

Effects in Printed Commercials: The Moment of Exposure and the Significance-effect

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ABSTRACT

The aim of this article is to investigate the emotional effects commercials cause on the interpreting mind in the so-called moment of exposure (MoE). Furthermore, we investigate what happens in the aftermath of the MoE, the after rationalisation process, which we name the Significance-effect (SiE), this is the process where the emotional level caused by the MoE becomes related to memory and thereby becomes related to meaning. Theoretically, the article primarily draws on concepts from the American polymath Charles Sanders Peirce, the French semiologist Roland Barthes and we also make use of recent results in neuropsychological research by i.e. Joseph Ledoux and Antonio Damasio.

1. INTRODUCTION

The contents of this article are directed at an analysis and definition of the concepts: Moment of Exposure (abbr. MoE) and significance-effect (abbr. SIE)¹ as fundamental cognitive effects when interpreting commercials. More precisely the article investigates some of the effects that occur when a mind becomes exposed (MoE) to a commercial and the effects that occur subsequently in the aftermath of the MoE—which is the SIE. These effects are very closely connected. The MoE is an effect that can be understood in relation to the American philosopher Charles Sanders Peirce's concept of Secondness as a reaction to something, whereas the SIE can be understood in relation to Thirdness as a habitual interpretation and generalisation of a certain reaction. However, both concepts are interpretants since they contain general features and must be understood as effects which attract attention and which communicate knowledge respectively. No commercial

¹ See e.g. Torkild Thellefsen, Bent Sørensen & Martin Thellefsen: "The Significance-effect – A Communicational Effect : introducing the DynaCom. Accepted in *Cybernetics & Human Knowing*.

can provoke unknown effects since an unknown effect is no effect at all—hence the general features of the MoE.

When dealing with commercials, the element of attracting attention is part of the nature of commercials. Commercials have to attract attention to the immediate utility value of the product and/or its symbolic value. The mediation of the product always succeeds the MoE. However, if we follow the logic of evolution: when becoming exposed to an effect over and over again, which is often the case when dealing with commercials, the effect tends to weaken as we become too familiar with it. So, in order to maintain the strength of the effect at a high level, more and more primitive effects often rooted in basic instincts such as sexual references that demand abductive reasoning are used in order to create the relation between the commercial and the product. And it seems to be the abductive elements that signify the relation between MoE and SIE. In this perspective, the SIE becomes a post rationalisation, a process of reasoning that involves a major part of the cognitive apparatus. The aim of the article is to describe and analyse the MoE and how the MoE, when the effect has settled through post rationalisation, can release the SIE.

Commercials as signs will always create a MoE, and, as we will discuss later, the strength of the effect caused by the moment depends on the motivation or the sympathetic state of mind of the interpreter, his or her mental development, level of knowledge, preferences, etc. However, the SIE may not succeed the MoE. The SIE only occurs if the interpreting mind truly understands the message communicated by an utterer and mediated by the commercial. The MoE is the effect that attracts attention to the commercial; the SIE is the right understanding of the message communicated by the commercial. Summing up, the MoE will always occur, the strength and impact of it depends on the conditions of the interpreting mind. The SIE will only be released when the message of the commercial is understood by the interpreting mind. Consequently, in order to obtain the maximum attention and communication from the commercial, there has to be a connection between the effect released in the MoE and the product advertised by the commercial. If the MoE attracts attention by using sexual effects, and we, in the post rationalization period, are unable to relate the advertised product to the sexual effects, the commercial may be a serious problem; the product may not be taken seriously and consequently the manufacturer could experience a decline in the sales figures.

The following passages are devoted to a semeiotically inspired definition of the MoE, however also inspired by Roland Barthes' concept: Punctum and a semeiotically inspired

definition of the SIE. We hope that we can close in on the processes of communication and interpretation of effects used in commercials. However, before we attend the MoE, we must establish a theoretical framework from where we can discuss effects and commercials. We believe Peirce's concept of interpretants makes up an excellent framework. Basically, Peirce's classification of interpretants is a classification of the different and dynamic effects signs have on minds.

2. INTERPRETANTS – INTERPRETATIVE EFFECTS ON MINDS

To Peirce an interpretant is "...a mediating representation which represents the relate (the sign) to be a representation of the same correlate (the object) which this mediating representation itself represents..." (CP 1.553). And further: "I [Peirce] define a Sign as anything which is so determined by something else, called its Object, and so determines an effect upon a person, which effect I call its Interpretant, that the latter is thereby mediately determined by the former." (A Letter to Lady Welby, SS 80-81, 1908). Peirce understood the interpretant as carrying out "the office of an interpreter who says that a foreigner says the same thing which he himself says" (CP 1.553). Furthermore, he used the following example:

...suppose we look up the word *homme* in a French dictionary; we shall find opposite to it the word *man*, which, so placed, represents *homme* as representing the same two-legged creature which *man* itself represents. By a further accumulation of instances, it would be found that every comparison requires, besides the related thing, the ground, and the correlate, also a mediating representation which represents the relate to be a representation of the same correlate which this mediating representation itself represents. Such a mediating representation may be termed an interpretant (CP 3.553)

Therefore, the interpretant is in itself also a sign, a mediating entity. The interpretant offers the possibility for an infinite or continued semeiosis or evolution of meaning. Peirce writes the following:

A representation is something which produces another representation of the same object in this second or interpreting representation the 1st representation is represented as representing a certain object. This 2nd representation must itself have an interpreting representation and so on ad infinitum so that, the whole process of representation never reaches a completion. (W2: 224).

The interpretant is part of an analogous relation to the relation between the sign and the object; this causes a process, which involves that the interpretant itself becomes a sign in a new semeiosis; a new semeiosis where the old sign and its object is the object of a new sign. This process is an infinite regress where signs emerge from other signs, from which still more signs emerge.

Peirce classified several interpretants into different trichotomies. The most general trichotomy consists of the immediate interpretant, the dynamic interpretant and the final interpretant. This classification covers all kinds of semeiosis. However, when dealing with the MoE and the SIE, which are limited to human communication, we apply the trichotomy consisting of the *intentional interpretant*, the *effective interpretant*, and the *communicational interpretant* (the cominterpretant).

Classification of Interpretants

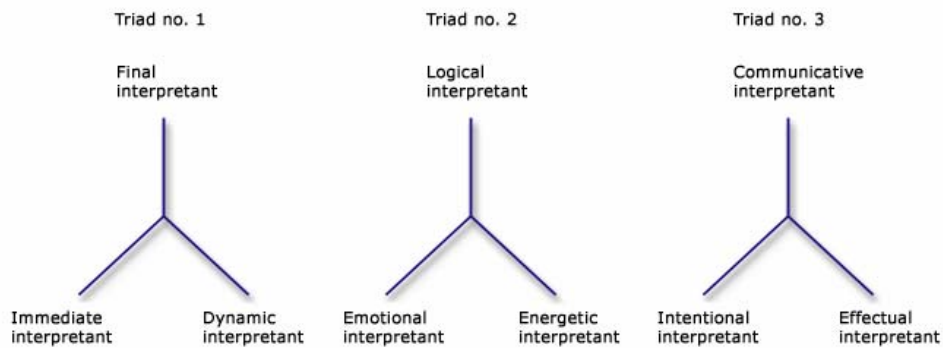


Figure 1. Classification of Interpretants.

Regarding this trichotomy, Peirce wrote the following in “A Draft of a Letter to Lady Welby” (1906):

There is the *Intentional* Interpretant, which is a determination of the mind of the utterer; the *Effectual* Interpretant, which is a determination of the mind of the interpreter; and the *Communicational* Interpretant, or say the *Cominterpretant*, which is a determination of that mind into which the mind of utterer and interpreter have to be fused in order that any communication should take place. This mind may be called the commens. It consists of all that is, and must be, well understood between utterer and interpreter at the outset, in order that the sign in question should fulfill its function” (SS 196-7).

Peirce developed the classification of this trichotomy even further and since especially the MoE in some way must be connected with the effectual interpretant and the SIE

to the cominterpretant, we focus on this division. The effectual interpretant is further divided into: the *sympathetic interpretant*, the *percussive interpretant*, and the *usual interpretant*. However, before we address the MoE as an effective interpretant, we will make a general definition of the MoE.

3. THE MOE2

Roland Barthes' notion of *punctum* as a subtle emotional effect has its background in these mechanics involved with the formal/technical emerging of a photograph. He introduced the notion in the notoriously unapproachable auto-biographical essay *La Chambre Claire* (1980), (English translation *Camera Lucida* 1982). From particularly the English title it is evident that the signifying metaphor for its content bears resemblance to the technical process that is involved with the shooting of a photograph. The notion of *punctum* is interesting because it can further highlight the relevance of MoE when dealing with the recall of emotional memory content linked to the perception of photographs (or advertisements). Stimulated by the death of his mother, Barthes is throughout the essay focusing on the possibility of recalling emotionally intense memory material which is linked to the perception of photographs. Indeed with the notion of *punctum*, Barthes is trying to put forward a hypothesis that is able to answer the observed peculiarity: why is it that certain photographs are capable of triggering certain responses, whereas other photographs do not have this capacity: "...and if another photograph interests me powerfully, I should like to know what there is in it that sets me off." (Camera Lucida. 1982: 19). The motivation for developing the notion is the death of his mother, and consequently Barthes thematizes its content on a very emotional level: "A photograph's *punctum* is that accident which pricks me (but also bruises me, is poignant to me)." (Camera Lucida. 1982: 27). The essay shows a large number of photographs. But its theoretical turning point, the

² The concept of MoE is imported from photography. Here, the concept stands for the process of taking a picture. As the lens opens, it conducts light onto the film. When the light is at its highest level the moment of exposure occurs and the picture has been taken.

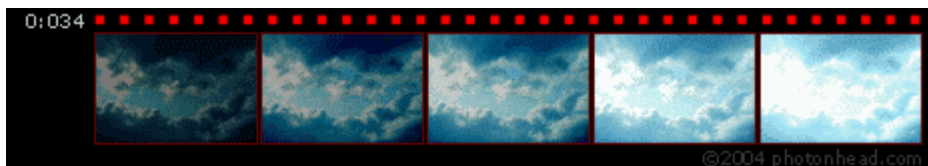


Figure 2. The sequence shows how the light becomes stronger and at its highest level, the picture is shot. The motive becomes fixated and the picture is shot. Cited from <http://www.photonhead.com/beginners/exposureintro.php>.

Winter Garden Photograph, which has captured Barthes' mother as a little girl in a winter garden, is the only photograph that, for Barthes, triggers a punctum effect. However, this photograph is not exposed to the reader. The Winter Garden Photograph is never shown. Actually, it seems symptomatic that the photographs shown are described linguistically, whereas the Winter Garden Photograph is never shown; only described. Consequently, the Barthean notion of punctum cannot be connected to any kind of scientific reliability. Therefore, the scientific status of the notion must be considered weak. Nevertheless, we believe that Barthes actually captures some aspects of mental life, which can be interesting for our semeiotic definition of MoE as a certain emotional response, which emerges in the perceptual confrontation with certain signs (photographs). Here, we will emphasise two passages from the essay. First, Barthes describes punctum as the experience of an overwhelmingly, emotionally intense moment, where "object recognition" is optimal even though no explicit analysis seems to be involved or, in fact, necessary in this process:

In order to perceive the *punctum*, no analysis would be of any use to me (but perhaps memory sometimes would, as we shall see): it suffices that the image be large enough, that I do not have to study it (this would be of no help at all), that, given right there on the page, I should receive it right here in my eyes. (Camera Lucida. 1982: 43).

Second, Barthes seems to state that punctum, as an affected and indeed intense moment, can only very difficultly be verbalized: "What I can name cannot really prick me. The incapacity to name is a good symptom of disturbance." (Camera Lucida. 1982: 51). We believe the quotations above point to the fact that punctum represents a psychological effect which may be, at least tentatively, constituted and defined by three factors:

- A surprising and emotional experience;
- Certain affective and/or emotional aspects of such an experience;
- The poor ability of such an experience to be verbally represented in memory, because of its intense emotional content.

Thus, the Barthean notion of punctum seems relevant for our notion and discussion of MoE. With departure in his private, autobiographical circumstances, Barthes presents punctum, a hypothesis (although, as mentioned, weak), suggesting the following: When dealing with an emotionally intense experience, this intensity influences the possibility of a meaningful articulation of content related to the experience. When dealing with aspects of an emotionally intense experience, the intensity itself seems to prevent precise recall and articulation of the content connected to it. This, however, does not implicate that the content does not have an impact on behaviour. In fact, it may represent a strong impact

on behaviour. Furthermore, it is necessary to emphasise that even though memory content seems inaccessible a certain point in the retrieval process, it does not mean that it cannot be articulated some time in the future. Therefore, the relation between the MoE and Barthes' notion of punctum seems to be on an emotional level. Both concepts seem to wake emotional memory in the interpreting mind.

The relation between MoE and punctum seems to be the subjective and emotional element of any experience when being exposed for a sign, in our case a commercial. The moment, which as a time unit is very hard to define, if possible at all, contains a subjective element, which may or may not trigger an strong emotional effect – a punctum.

So, having related MoE to Barthes' punctum, let us return to the interpretants of Peirce. If we analyze the MoE in relation to the interpretants, it seems evident that the MoE is an effective interpretant (containing an emotional interpretant). However, before a MoE can occur, the mind must be in some sort of a sympathetic state or a state of willingness, which will allow a given sign to create an effect in the exposed mind; we stress that the allowance can occur simultaneously both on a conscious and unconscious level. We believe that when the mind rests in a sympathetic mood (as indeed was the case with Barthes and his mother in the winter garden), it is able to let certain sign mediated emotions awake certain parallel or similar emotions in the mind; emotions that refer to some sort of emotional memory. Consequently, if someone feels sympathy towards a commercial, it could be because the person in some way shares the feelings or qualities mediated by the commercial or the effects used to mediate the product. Thus, there seems to be a kind of iconic emotional attraction leading to an experienced sense of community between the commercial and the interpreting mind. So, in order for the MoE to emerge, the given mind must possess a sympathetic interpretant, this must be the first condition.

Once the mind is in a sympathetic mood, the MoE has to attract attention using percussive effects of different kinds that can trigger emotional memory; this must be the second condition. The ability of the mind to connect the percussive effect(s) with a certain sympathetic state of mind ensures the process of an element of generality – a usual interpretant, which enables the mind to recognise the sympathetic state of mind with a certain percussive effect; this must be the third condition. Once having been subjected to a certain punctum, the feeling may never occur again, only a representation as an emotion may occur.

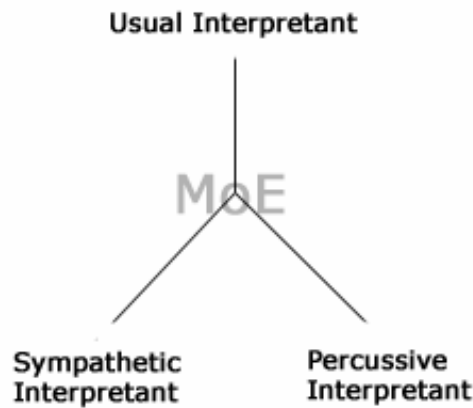


Figure 3. The MoE as an effective interpretant. The interpreting mind must be in some degree of sympathetic state—a state of willingness—towards the sign in order for the percussive interpretant to occur and subsequently the emergence of the usual interpretant, the latter enabling the mind to recognize the relation between an emotional state and a given effect.

Interestingly, it seems fair to say that commercial—and consumer research has almost never approached MoE as a subtle emotional effect, emerging in the perceptual evaluation of a given message, and certainly not as a reception process, which can influence our motivation and, in the end, lead to decisions. A large number of the hierarchy-of-effect models not only emphasize attention as the first process in a sequence of cognitive processes. But also as a process, which is not in itself sufficient, if the message should lead to relevant decisions and behaviour. Unfortunately, these models are rooted in classic, cognitive, sequential views on how humans process information, i.e. leaving out new evidence in brain research on how basic emotion processes may influence, direct, and redirect cognition within an evolved and functional brain architecture (LeDoux, 1998, 2003; Damasio, 1994). Cognition, of course, is not necessarily a process controlled by will. And, from a viewpoint, which stresses the importance of the new evidence on how emotion works, it is certainly not a process, which is sequential. On the contrary, from both a Peircean and a neuropsychological viewpoint, everything points to the fact that cognition is a dynamical process. No doubt that attention is a necessary aspect of the information processing of an advertising message. However, in contrast to the traditional and still very influential sequential, cognitive approaches to consumer response we put forward the hypothesis that with MoE, it may also be *sufficient*. Indeed, it seems, this hypothesis cannot be very easily integrated with hierarchies of effects still in use on today’s planning market. For instance the model and strategy of DAGMAR (Defining Advertising Goals for Measured Advertising Results) as initiated by Russel H. Colley (1960), seems to be the first to directly stress cognitive factors for sales results. Thus, we believe the

DAGMAR strategy represented the 1st in-depth approach to measuring advertising effectiveness in which advertising objectives (attention, learning, memory) were turned into specific measurable goals. Based on the strategy of DAGMAR, Russel H. Colley developed the hierarchical consumer response model now known as ACCA. This acronym represents the cognitive processes of Attention, Comprehension, Conviction, and Action. Since this model is basically sequential in its approach to information processing, it follows that if the recipient does not understand the *semantics* of the message, she cannot be convinced and in the end, take action. However, contrary to the vast majority of the existing modelling of the hierarchy of effects, we assume, on an experimental basis that if the message awakes emotional response in the mind of the recipient, it may also influence decision-making and behavioural processes rather directly, that is, without having the recipient to necessarily comprehend the semantics of the message. MoE is an emotion driven, basic low-attention processing of the message. An alternative hypothesis concerning a subtle emotion driven MoE-effect, therefore may be relevant in explaining important aspects of *low-involvement* consumer behaviour when dealing with very well integrated brands and complex product knowledge. Not until very recently, commercial—and consumer research, as already mentioned, has shown interest in how emotion processes actually influence the cognitive process dynamically. As an example, the 4th point in *PACT* (Positioning Advertising Copy Testing), which is one out of nine principles, which twenty-one of the largest U.S. agencies have endorsed, aimed at preparing and testing ads, with the goal of providing a more creative product for the client, yet paying attention to controlling the costs. To quote this 4th point in full length, the testing shall: "be based on a human response to communication –the reception of a stimulus, the comprehension of the stimulus, and the response to the stimulus." (Advertising and Promotion—an integrated marketing communication perspective: 628). From this quote, it seems evident that the DAGMAR-based formula of ACCA and similar forms are still very influential. Thus, it clearly stresses *comprehension* as the pivotal process in effective advertising communication. As indicated above, virtually all advertising theory and practice are based on the cognitive assimilation of advertising messages, leaving out the importance of emotion. The question of the relative contribution of cognitive and emotional processing to advertising is still to be answered. However, when speaking of MoE as a subtle, low-attention emotion effect of a message, it seems necessary to emphasize the research of Robert Heath. He put forth the hypothesis that we process messages at least as much when we are paying little or *no* attention to them as we do when we consciously take them on board. At low levels, according to Heath, certain simple elements may get through. Heath presents this hypothesis in more detail in his *Low Attention Processing*

Model (Heath 2000, 2001a, 2001b). Moreover, according to Heath, these elements do not decay because they are stored in implicit memory which is very persistent. This system represents emotional, non-declarative knowledge and operates without conscious awareness, while controlling fundamental behavioural processes (LeDoux. 1998: 209). Heath's Low Attention Processing Hypothesis can contribute to the explanation of some patterns in consumer behaviour, to which high-involvement models (such as ACCA) are indifferent to, at best. However, the hypothesis of a low attention processing is not able to capture MoE as an emotion process, which may influence certain low-involvement semeiotic levels in consumer behaviour. Accordingly, if the MoE is taken seriously, traditional (recall) measures where the respondent is *reporting* about the content of a message (e.g. category cued salience methods, etc.) have to be supplied with other emotion/recognition-based measures.

Based on the above, we transfer the MoE inspired by Barthes' theory of punctum and Peirce's effective interpretant into commercial and marketing research. As a consequence, it loses its original and technical definition; however, it maintains some of its original qualities. Thus, we define the MoE *to be the cognitive and emotional effect caused by a sign upon a mind; an emotional effect that is prior to any communication of structured meaning i.e. before the emergence of any cominterpretant and significance-effect.*

As already mentioned, emotional processes have traditionally been neglected in the field of consumer research. Consumer research theorists have predominantly been occupied with consumer decision and how humans process information from a purely cognitive viewpoint. Early *cognitively* based attempts to study consumer behaviour and decision-making are for example Sheth and Howard (1969), Nikosia (1965), Hansen (1973). These researchers basically study human consumer choice as a procedure of information processing. That is, as a type of processing almost similar to traditional sequential modelling of the mental process. In the article "Memory without recall, exposure without perception" (1977), Herbert Krugman argued that *recall* is a left-hemisphere measure, whereas *recognition* is a right-hemisphere measure. In other words, when measuring recall, one is approaching processes in the left-hemisphere and when measuring recognition, one is approaching processes in the right hemisphere. Based on some presuppositions of the functioning of the two hemispheres, Krugman further argued that recall is appropriate for measuring logical ('thinking') adverts, whereas recognition is appropriate for emotive ('feeling') advertising. In addition, Krugman stressed that print advertising is primarily logical and television advertisements is emotive. Therefore, he concluded, re-

call is the best measure for print, whereas recognition is best for television advertisements. Even though fundamental aspects of Krugman's thinking are wrong, the article must be considered very important, because it, as far as we know, is the first serious attempt to relate a view of how the human *brain* works to how an ad works. Earlier modeling of advertising effectiveness, as already mentioned, only stressed the so-called cognitive dimension, leaving out the functioning of the *brain*. Krugman's interest is the functioning of the brain; therefore, it is interesting in the light of new insights emerging within the field of today's consumer research. It seems evident that research in this field has recently been very much inspired by the 'emotional turn' in neuropsychology. This, in fact, to a degree that makes it possible to speak of an "emotional turn" also within the field of consumer research (e.g. Heath, 2001b; Bagozzi et al., 2000, 2002; Du Plessis, 2005). Recent neuropsychology (e. g. Damasio, 1994, 2000; LeDoux, 1998, 2003) stresses the very importance of emotion processes in understanding human behaviour and brain activity. The field has stressed the importance of making a distinction between an unconscious, but observable emotional state and a semi-conscious, unobservable, thus private, state of feeling. The latter state generally depends upon the first. Damasio writes:

it is through feelings, which are inwardly directed and private, emotions which are outwardly directed to the public begin their impact on the minds. I separate three stages of processes along a continuum; a state of emotions, which can be triggered and executed unconsciously and a state of feeling made conscious that is known to the organism having both emotions and feelings. (Damasio. 1994: 8).

Or with the words of LeDoux: " ...emotions are things that happen to us rather than things we will to occur... And while consciousness' control over emotions is weak, emotions can flood consciousness." (LeDoux. 1998: 19). In contrast to the level of feeling processing, the unconscious level of emotion processing may actually be the one, which can be tested. From a scientific point of view, this passage suggests that emotion and cognition are best thought of as separate but interacting mental functions. LeDoux presents experimental evidence for this assumption:

When a certain region of the brain is damaged, animals or humans lose the capacity to appraise the emotional significance of certain stimuli without any loss in the capacity to perceive the same stimuli as objects. The perceptual representation of an object and the significance of an object are separately processed by the brain. (LeDoux. 1998: 69).

Furthermore, it is necessary to stress that in the emotional as well as in the cognitive systems, the notion of memory also plays a fundamental role when dealing with MoE's ability to cause an effect in the mind of the consumer. Thus, we believe that the strong

experimental evidence of both an implicit and an explicit processing memory system is very important in understanding learning and recall connected to the impact of a sign (advertisement) in MoE. Here, the functioning of the explicit and implicit processing memory systems is crucial in two interconnected, general ways. First, the systems represent the neuropsychological underpinnings and general conditions of the possible kinds of learning processes occurring in MoE. Second, the systems also represent the general foundation for a precise understanding of how a learned matter is actually reactivated and retrieved. Unfortunately, the impact of MoE on learning and memory is less investigated within consumer research. In the book *The advertised mind*, Nigel Hollis writes: "When people talk about brands or ads they often start off by saying 'I like it because...'. Based on what we now know of how the brain works we should accept this statement at face value. Further probing may well just lead to a rationalization of this response, the real challenge for research then is to discover the origins of that initial reaction..." (Duplessis, 2005, foreword: xvii). Thus, with the notion of MoE, as a subtle process with a certain neuropsychological underpinning and functioning, it is possible to put forward a hypothesis, which may be able to explain important learning and recall processes occurring and connected with the initial reaction to an ad exposure. From this view, in fact, it is possible to define the strength of MoE as the relation between this initial reaction and the cognitive rationalization and kind of memory processes occurring when later exposed to the "ad-sign". Therefore, in fact, the study of the effect caused by MoE, as we theorize it, is a way of moving beyond the rationalization processes always occurring in the reception of ads but also with the goal of getting to know the precise nature of the rationalization process. We have stressed two factors necessary in the understanding of the effect in MoE. 1. The occurrence of a sympathetic interpretant within the mind of the interpreter, a percussive interpretant and a usual interpretant. 2. The level of knowledge represented in the mind of the consumer exposed to a certain "ad-sign". Returning to a consumer research- and neuropsychologically oriented vocabulary, then, the ability of a sign to cause an effect in the mind of the consumer in MoE basically implies a theory of an interplay between two factors: 1. The actual degree of consumer involvement and/or motivation. 2. The category of advertising stimulus that the consumer is perceiving; that is, the type of memory systems dominating in the - in advance represented - product knowledge in the mind of the consumer; and whether this knowledge primarily belongs to informational or transformational categories.

Following this logic, we are able to hypothesize the following dynamics: For informational categories and brands, the MoE is most powerful when the consumer is highly

involved/motivated than the opposite. However, when dealing with transformational categories and brands, the effect caused in MoE may be at least as powerful when the consumer involvement/motivation is low as high. The latter seems to be the case as the knowledge, which the transformational ad categories represent as mental structures, from a general view must be considered as of a more implicit, non-declarative nature, than the informational ones (e.g. East. 2003: 78-79). When dealing with a small cognitive timespan from actual exposure to the re-activation and further consolidation of the mentally represented knowledge, therefore, it is, in most instances, explainable by the correspondence of two factors; high consumer involvement and the integration level of the product knowledge in question. However, the cognitive timespan from exposure to the reactivation of the learned material may also be small, even though high-involvement is not initially at stake. In this latter situation, a necessary condition for the MoE to be powerful is the reactivation of material in implicit processing memory systems, as activation of material in this system is not necessarily dependent on high involvement, but may be affected with very little processing.

Several marketing researchers (e. g. Heath, as mentioned above) have pointed to the fact that low-involvement processing of advertising is not only the dominating on today's market; but is also able to affect the emergence of preferences without any recall of the ad in question; consequently arguing for the relevance of supplying traditional recall measures with recognition methods. Obviously, therefore, the ability of MoE to provoke an effect in the mind of the interpreter, and the intensity of this effect as explainable by the level of consumer involvement and knowledge representation in question, calls for further investigation.

Summing up, MoE is the cognitive and emotional effect caused by a sign upon an interpreting mind; an emotional effect that is prior to any communication of structured meaning i.e. before the emergence of any cominterpretant and significance-effect. However, it is important to stress that MoE is not a detached moment without any reference; it stands in a continuous relation to the past, which therefore involves memory and a general element and thereby the future. Consequently, MoE rests upon and refers to a lived past, a large body of shared experience and it is able to evoke experienced emotions that we may desire to experience again. It rests on the past and points to the future since the emotional effect it caused on a mind has to be settled, in some way, i.e. through fulfilment of a desire, a wish, etc.

Having defined the MoE in relation to Barthes concept of punctum and Peirce's effective interpretant, we will define the SIE as the after-rationalization process, an aftermath following the MoE, however, this aftermath, as we will see, depends on the beforehand knowledge of the exposed minds, therefore it is not just a time period, where the dust settles, so to speak, rather it is a cognitive timespan that organizes the emotional memory evoked in the MoE.

4. THE SIE

The SIE is the interpretative (and emotional) effect caused by a meaning intentionally communicated by an utterer to an interpreter through mediation of a sign. It is important to notice that the utterer does not necessarily have to be an individual; the utterer can e.g. be an organization, part of an organization or a knowledge domain, and the interpreter can e.g. be an individual or a community of any kind.

The meaning communicated is identical in essence to the meaning interpreted. This means that the interpreter must be able to interpret the message in the right way, which is the way intended by the utterer. This is shown in the following figure:

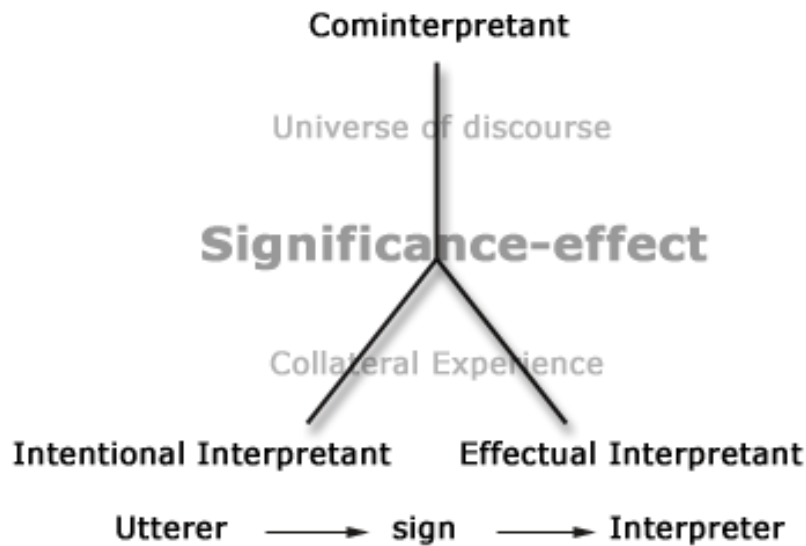


Figure 4 The occurrence of significance-effect.

According to Peirce, any act of communication depends on an utterer capable of creating an intentional interpretant, a sign as medium, and an interpreter capable of creating an effectual interpretant. Since the SIE is an effect of communication, it also depends on these communicational conditions. Furthermore, the SIE depends on collateral experience

in the interpreter since the effect occurs whenever an interpreter interprets a sign in relation to the knowledge already existing within the interpreter. Collateral experience is an experience that is not mediated by the sign itself but is an experience parallel to the sign; an experience that precedes the sign (cf. Johansen 1997: 78). Peirce wrote:

All that part of the understanding of the Sign which the Interpreting Mind has needed collateral observation for is outside the Interpretant. I do not mean by "collateral observation" acquaintance with the system of signs. What is so gathered is not collateral. It is on the contrary the prerequisite for getting any idea signified by the sign. But by collateral observation, I mean previous acquaintance with what the sign denotes (CP 8.179).

As an example, Peirce used the sentence: "Hamlet was mad". In order to understand this sentence, you have to know: "that men are sometimes in a strange state; one must have seen madmen or read about them; and it will be all the better if one specifically knows...what Shakespeare's notion of insanity was. All that is collateral observation..." (CP 8.179). And put in a more modern way: collateral experience or knowledge is beforehand knowledge necessary in order to interpret any sign or engage in any sign activity. Thus, the necessary collateral experience involves being able to indicate a certain kind of mental states, to which the sentence can be applied, and the ability to include the sentence in a network of experience, which is presupposed but not explicit in the sentence.

However, the communication has to take place within a shared contextual framework, which Peirce named a universe of discourse. Peirce distinguished between three universes of discourse defined by the ontological character of the objects located within them. The first universe is the universe of possibles: "the first comprises all mere Ideas, those airy nothings to which the mind of poet, pure mathematician, or another might give local habitation and a name within that mind" (CP 6.455). Its reality consists in its capability of being thought or instantiated, not in actually being thought or instantiated. The second universe is the universe of actuals. It is made up of brute facts and things whose reality consists in action and re-action. Finally, in the third universe, everything is located:

"... whose being consists in active power to establish connections between different objects, especially between objects in different Universes. Such is everything which is essentially a Sign -- not the mere body of the Sign, which is not essentially such, but, so to speak, the Sign's Soul, which has its Being in its power of serving as intermediary between its Object and a Mind. Such, too, is a living consciousness, and such the life, the

power of growth, of a plant. Such is a living constitution -- a daily newspaper, a great fortune, a social "movement." (CP 6.455).

In this universe, we find every form of regularity, law, habit, continuity, and semeiosis; this universe mediates between the first two universes and, as such, it is the category of intelligibility – the real par excellence, therefore the most important.

And, since the SIE is the correct understanding of an intended communication communicated from an utterer, a cominterpretant has to occur. If the cominterpretant occurs, the conditions for the SIE have been met. Summing up, the SIE is released only when the conditions of the cominterpretant are met.

The conditions for the release of the SIE are the following

1. Communication has to take place inside a universe of discourse
2. Utterer and interpreter must share collateral experiences
3. The conditions for communication and community defined by Peirce must be met
4. The cominterpretant must occur

Based on these formal definitions of the MoE and the SIE, let us take a closer look at how these effects support each other.

5. MOE, SIE AND COMMERCIALS – SOME POSSIBLE CONSEQUENCES

Let us try to close in on an analysis of the MoE and the SIE by aid of the following figures.

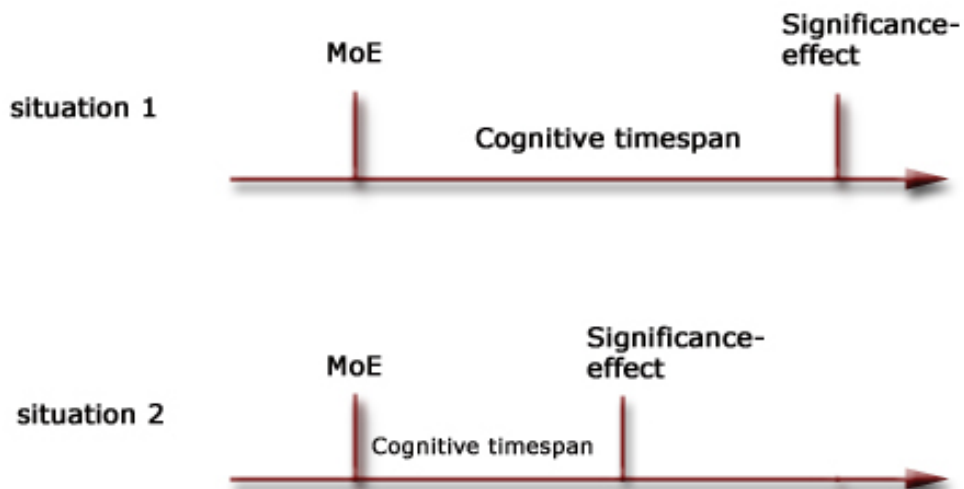


Figure 5 The cognitive timespan – the semeiotical relation between the MoE and the SIE.

The MoE occurs whenever a mind becomes exposed to a sign and the sign is able, due to the sympathetic state of mind of an interpreter, to cause an effect of emotion in the mind. If the sign cannot cause an effect, the mind will not interpret the sign as a sign, consequently, no interpretant arises, no effect occurs. However, if the exposed mind is familiar with the sign, let us say, to a degree where the sign becomes trivial – as most commercials tend to become when we are exposed to their general effects again and again, the sign will probably only cause an effect of indifference or irritation (negative SIE). Indifference is the case in around 99% of the signs we interpret daily. Naturally, this state of indifference forces the advertising agencies to be creative thinkers since the competition amongst most product categories are fierce. However, if the motivated mind becomes exposed to a sign and he or she possesses knowledge of the sign, the MoE can be powerful and the SIE may occur.

In the figure above, situation 1 covers a situation where the exposed and motivated mind reacts positively to the MoE but do not instinctively know the relation between the effect used in the commercial and the object of the commercial. This means that the interpreter has to use a larger amount of cognitive timespan to figure out the relation. Situation 1 shows a case where it is necessary to apply abductive reasoning and if the interpreter comes to understand the relation, the SIE might occur. The interpreter will in fact understand the intentional communication of the sign. If the interpreter does not understand the intention of the sign, the SIE will not occur, however, this does not affect the force of the MoE. In situation 2, the cognitive timespan is shorter, which indicates that the interpreter has prior knowledge of the content of the commercial. This means that the interpreter does not need to apply abductive reasoning in order to understand the relation. Here, symbolic reasoning as a habitual understanding as a sort of knee-jerk reaction is applied. However, this might imply that the MoE is not very powerful, since the interpreter has to be familiar with the given commercial and consequently the effect it uses. On the other hand, if the interpreter is in a sympathetic state of mind and does know the meaning of the sign, the MoE can be powerful even if the effect is well-known and the SIE may occur instantly. So, the situations where (1) the MoE is less powerful due to the indifference of the interpreter and where the SIE cannot occur and (2) the MoE is powerful due to the sympathetic state of mind of the interpreter but the interpreter does not possess adequate knowledge of the sign to release the SIE are by no means optimal for commercials. If the cognitive timespan is too long, the interpreter might lose her interest

and if the timespan is too short, the commercial might be so trivial that it does not cause any effect other than a usual interpretant in the interpreter. So, the ability of the MoE to cause an effect in the mind and maintain the interest of the interpreter seems to depend on:

- 1 1. The sympathetic state of the interpreter;
- 2 2. The knowledge level of the interpreter

Ad 1) The effect of the MoE is reflected in the sympathetic state of the interpreter. However the sympathetic state does not have to be directed at a certain commercial nor does it have to be a conscious state – this equals the low involvement mentioned earlier. The sympathetic state of mind can be the need of a given product due to various reasons i.e. emotional or logical reasons. E.g. if someone owns a loghouse and the wood needs some kind of fungicide in order to be preserved; here, we do not have a specific brand in mind, but the need for a wood preservative directs the attention towards this specific brand of goods. In this case all commercials about wood preservatives will presumably release a forceful MoE since they attract the attention and the SIE will occur almost instantly, since we presupposes that the buyer knows sufficient about wood preservatives to understand the message of the commercial. In this case, high motivation and knowledge of the product can create a forceful MoE and a rapidly occurring SIE, making the cognitive timespan very small. When the need for wood preservatives is covered, the commercials containing wood preservatives tend to become irrelevant and they tend to fall into the category of the 99% signs not consciously noticed. Consequently, the strength of the MoE and the occurrence of the SIE have everything to do with the state of mind of the interpreter. This example is a case of conscious motivation. But most cases of motivation and consequently actions as effects of commercials never reach the same conscious level. Unconscious or instinctive states of mind are often the driving force that leads to the MoE. However, this does not change the general mechanism of motivation as the following figure shows. When motivation goes up, the power of the MoE also goes up. On the other hand, if the interpreter is not in a sympathetic state at all, the MoE will be very weak or it may not occur at all.

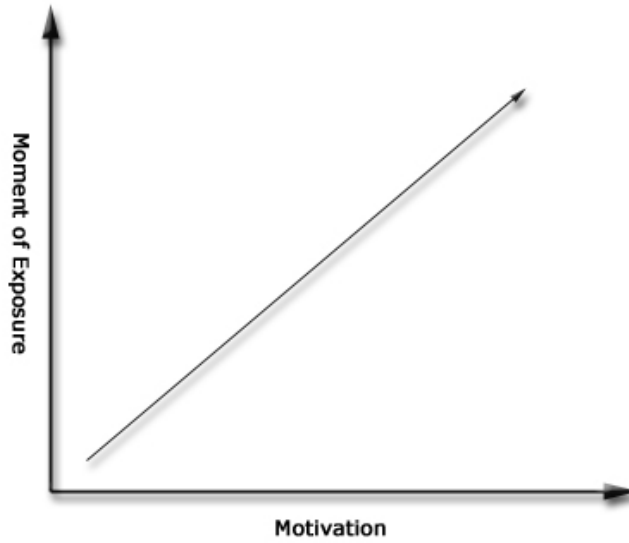


Figure 6 The motivation of the interpreter is crucial for the force of the moment of exposure.

Ad 2) The more knowledge an interpreter has of a given sign, and if the interpreter is motivated, the MoE can be powerful and the SIE may occur. This can be illustrated in the following way:

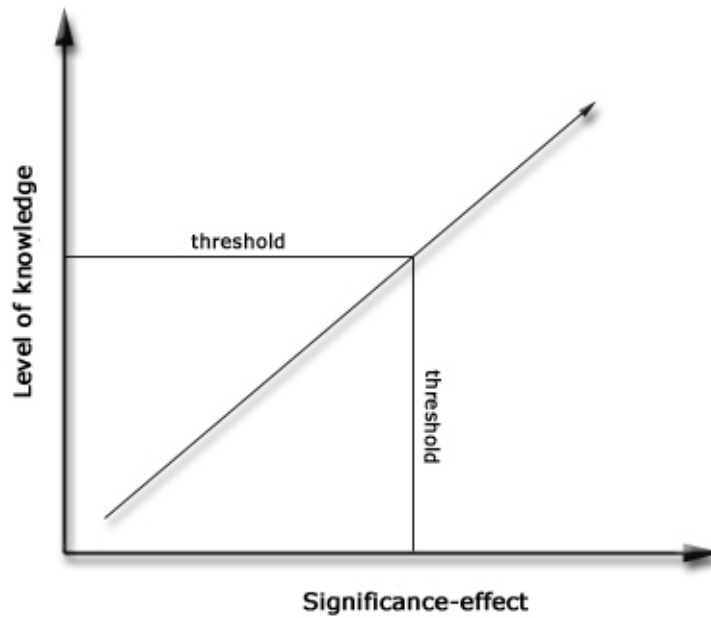


Figure 7 The significance-effect and the level of knowledge.

The interpreter's level of knowledge is crucial for the release of the SIE. The more the interpreter knows about a given sign, the more knowledge the sign communicates to the interpreter. The threshold suggests that a certain amount of knowledge is necessary for the proper interpretation of a certain message. In the case of the wood preservative, the interpreter has to have basic knowledge of these products in order to properly understand the message communicated by the commercial.

6. CONCLUSION

In this article, we have focused on defining the MoE and the SIE as effects caused by printed commercials upon interpreting minds. We have focused on the relation between the MoE as the effect that occurs whenever some mind becomes exposed to a commercial and the SIE as an effect of significance, that is, an effect that has to do with the understanding of the communication of the commercial. However, we have not presented a thorough definition of emotion and the relation between feeling and emotion; we have hinted that there might be a difference between feeling and emotion since an emotion in a Peircean perspective is a representation of a certain feeling(s). This will be dealt with in further research. Further research will also show a more precise definition of the cognitive timespan, experiments may be able to present a classification of the cognitive time span in relation to different types of commercials and the knowledge already present in the interpreter.

REFERENCES

- Bagozzi, R. et al. (2000), 'The Role of Emotions in Goal-Directed Behavior'. In *The Why of Consumption: Contemporary Perspectives on Consumer Motives, Goals, and Desires*. (London Routledge), p. 36-58.
- Bagozzi, R., Zeynep G.-C., and Priester R. J. (2002), *The Social Psychology of Consumer Behaviour*. (Buckingham United Kingdom Open University Press).
- Barthes, R. (1980), *La Chambre Claire*. (Editions du Seuil. Paris).
- Barthes, R. (1982), *Camera lucida*. (Vintage. London).
- Belch, E. G. & Belch, A. M. (2003), *Advertising and Promotion. An integrated marketing communication perspective*. (6th edition McGraw-Hill).
- Colley, H. R. (1961), *DAGMAR*. (New York: Association of National Advertisers).
- Damasio, A. (1994), *Descartes' error. Emotion, Reason, and the Human Brain*. (New York: Grosset-Putnam).
- Damasio, A. (2000), *The feeling of what happens*. (Vintage).
- Dines Johansen, J. (1993), *Dialogic Semiosis - An Essay on Signs and Meanings*. (Indiana University press).
- Doux, LeDoux J. (1998), *The emotional brain. – the mysterious underpinnings of emotional life*. (New York. Touchstone).
- Doux, LeDoux J. (2003), *The synaptic self. How our Brains Become Who We Are*. (Penguin).
- East, R. (2003), *The Effect of Advertising and Display. Assessing the Evidence*. (Kluwer Academics Publishers. London).
- Hansen, F. (1973), *Consumer Choice Behavior: A Cognitive Theory*. (The Free Press. New York).
- Hansen, F. (1981), 'Hemispherical laterilization: Implications for Understanding Consumer Behavior'. In *Journal of Advertising Research*, 8, pp. 23-28.
- Heath, R. (2000), 'Low involvement processing – a new model of brands and advertising'. In *International Journal of Advertising*. 19. No. 3 p. 287-298.
- Heath, R. (2001a), 'Low involvement processing – a new model of brand communication'. *Journal of Marketing Communications*. 7. No. 1 p. 27-34
- Heath, R. (2001b), *The Hidden Power of Advertising*. Admap Monograph No. 7. (World Advertising Research Centre. Henley-on-Thames, Great Britain).

- Heath, R. & Nairn, A. (2005), *Measuring Affective Advertising: implications of Low Attention Processing on Recall*. (University of Bath. School of Management. Working Paper Series).
- Howard, J. A & Sheth, J. N. (1969), *A Theory of Consumer Behaviour*. (John Wiley and Sons. New York).
- Krugman, H. (1977), 'Memory without recall, exposure without perception'. In *Journal of advertising research* 17 (4) pp. 7-12
- Liszka, J. J. (1996), *A General Introduction to the Semeiotic of Charles Sanders Peirce*. (Indiana University Press, Bloomington and Indianapolis).
- Nicosia, F. M. (1965), *Consumer Decision Process*. (Englewood-Cliffs, Nj. J. Prentice-Hall Inc.)
- Peirce, C. S (1931-1958), *Collected Papers*, vols. 1-6, Hartshorne, C. & Weiss, P. (eds.); vols. 7-8, Burks, A W. (ed.), (Cambridge Mass.: Harvard University Press).
- (1958) *Selected Writings*. Wiener, P.P. (ed.). (New York: Dover Books).
- (1976) *The New elements of Mathematics by Charles S. Peirce*, edited by Carolyn Eisele, four volumes in five books (The Hague: Mouton).
- (1977) *Semiotics and Significs. The Correspondence between C.S. Peirce and V. Welby*. Hardwich, C. (ed.). (Bloomington, Indiana University Press).
- Plessis, E. du. (2005). *The advertised mind*. (Kogan Page Limited. London)
- Thellefsen, T (2002), 'Semiotic Knowledge Organization : theory and method development'. *Semiotica* 142: 71-90.
- Thellefsen, T., Brier, S. and Thellefsen, M. (2003), 'Indexing and significance-effect: A Peircian semiotic and cognitive semantic approach to the analysis of the problems of subject searching'. *Semiotica* 144: 177-218.
- Thellefsen, T. & Jantzen, C. (2003), 'What Relations Are: A Case Study on Conceptual Relations, Displacement of Meaning and Knowledge Profiling'. *Sign Systems Studies*, **31**, pp. 109-133.
- Thellefsen, T. (2004), 'The Fundamental sign'. *Semiotica* 149, 245-259
- Thellefsen, T. (2005), 'The revised fundamental sign'. *Semiotica* 155, 51-63.