Moreover, the paper also represents an attempt to prevent, or at a minimum, to disturb the imposition of social uniformity upon the human practice of nursing by opening up a much needed space for dialogue about the place wealth creation occupies in the delivery of human care.

What follows is an overview of Foucault's conceptualizations of '*the subject*' '*subject positions*', '*subjectivation*' and '*subjectivity*', which will serve to provide the necessary theoretical foundation for the exploration of the '*technologies of the self*' the subject applies to itself to become an instrument of the pharmaceutical industry. The review of these conceptualizations will also provide the foundation for the exploration of what subjects actually do to themselves in terms of the regulation of their time, their activities, and their actions as they shape themselves into objects of instrumentality for the pharmaceutical industry; and importantly, as they shape themselves into the subjects they wish to become. By demonstrating what subjects actually do

to themselves to transform themselves into objects consistent with what the pharmaceutical industry requires it can be shown that an order, in Foucault's[2] sense, actually exits.[1] Moreover, it can also be shown that nurses' autonomy and authority in practice pales before the constraints of discursive determinism.[44]

## The subject and subjectivity

To understand '*the subject*' from a Foucauldian perspective is to first understand that Foucault distinguishes between '*the subject*' and '*the individual*'. Foucault was not so much concerned with '*the individual*' as he was with the forms of power that transform the individual into '*a subject*'. From that perspective, '*the subject*' is to be understood as '*a form*', as opposed to '*a thing*'. Vital in understanding '*the subject*' as '*form*' rather than '*thing*' is to understand that '*the form*' ('*the subject*') is not constant even when attached to the same individual.[45] As Foucault explained, the subject is a form not primarily or always identical to itself.[45] To understand Foucault's conception of 'the subject' one has to be clear between the two different but interconnected meanings ascribed to '*the subject*'.[46] First, "human beings are made subjects",[46 p208] that is, they are made subject to. In other words, human beings are made to be subject to others by control and dependence. Second, the subjective identity of the subject, that is, who or what the subject understands itself to be is '*made*' or '*produced*' by being tied to a given identity through consciousness or self-knowledge.[46] However, notions of subjectivity arise through broad and complex social and historical contexts, the effects of which are unconscious. As Weedon[47] explains, conscious subjectivity, which is acquired through discourse, is inherently unstable inasmuch as subjectivity is constantly in process.

## Subject positions and subjectivation

Subject positions can best be understood as ways of being within a particular social context, which call for different qualities or modes of being.[47] For example, one's subject position or way of being, as mother, father, child or sibling will be different from one's subject position as nurse, teacher, researcher, NOL, and so on for the myriad subject positions one subject occupies in any number of social contexts. Subject positions can also be understood as spaces from which one speaks and observes in a discursive formation.[48] A discursive formation is understood as occurring through the systems of thought and knowledge Foucault[38] argues operate beneath the consciousness of subjects. In other words, a discursive formation defines a system of conceptual possibilities that determines the boundaries of an individual's thought in a given domain or discipline.

Important in this understanding of a discursive formation as it relates to the treatment and care of individuals with MS is that it is precisely these discursive formations that constitute disciplines, and more importantly, it is these discursive formations that underpin the exercise of a discipline's techniques of control over individuals.[49] Put another way, subject positions have rules for the acceptance of certain individuals into those spaces from which one speaks (one's discipline). According to Akerstrom Andersen[48] these rules of acceptance also determine the situations in which the subject position can be used as a platform for speaking and observing, and they also determine the formation of statements once the subject has assumed a specific subject position.[48] Akerstrom Andersen[48] clarifies subject positions further by suggesting that subjecting arises when an individual or collective is proclaimed to be a subject within a specific discourse. As such, the individual or the collective is offered a particular position in the discourse from which they can speak and act in a meaningful way. On these basis subjecting signifies the space (the practice realm) in which the discursive individual (the nurse) receives itself as nurse, as expert, as key opinion leader, as collaborator, as partner, and so on.[48] Subjectivation on the other hand, occurs when individuals or groups are formed and transformed through discourse. Subjectivation must therefore be understood as occurring when the subject (individual or group) wishes to be that subject.[48]

As Akerstrom Anderson[48] points out, subjectivation signifies the space in which the individual gives itself to itself. Therefore, '*technologies of the self*' must be understood as the performances undertaken by individuals and groups within a particular space (the practice realm) to become what they want to become. Of significance to the context of MS treatment and care is that when a nurse accepts a particular subject position within the practice setting that nurse is transformed in such a way that he or she becomes a channel for the flow of power.[50]

## 'Technologies of the self' as instrumentality

'*Technologies of the self*' must be understood as arising through knowledge (*savoir*)[49] with '*savoir*' understood as the labour performed by the subject upon itself in order to know[49]. '*Technologies of the self*', as those have been described by Foucault[49], can therefore be understood as the performances the subject engages in to modify itself by what it knows. Put another way, '*technologies of the self*', are the modifications, formations and transformations that arise in the subject through unconscious ways of knowing. Indeed, it was this transformation that arose in the subject that was so striking to Foucault during his historical analysis of the discourses producing 'the criminal' and 'the prison'. So intrigued was Foucault by these transformations that demonstrating '*how*' human beings are made subjects,[50]

became the very central focus of his corpus[49] as his response to questioning about his book '*Pierre Riviere*', clearly indicates:

> It's a totally strange story. It can however be said, and this is what struck me, that in such circumstances writing one's life story, one's recollections and experiences, was a practice found in a fair number of cases, and particularly in the prisons… one also finds judges and doctors doing this. It was the first great burst of curiosity about the individuals whom it was desired to transform and for the sake of whose transformation it was necessary to acquire a certain savoir, a certain technique.[49 p48-49]

Indeed, Foucault's purpose in writing '*Pierre Riviere*' was not at all to do with exposing the crime committed. Rather, it was to "render visible the medical and juridical mechanisms that surrounded the story".[49 p49] It was in this writing that Foucault made visible the '*mechanisms*' and '*techniques*' required to transform the subject into what the prison system required it to become (prisoner). According to Foucault[39] the visibility produced at that time left the experts of the day completely silent. Indeed rendering visible how human beings are transformed into required subjects in any number of contexts leaves the experts "equally dumb today".[50 p49] Foucault cautions "not to regard the point in time where we are now standing as the outcome of some teleological progression".[51 p49] Rather, he asks that we make inquiries regarding ourselves; that we inquire as to what we are here and now.[52] Thus, the inquiry we undertake asks critical questions about ourselves as nurses, and about our nursing knowledge relative to our engagements with the pharmaceutical industry.

## Rendering the effects of power/knowledge visible

As the foregoing clearly demonstrates, power/knowledge produces effects; effects which are rendered visible by the '*technologies of the self*' or the '*self-technologies*' the subject applies to itself to transform itself by what it knows. In this sense, because activities are actions taken in pursuit of some objective,[53] and because actions consist of the activity or process of doing something to achieve an aim, in the context of MS treatment and care, activities and actions will be understood as the performances and practices carried out by MS nurses involved in pharmaceutical industry discourse as a direct result of their participation in that discourse. In other words, the activities and actions carried out by MS nurses engaged in relationships with pharmaceutical industry through direct contact with company representatives, through the conduct of sponsored research, through the writing of journal articles and research reports, through the facilitation of treatment decisions, and the further facilitation of compliance and adherence to treatment can all be understood as the '*technologies of the self*' MS nurses engage in to become what the pharmaceutical industry requires them to become (instruments of persuasion and surveillance); and importantly, what they themselves wish to become (expert thought leaders and key opinion leaders in their fields). While how an individual takes up a subject position is not observable, 'how' a discourse demands the individual take up a subject position is observable.[48] As such, the following explanation of self-technology analysis, along with the specific example of the '*technologies of the self*' MS nurses apply to themselves in the context of authorship will make visible and observable '*how*' discourse demands individuals take up particular subject positions.

## Self-technology analysis

Self-technology analysis speaks to 'how' individuals manifest themselves as subjects. The approach concerns the analysis of the technologies available to an individual's manifestation of itself as subject, and how subject positions are created.[48] As previously discussed, within self-technology analysis the distinctions Foucault makes between subjection and subjectivation must be viewed as much more than theoretical distinctions. Recall that "subjection means that an individual or collective is proclaimed subject within a specific discourse. The individual, or collective, is offered a specific position in the discourse from which it can speak and act meaningfully".[48 p24] Subjectivation, on the other hand arises "when the individual or collective has not only been made the subject, but also wishes to be so".[48 p24] This important distinction lies between the two different demands made of individuals who are to become subjects, demands that arise through discourse.[1] In other words, the subject doesn't simply receive itself passively. On the contrary, the subject receives itself actively by giving itself to itself.[48] This active giving of oneself to oneself is to be understood as not only a mode of subjecting, it is also to be understood as a mode of transformation.[49] Thus, in the context of MS treatment and care, in addition to the demands nursing discourses make of its subjects, the strategies and tactics the pharmaceutical industry employs cannot be underestimated.[1] As Rose reminds us, in analyzing relations between 'the self' and power, "it is not a matter of lamenting the ways in which our autonomy is suppressed… but in investigating the ways in which subjectivity has become an essential object and target of certain strategies, tactics and procedures of regulation".[54 p152]

As previously pointed out, subjectivities are both constituted and constrained through what Foucault calls the "great nervure of prescriptions" that arise in discourse.[55 p304] Important in the analysis of '*self-technology*' is to understand that utterances arising within specific discourses are never value free; they are always based on certain rules of acceptability. As Foucault argues, these rules of acceptability

"run through individual oeuvres, sometimes govern them entirely, and dominate them to such an extent that nothing eludes them".[56 p139] Discourses are therefore much more than what can be said and thought; discourses are also about who can speak, when, and with what authority.[49] As such not just anyone can speak about any subject. Only those possessing the qualifications, prestige and status to speak are afforded authority within a given discourse.[56] Due to the status the medical professions enjoy in modern society, all are afforded a certain status and therefore positioned as '*expert authorities*',[1] all with the privilege to speak based on their credentials and the status they enjoy within the hierarchy of those professions. Indeed, the pharmaceutical industry has come to appreciate the marketing value of engaging the medical professions in their marketing activities.[29] As Angell[22] argues, the price of medicines is determined by their value in preventing and treating disease, and it is the physician (and increasingly the nurse) who plays a central role in determining what that value will be. Thus, return on investment for the pharmaceutical industry has been contingent upon the prescribing behaviours of physicians,[22] and will increasingly become contingent upon the prescribing behaviours of advanced practice nurse practitioners and other health professions achieving prescriptive authority.

## Self-work

We have mentioned several times NOLs as the subjects and objects of DMT discourse. Subjectivity, in this sense, involves the discourses NOLs participate in as a result of their involvement in promoting the interests of the pharmaceutical industry. Such involvement is not confined to those occasions when NOLs speak in favor of the advantages of DMTs; it is a consistent part of everyday practice in clinical settings. This is because the discourses a subject engages are biased in favor of the practices typically participated in by the subject.[1] In other words, those discourses that relate directly to current practice are the most influential on current practice. In the practice of nursing, discourses of science and medicine play a pivotal role.

However, there are any number of discourses that govern and influence the individual subjectivity of NOLs. The discourses in which they participate as they practice resonate with "personal history and biography; formal training and education; professional identity; practice relevant experiences; and with participation in the relevant plurality of the social apparatus"[1 p226-227], to which they belong. All of which contribute to what Springer[1,25] describes as the heterodiscursive space of subjectivity. Therefore, when determining the various '*self-technologies*', or the '*self-work*' that NOLs engage in, one must not fail to consider the heterodiscursive space of subjectivity; the relevant plurality of the social apparatus; the dispositive. The forms of consciousness NOLs engage in within the heterodiscursive space we have referred to can be made visible by attending to how NOLs act on themselves as objects from the subjectivity of the heterodiscursive space they occupy; that is, by attending to the '*self-work*' NOLs engage in. While there are any number of possibilities, our concern is with those '*technologies of the self*' that operate in favor of the pharmaceutical industry via '*self-work*' by acting on human vulnerabilities and professional and personal identities, such as those governed by aspirations for status, recognition, prestige and authority.

## Technologies of the self and nursing subjectivities

When NOLs participate in DMT discourse their subjectivities are doubly impacted. As subjects, NOLs express subjectivities governed by the requirements of clinical practice in all its heterodiscursive complexity. In the following statement, Costello and Halper[57] link commitment to the importance of a 'trusting nurse-patient relationship', a central tenet of professional nursing discourse, and 'long-term adherence; a clinical prerequisite for remission in DMT discourse, and a pharmaceutical industry imperative linked in part to financial interests:

> An open, trusting nurse-patient relationship is critical to long-term adherence. Recent anecdotal evidence from the pharmaceutical industry supports the importance of nursing education and sustained nurse-patient relationships to patients receiving self-injected therapies.[57 p18]

Here the NOLs Costello and Halper instruct other MS nurses within the normative expectations of MS clinical practice to achieve the goal of 'long-term adherence' through the means of a 'trusting nurse-patient relationship. Such exhortations reinforce professional values understood from within subjectivities that leave DMT discourse unquestioned, while urging MS nurses to work at developing nurse-patient relationships of the trusting kind. In other words, the MS nurse is prompted to strive for, to work at, to apply '*technologies of the self*' that will cultivate a persona of trustworthiness consistent with the interests of not just the person with MS, the explicit focus of the statement, but also in the interests of the pharmaceutical industry that speak loudly from what is not and cannot be said. Such trustworthiness requires the application of '*self-technologies*' that allow the MS nurse to manage personal time to be wherever possible always available for unscheduled drop in visits or telephone contact so that any problem or concern the patient may have can be addressed without delay, thereby eliminating any resistance to treatment.[1] Such foundations of trustworthiness involve a transformation in clinical practice whereby surveillance[58] of treated patients takes precedence over other important

care practices the patient may require.

The point to be taken from this example is that '*technologies of the self*' are the means MS nurses adopt as they strive to meet the expectations set out for them in the dominant discourses of practice in which they participate. As such, MS nurses apply myriad '*self-technologies*' as they strive to practice in accordance with DMT discourse in those settings where it dominates clinical practice.

Thus, this unraveling of the '*technologies of the self*' MS nurses apply to themselves; can be taken as but one example of how the pharmaceutical industry inserts itself into nursing practice. Irrespective of context, when nurses consciously attend to the requirements of practice germane to medication, they develop expertise required of them by their professional subjectivity, while transforming themselves at the same time into instruments of the pharmaceutical industry; unless, in the absence of evidence, they bring a healthy skepticism to the unsubstantiated claims made for the benefits of DMT products. It is important to understand that in the '*self-technologies*' nurses apply, be it as authors, as experts, as NOLs, as relational and knowledgeable partners in decision-making, as enthusiastic, hopeful, empathetic, friendly and responsive supporters,[1] that without insight into the forms of subjectivation and instrumentality the pharmaceutical industry engages in, nurses believe they are being faithful in their practice to only their understanding of nursing. Fundamental to such beliefs is the commitment to actions that are in the best interest of the patient.[1,25] However, without suspicion, nurses will not realize that they may be unwittingly exploiting the fears and hopes of their patients as they (nurses) take up their subject positions as 'channels for the flow of power' from the pharmaceutical industry. Indeed, it is the '*ordering*' of the work nurses perform in their everyday clinical practice settings, as well as the work they perform upon themselves as they conform to the expectations of their discipline, as well as the expectations of the heterodiscursive spaces within which they work, that their subjectivities are formed and transformed.[1,25]

## Discussion

There are frameworks other than dispositive analysis that we could have used in preference to finding insights and directions for inquiry from Foucault's problematizations and researches. Therefore an obvious question is why did we opt to conduct our studies of DMT discourse within a distinctly Foucauldian conceptualization. The strong reasons we have for our approach are motivated by two concerns. The first as already mentioned is to explore DMT discourse within a broad framework of the unsaid: the institutions, practices, and networks of changing an interactive relationship that influences conceptions of the management and treatment of people with MS. As we have mentioned, the notion of 'dispositif' (dispositive) we find in Foucault's researches and conversations provides a sufficiently challenging and enlightening framework in which to investigate our interest in the current dominance of DMT discourse in managing and treating MS. We deliberately exclude our usual formulation of people with MS here because we want to draw attention to the influences that impact MS patients as they participate in DMT discourse as the recipients of a relevant treatment regimen. However, we want as well to link our understanding of the conceptual contribution of the 'dispositif' with an exploration of how politics of the 'self' constitute a distinctive subjectivity among physicians, among nurses; and among MS patients who serve as extensions of the pharmaceutical industry within the changing dynamics of conditioning institutions, organizations, practices and discourses.

Our interest in the distinctive subjectivities to which we have drawn attention raises the challenging question of the relationship between our use of Foucault's concept, '*technologies of the self*' to his distinctly ethical concerns, especially those he researched in *The History of Sexuality*. What, it may be asked, links our account of DMT discourse within a dispositive to the sort of ethics that interested Foucault? The short answer in one word; freedom. We will explain.

Let us take it that what Foucault means by '*technologies of the self*' is essentially self-constitution through practices of freedom. We now have two things to reconcile, what we might call the techniques of domination, the strategies and tactics of the 'dispositif' that provides the historical and immanent context for understanding the '*how*' and '*why*' of DMT discourse; and the practices of freedom we refer to as 'technologies of the self' that have a positive influence on promoting the interests of the pharmaceutical industry. The '*technologies of the self*' we refer to are in a sense practices of freedom, but at the same time they involve self-transformation into the subjectivities we have described. With this, we arrive at a Foucauldian paradox. For Foucault, the self is not an objective entity standing outside the discourses in which it is constituted, but a political and therefore ethical entity. Therefore, those we have called NOLs are engaged in activities and practices that are conditioned by the power relations and much else that are the elements of the *dispositif* that produces, reproduces, develops, regulates, advances and promotes DMT discourse.

However, the subjectivities to which we refer, following Foucault's later work, involve a notion of the subject that is capable of self-transformation. The paradox we engage with therefore is that of accepting that strategies and tactics of domination that are entirely compatible with a self that has the capacity for self-transformation. This works to the advantage of the pharmaceutical companies to the extent

that the subjectivities of nurses, as well as physicians and people with MS are constituted by DMT discourse, but this also leaves open the potential for commitments, actions and consequences that will provide alternative forms of self-transformation. In his later writings, Foucault takes us some way towards overcoming the paradox of domination with freedom, but we still have conceptual work to do to reconcile his archeological and genealogical studies with his ethics.

We claim that Foucault's notions of '*dispositif*' and 'technologies of the self' give us indispensable conceptual, political and ethical resources in which to research what would be unsaid about the contemporary management and treatment of people with MS. Foucault stimulates us to research neurological, nursing, and self-care practices to begin to understand how and where the ideas come from that support the ascendancy and dominance of DMT discourse. We claim no privilege for our perspective. We steer clear of any totalizing notions. We have no grand narrative to relate, no definitive answers to the problematizations we have drawn attention to; rather we seek to understand what we have described. We problematize the subjectivities MS nurses and MS NOLs, as well as the subjectivities of physicians and MS patients. We encourage an agenda of seeking out the values, interests, organizations and institutions that intertwine in the domination and control of an important field of clinical practice.

We therefore propose a double reading of our final quotation from Foucault; a reading consistent with our usage of '*technologies of the self*' in the sense of self-transformation in accordance with the interests of the pharmaceutical industry, and the more positive ethical meaning Foucault intended:

> The task of testing oneself, examining oneself, monitoring oneself in a series of clearly defined exercises, makes the question of truth – the truth concerning what one is, what one does, and what one is capable of doing – central to the formation of the ethical subject.[59 p68]

We arrive at our double reading from what we have called the Foucauldian paradox, by reading the subjectivities of physicians, nurses and people with MS as objects, but also as subjects.

## Conclusion

This demonstration of what MS nurses who become influential advocates and the first line contact with MS patients do to themselves in response to the knowledge generated by pharmaceutical industry presence and influence, and which in turn transforms them into instruments of persuasion and surveillance, demonstrates the forms of power involved in transforming nursing subjectivities into objects and instruments of the pharmaceutical industry. Not only do such transformations risk distorting the practice of nursing itself, it transforms nurses into allies, agents and marketers for the pharmaceutical industry. The result of that transformation raises patient motivation, compliance and adherence to the status of a nursing imperative and displaces the caring practices of nursing.

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*Contact Information for Authors:*
*Rusla Anne Springer, RN, Ph.D., MSCN (Multiple Sclerosis Certified Nurse)*
*Assistant Professor*
*University of Saskatchewan*
*1121 College Drive, Rm 309-St. Andrew's College Building,*
*Saskatoon, Saskatchewan, S7N 0W3*
*Canada*
*Email: ra.springer@usask.ca*

*Michael E. Clinton, RN, Ph.D.*
*Full Professor*
*American University of Beirut*
*School of Nursing*