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How to Analyse Comprehension in Print Advertising: Advertising Effect from a Peircean Perspective

Abstract

The present article shows how the composition of an advertisement influences the creation of comprehension in the receiving process. It is suggested that composition is a varying structure of inference fields, and on this foundation, it is emphasised how composition is underrated in consumer research and in its classical modelling of the cognitive effect of advertising, especially comprehension as an effect, and as a contributing factor in the ongoing mental assimilation of the message in general.

That composition is an important factor in an advertisement's cognitive construction of the message is demonstrated via a so-called *reduction analysis*, that is, an operation in the ad's composition; its inference fields. This reduction analysis is meant as a preliminary method to establish hypotheses concerning how the composition supports different kinds of comprehension, and to be able to further test such hypotheses experimentally.

Keywords: Advertising, Composition, Comprehension, Reduction analysis, Cognition, Semiotics

Introduction

Based on Peircean Semiotics, this article develops a Matrix which may be used as some sort of guideline for testable predictions of effect – namely on the basis of differences between relations of the inference fields which constitute the composition. The purpose is here to make a semiotic contribution to the classic sequential modelling of effect – the so-called hierarchies-of-effects models. Thus, it is argued, classic cognitive modelling of effect can be profoundly deepened drawing on Peircean Semiotics. The reason for this being that hypotheses that explain and predict especially the comprehension of the message from the structure of the composition on the basis on Peircean Semiotics can be formulated more pragmatically precise as inferential relations. Within the classic cognitive modelling of effect, the communicative goal of every advertisement is to provoke attention, enhance comprehension, and strengthen memory. In this

article focus is primarily on comprehension, though without ignoring questions of attention and memory.

Purpose

In the following, it will on a Peircean foundation be demonstrated, why composition in print advertisements should be considered as both a major but also overlooked factor in the cognitive construction of the comprehension of the message. Furthermore, it will be argued that composition might be considered *the* major factor in the comprehension process. With the hypothesis that the composition of ads as a starting point is structured in different inference fields, and furthermore, that specific types of ads can be defined according to a certain combination of these fields, the purpose is to show how differences between such inference fields, and their combination in a specific composition, prompt differences in the kind of comprehension, which is formally implied in the cognitive construction of the message.

On these premises, this article positions its hypotheses to classic consumer research and research on advertising effect with special focus on the goal of comprehension. Thus, the article draws attention to the not very well noticed fact that hypotheses and models, which *explicitly* focus on composition as an important factor in the explanation of the realisation of this goal, are virtually nonexistent in the literature. In this capacity, focus is put on the important ACCA model. This model was developed with reference to the very influential DAGMAR-form (Colley 1961).

Based on Peircean Semiotics, an alternative Matrix is developed, which can actually explain the status of composition. Not only with respect to getting to know active, basic cognitive processes involved in the cognitive construction of comprehension in the receiving process, but also with the goal of asking how a more explicit Peircean conception of composition can be predictive of effect

when applied on single ads. In this way, the article develops an experimentally testable argument on how composition can be theoretically integrated as an important factor in the explanation and prediction of effect – especially comprehension.

The structure of the article

The article begins with a brief introduction to the actual scientific background and/or motivation for dealing with the question of advertising effect; this based on the alternative hypothesis that composition is an important and over-looked factor therein. As mentioned above, focus is on the cognitive goal of comprehension. The theories, models, and notions that are used and discussed in this article are a result of this focus on comprehension as a cognitive goal.

From this point, the argument follows. It is outlined why and how composition must be understood as underlining the cognitive construction of comprehension in an effective way. A concrete composition is analysed with starting point in the *reduction analysis*, that is, the argument concerning *why* and *how* composition must be considered a major factor in the cognitive realisation of the message and its comprehension. Some perspectives on the hypothesis implied in the argument and the development of the reduction analysis are discussed, just as attention is drawn to other possible ways of showing the hypothesis.

The last part of the article is structured around the basis of one question: What is the major contribution of a Peircean based approach that prioritises composition as the primary factor in an advertisement's delivery of effect, when the larger theoretical reference is consumer research, and its *modelling* and *evaluation* of comprehension? Here, focus is on the DAGMAR formula as it is evident that this formula has been an inspiration for the development of significant sequential effect models; the so-called hierarchies-of-effect models. In this connection, the analysis is defined against the important ACCA-model. An integral part of the

focus of this model is comprehension. The model prioritises comprehension. Unfortunately, this priority takes place without asking whether composition possibly influences, or has an impact, on the formation of comprehension. Without breaking with the DAGMAR formula as a general strategy of advertising communication and of measuring effect, and as we continuously relate our Peircean approach to ACCA, composition is inserted as a factor of comprehension. Within a Peircean framework that draws attention to comprehension as a result of composition, a semiotic form is set up which can explain the advertisements' construction of comprehension as a function of the organisation of the inference fields in a composition. This particular aspect is in focus as it is kept in mind that Ch S. Peirce noted that every mental effect can be described as purely inferential relations.

Current research: Background

In the article "Advertising Semiotics between meaning and effect – Composition, Categories and Cognition" (2004) there is a plea for a new aesthetic oriented semiotic paradigm in advertising research on a Peircean basis. The hypothesis is that there is an overlooked relation between an ad's composition and its cognitive effect. In the article, it is argued that this hypothesis is worth closer examination because of its clearly marked communicative significance, among other things. In classic research on advertising effect, the question whether the composition of an advertisement actually supports the cognitive construction of the message is poorly integrated. It has never been a well-defined question, whether composition represents a cognitive potential with relevance for the communicative goals of advertising; that is, attention, comprehension, and memory.^[1] Conversely, the humanistic tradition in advertising research has to a considerable extent been focusing on composition, but without assisting systematic reflections concerning whether and/or how composition may have a supportive function in the cognitive construction of comprehension.^[2] In the mentioned article, print advertising is differentiated into three types: a

sophisticated, a compound, and a simple category (2004: 53). The development of the different categories is based on an analysis of the interplay between the single ads' so-called meaning fields: illustration, headline, text, signature line, and – finally – the price. Moreover, the semiotic mode of representation, the signs involved, influences the categorisation. On a Peircean (and cognitive psychological) basis, the article thinks it probable that the different categories – as defined by the implied compositional features – correspond to certain emotional and cognitive processes in the reception (2004:60). Furthermore, the article prepares the ground for substituting the linguistic associated term “meaning field” with a more capacious one: *inference field*.^[3] However, the possible replacement of meaning field with inference field remains a mere hint in the article, just as it is not explained *why* it seems productive to substitute the terms.

In the article “A Peircean inspired Typology of Adverts” (2008)^[4] the hypothesis that composition underpins the creation of comprehension is clarified. This happens as the ad’s meaning fields are defined as a “structure of inference fields” and “cognitive effect” is specified as an “effect of comprehension” (2008:2). Furthermore, the hypothesis is that: “the array of the adverts inference fields determines the inferences made in the reception in a certain way, that is, provoke the receivers inferences, which in turn leads to a certain kind of comprehension” (2008:5). Consequently, the specific array of inference fields in a certain composition or in the way the composition is structured perceptually anchors and directs the construction of comprehension (2008:5). So, the advert’s construction of comprehension is considered a function of the array of inference fields in the composition assuming that comprehension as such is anchored in the perceptual process (2008:2).

It is this hypothetical question of ‘how the concrete structure of inference fields in a composition with respect to effect supports and forces a certain kind of

comprehension in the reception', which we in the following will try to answer. This is done by carrying out a reduction analysis of the inference fields in a selected advert. The purpose is to demonstrate how differences in and between the concrete array of inference fields actually produce differences in the kind of comprehension that is created. In other words, the compositional structure is analysed on the basis of an alternative structuring of the composition, that is, where some inference fields are systematically removed. On this background, a further purpose is to show how the effect of comprehension must become another – exactly as a consequence of the formally new way that the advert is experienced because of its perceptual anchoring. In this way, the method entails a completion of some sort of manipulation with the array of fields in the composition, and on this background to show how an advert builds comprehension, at least partly, as a function of its specific composition.

However, to be able to demonstrate why and how an advert's construction of comprehension is anchored in its compositoric structure, it is necessary to sum up some of the most important conceptual preconditions from the two above mentioned Peircean based articles – and furthermore to present and add a few conceptual supplements to these articles. These conceptual preconditions, and the few added theoretical supplements, is discussed with reference to two questions – both with Peircean Semiotics as the primary framework. Firstly: How can the concept of composition be understood? Secondly: How can the concept of comprehension be understood?

Conceptual preconditions: Recapitulation

On the basis of Peircean Semiotics, we assert that composition is a conditioning factor in the comprehension of the message. Firstly, and basically, because there is nothing in the intellect which has not already been in the perception, "*nihil est in intellectu quod non prius fuerit in sensu*", Peirce emphasised as he implied two important issues in relation to this article's explanation of comprehension as

a function of composition in the famous Aristotelian dictum concerning representation and significance.

Thus, and firstly, Peirce understood “intellectus” as the meaning in a representation and, “in sensu” as the perceptual judgement. The latter, the perceptual judgement, was described as: “A judgement asserting in propositional form what a character of a percept directly to mind is”. Even though Peirce uses the concept “perceptual judgement” it is here important to emphasise that this process is working completely without the control of rationality. Hence, the perceptual judgement is actually enforced on the perciever (cf. CP:5.55; 5.116; 7.627). If there is nothing in the intellect which has not first been in the perception, the implication is that the perceptual experience constitutes the basis for comprehension or understanding. In other words, the perceptual experience – or the perceptual judgement – makes up the basis or the specific material that comprehension at any time must be working with. This means that comprehension cannot be fabricated, instead it must always be understood as a result of a preceding perceptual judgement. Peirce emphasises this matter in the following way: “...every general element of every hypothesis, however wild or sophisticated it may be, (is) given somewhere in perception, but I will venture so far as to assert that every general form of putting concepts together is, in its elements, given in perception”. (CP: 5.181).

When we try to understand an advertisement and comprehend its message, it is always on the basis of our perceptual judgements. The composition of an advertisement puts restraint on our perceptual judgements, and thereby our comprehension. Therefore, the precondition for comprehension is perception as it is shaped by the composition of the advertisement. This is an important insight concerning advertising; composition and comprehension as one of the major communicative goals of advertising – as said earlier – is to produce comprehension.

Secondly, the comprehensibility of an advertisement is constituted via an integrated intentionality: the advert means something, it addresses somebody, it is often candid, and it is not possible just to comprehend its message in every possible way. With a Peircean notion, an advertisement is connected to a *final interpretant*, which indicates a certain kind of movement in the comprehension. It is the composition that establishes this – one could say – sort of fixedness in the comprehension process. Or to put it differently, the precondition for this kind of comprehension and its direction is the configuration of the composition. The composition, then, constitutes the basis which regulates comprehension in a certain direction. Thus, the composition sets the limitation for the possible kind of comprehension in the cognitive construction of the message as well as constitutes the condition for our comprehension of the message.

As mentioned earlier, Alsted and Hartvig–Larsen have developed a classification of print advertising in different types based on a careful distinction between the presence or absence of the so-called meaning fields that make up the given composition. As already announced, we will – inspired by Alsted and Hartvig–Larsen – understand the basic structure of an advertisement’s composition as composed of the mentioned fields. But where Alsted and Hartvig–Larsen denote these fields “meaning fields”, we choose on a Peircean basis to develop and make use of the concept ‘inference field’.

For this reason it is important to deepen a concrete as well as a more principled version of Alsted and Hartvig–Larsen’ use of the relevant concepts. The authors borrow concepts as implemented by Roland Barthes, that is, they make use of myth, denotation, and connotation in their description and analysis of the different types of advertisements. However, contrary to Ferdinand de Saussure (1857-1913), it is fair to say that at least the early Barthes in his approach must

be considered linguist as he absolutely explicitly subordinates all kinds of sign systems to the linguistic sign system.

However, in a more principled way, a structural linguistic theory in a Barthean design makes it impossible to analyse how composition affects the cognitive construction of comprehension, whereas a Peircean approach on the contrary seems very suitable in answering such a question. Contrary to the abstract, system inherent, and conventional conception of the *signifié*, the Peircean Semiotics operates with sign dimensions, which make it possible to describe and analyse forms of inference that have kept their affinity to both perception and memory traces. From such a perspective, our Peircean inspired analysis of advertising effect makes it possible to explain and predict basic processes in the development of comprehension of the message on the basis of composition, because the inference process in a Peircean sense is directly anchored in the concrete, perceived and experienced outside world. Composition, here understood as a structure of inference fields. Since the Peircean Semiotics operates with sign mediated forms of comprehension, which in a certain varying degree has affinity to perception and memory traces connected to the composition of an advertisement, as a structure of fields, it is on this basis also possible to explain aspects of advertising attention and memory as a function of the organisation of the composition and its comprehension potential – although these two last effects in this article is toned down in favour of a focus on the comprehension process.

The reason for this is, among other things, that every mental effect or modification of consciousness, as Peirce often said, can be formulated as a row of inferential relations: “...every sort of modification of consciousness – Attention, Sensation, and Understanding – is an inference.” (CP: 5.298) The effect that a composition produces is, in other words, we assume, an inferential effect. In this connection, it is obvious that the concrete array or organisation of

the inference fields in a certain composition makes the receiver comprehend the message in a certain, given way. The structure of the inference fields makes the receiver infer in a certain way, that is, to produce a certain kind of comprehension of the message.

In this way, it is now substantiated why it is legitimate to contend that the composition of an advertisement – here conceived as a structure of inference fields – constitutes the foundation on which the comprehension of the message emanates. We have sketched out that is to be understood by the term “inference field”. This field constitutes the basis for the perceptual judgement which, in turn, we assume, is the foundation for the construction of comprehension in the receiving process. But how is this comprehensible dimension to be understood within a Peircean framework?

Signs and comprehension/understanding

When we comprehend or understand something, we make use of signs. Peirce maintains that we have no capacity to think without the use of signs. Thus, in “Certain Faculties Claimed for Man” (1868) he stressed: “If we seek the light of external facts, the only eases of thought which we can find are the thought in signs. Plainly, no other thought which can be evidenced by the external facts. But we have seen that only by external facts can thought be known at all. The only thought, then, which can possibly be recognized is thought in signs. But thought which cannot be cognized does not exist. All thought, therefore, must necessarily be in signs.” (EP I: 24). We only have access to thoughts which are mediated by signs. Thinking is only possible to locate by means of external facts. Every thought that wants to disprove Peirce’s argument has to be identifiable to be intelligible, and this is only possible to identify by the use of signs. As with every other thought, this thought also ends by verifying Peirce’s argument (Cf. Skagestad 1978). Hence, Peirce could conclude: “...whenever we think, we have

present to the consciousness some feeling, image, conception, or other representation, which serves as a sign.” (CP: 5.283)

From a Peircean perspective, semiosis is understood as a triadic process. Semiosis is the operation which produces meaning and significance by instituting a reciprocal precondition between representamen, object and interpretant. Representamen can be conceived as the perceivable sign, a sensory input, which represents something else. This ‘something else’ is the object, which thereby can be said to be the subject of representation (that which the sign stands for). The third correlate, the interpretant, is by Peirce defined as the signs “Significance or interpretation” (CP: 3.456). In that connection, is the sign the entity that interprets, deciphers and associates the representamen with its object. This conception of the sign process as basically triadic in nature constitutes a theoretically relevant key, when it comes to the clarification of the kind of comprehension that the different inference fields and their organisation support in the receiving process. Peirce further specifies the triadic sign relation in the following way: “...it is a sign to some thought which interprets it; second it is a sign for some object to which in that thought it is a sign; third, it is a sign, in some respect or quality, which brings it into connection with its object” (CP: 5.283). Comprehension involves, from this point of view, that something, an object, in some respect or capacity, by the help of a sign, is made the focus of representation, because another sign – a thought-sign – starts to represent the first mentioned representation. The last mentioned thought-sign often characterised as an ‘interpretant’ by Peirce (Cf. CP: 5.283). This process or semiosis is possible to describe more precisely as an inferential process, where we by the use of the sign (as premise) and the interpretant (as rule) infer the object (the conclusion) (Cf. EP. I:9). Further, Peirce shed light in this general principle in the following way: “In a system of signs in which no sign is taken in two different senses, two signs which differ in their manner of representing their object, but which are equivalent in meaning, can always be substituted for

another.” (CP: 5.323). If it is not possible to think without signs, and if semiosis is identical with the inferential process, then comprehension must be anchored in inference. Every time we comprehend or understand something – aware or unaware – the same kind of movement is going on – from premise to conclusion. If something is true, something else is also true: “...it is a matter of constant experience, that if a man is made to believe in the premisses, in the sense that he will act from them and will say that they are true, under favorable conditions he will also be ready to act from the conclusion and to say that it is true. Something, therefore, takes place within the organism which is equivalent to the syllogistic process” (CP: 5.268). Comprehension is in any respect a question of forming and performing inferences. This is the case whether we have to do with conscious and articulate reasoning or informal and more ordinary and familiar inferences without actual logical control, that is, criticism.

Comprehension and forms of inference

According to Peirce, there exist three different ways, in which we can go from sign via the interpretant to a conclusion. Thus, we can infer or think abductively, deductively, and inductively. Parallel to this, it is also necessary to say that this implies that there are three – and only three – different ways whereupon our comprehension or understanding can be formed.

With regard to the abductive kind of comprehension, Peirce stated in an article written to the Baldwin Dictionary as follows: “Upon finding himself confronted with a phenomena unlike what he would expected under the circumstances, he looks over its features and notices some remarkable character or relation among them, which hence recognizes as being characteristic of some conception with which his mind is already stored, so that a (hypothesis) is suggested which would explain...that which is surprising in the phenomena.” (CP: 2.776). Hence, we make use of abduction when we try to comprehend a new and surprising phenomenon, or more precisely, when we only have a very rudimentary kind of

understanding of a phenomenon, we make use of abductive reasoning. Comprehension, which in this way always is connected to the abductive hypothesis concerning a given phenomenon, is therefore always hypothetical – probable. In the article “Deduction, Induction, Hypothesis” (1878) Peirce gave an example of the role of the abductive process in the cognitive construction of comprehension: “Suppose I enter a room and there find a number of bags, containing different kinds of beans. On the table there is a handful of white beans; and, after some searching, I find one of the bags contains white beans only. I at once infer as a probability, or as a fair guess, that this handful was taken out of that bag.” (CP: 2.623). It is because of this relation – that there exists a relation of similarity of whiteness – that Peirce can infer that the handful of beans which lies on the table, is from the bag in which there is only white beans. Following Peirce, we can describe the abductive form of inference by means of the following syllogism:

Rule: All the beans from this bag are white.

Result: These beans are white.

Case: These beans are from this bag.

Abduction is a so-called synthetic inference. Compared to an example this kind of inference broadens our comprehension and understanding. This is the case because we, as we formulate a conclusion concerning the instance, at the same time establish a relation between the rule and the result, which is not obvious, and which we cannot have a pre-existing knowledge of. Nevertheless, it is very important to stress that we only comprehend the instance a possibility. In other words, the conclusion is not necessarily a consequence of the premises. When we are to comprehend or understand something new, this comprehension is always anchored in abduction. Or as Peirce stated: “if we are to learn anything or to understand a phenomenon at all, it must be by abduction that this is to be brought about.” (CP: 5.171). Peirce specified further that: “The abductive

suggestion comes to us like a flash. It is an act of insight, although an extremely fallible insight. It is true that the elements were in our minds before; but it is the idea of putting together what we have never before dreamed of putting together which flashes the new suggestion before our contemplation.” (CP: 5.181). The original in the hypothesis, the mentioned flash of understanding, is not a matter of discovering a new rule. Rather, this kind of understanding concerns that we understand that the perceived fact can possibly be ascribed to an already known rule^[5]. According to Peirce, there are two important ways in which this can take place since we can obtain comprehension either via analogue or metaphorical inference. Of these forms, we will here focus on the kind of comprehension that is constructed in the point of departure in the analogue form. When we attain comprehension using analogue inference, this happens as we infer that a smaller collection of objects, which share important similarities in some respects, also share similarities in other respects (Cf. CP: 1.69). Peirce gave the following example; We know that among the big planets – Earth, Mars, Jupiter, and Saturn revolves around their own axis, and on this background, we conclude that the other big planets – Merkur, Venus, Uranus, and Neptun – probably do the same (Cf. CP: 2.733; cf. Goude 1950: 205). This relation can be represented like this:

S1, S2, S3 are a random sample from the class of things, X, which exhibit certain properties, P1, P2, P3.

Q also has those properties, P1, P2, P3.

But the Ss also have the property R.

Therefore Q probably has the property R, too.

We therefore infer that Earth, Mars, Jupiter, and Saturn make up a random sample of the class of big planets, and we conclude that all big planets revolve around their own axis. However, because Merkur, Venus, Uranus, and Neptun, as far as we know, share all the properties of the class, we then conclude that they also revolve around their own axis (Cf. Goude 1950: 205)

The deductive kind of comprehension is expounded in accordance to the classical conception, because it implies the use of a general rule on a specific instance (Cf. CP: 2.623). Again, it seems useful to point at Peirce's sack of beans, and represent this relation as a classical syllogism:

Rule: All the beans from this bag are white.

Case: These beans are from this bag.

Result: These beans are white.

When we have a rule and an instance, and we understand that this instance belongs to the rule, we have managed to make a logical inference. The reason for this is that the rule is evident in all instances, and if we understand that a special instance can be attributed to a rule, then we have been forming our conclusion in agreement with proper reasoning. Given that we want to achieve comprehension by means of the deductive form of reasoning or inference, we cannot achieve new knowledge as in the case of the abductive kind of inference. Deduction is analytical, and therefore it is only possible to express what is already implicitly present in the rule. Hence, the deductive form of comprehension or understanding is anchored in a general rule, which is set hypothetically, and from this rule all thinkable consequences are inferred and therefore must be true. However, because deduction is analytical, its conclusions only have validity in an imagined universe. The strength of deduction lies in its predictive power. It can assist us in making relevant predictions. If we, for example, know that all ravens are black, then we also infer that if we should run into a raven, it would be black too. Thus, the relative strength of deductive inference is its efficiency in the interpretation of relatively recognizable objects and situations. Hence, one could say that with the deductive form, we have a process through which an open field of significance, which to begin with is conveyed by abduction, is replaced by a more simple and definite significance.

Finally, with regard to the inductive kind of comprehension, its character is that we based in an observation of a result in a certain instance infer a general rule. Once again, we can return to the sack of beans. If we grab a random handful of white beans from the sack, and we do not in advance know how many of the beans in the sack are white, and we at the same time observe that $2/3$ of the beans are white, and we subsequently roughly conclude that $2/3$ of the beans in this sack are white, we have achieved comprehension or understanding by means of induction. This will appear even more evident if all the beans in our handful are white. In this case, induction can be represented by means of the following syllogism:

Case: These beans are from this bag.

Result: These beans are white.

Rule: All the beans from this bag are white.

Based on the inductive form of comprehension, we manage to make generalisations anchored in instances where something is true, to instances we have not yet observed. In other words, we conclude something true about an instance that resembles an instance we have already observed. This means that we transfer a logical truth with a certain degree of probability. Hence, induction must be understood as an evaluative kind of comprehension. Contrary to deduction – which indeed is analytically specifying – and therefore is able to express something with necessity within defined domains, induction is the basis for a kind of comprehension that rests upon the generalisation of something specific. Just as abduction, induction is a form of synthetic inference; that is, by means of both of these processes we can acquire new kinds of comprehension or understandings of something. Nevertheless, induction is closely connected to a well-founded expectation, by which we can form a new kind of comprehension involving *regularity* and *habit*.

On the basis of Peircean Semiotics, as we have made clear throughout the previous pages, it is now possible to return to the main hypothesis of this article: That the composition of an advert, here understood as “a structure of inference fields” – is a supportive factor in the cognitive construction of effect, especially comprehension. Through *reduction analysis* we will show this hypothesis, and further outline some methodological consequences concerning how to develop experimental hypotheses from this analysis. This hypothesis concerning composition and comprehension is not possible to show within a traditional linguistic framework which Alsted and Hartvig-Larsen for example operates upon. Within a linguistic framework, the hypothesis will at its best appear as a postulate, because the comprehension process here can in no way be explained in relation to the perceptual judgement; that is, how perception is related to composition, just as a linguistic framework in no satisfying way can be taken as a coherent basis if you want to formulate hypotheses that can explain and predict effects of *attention* and *memory* on the basis of composition analysis^[6].

Through reduction analysis of the inference fields in a specific advertisement it is now possible to show how composition supports and maybe even determines the cognitive construction of comprehension in the receiving process. However, before it is possible to unfold our reduction analysis, it is necessary to give a brief explanation and a few reflections of the method in question.

Reduction analysis

As stated earlier, the purpose as such is not to make an actual contribution to the further development of the categorisation of print advertising that was launched in 2004 and further developed in 2008. On the basis of Peircean Semiotics, the purpose here is strictly to substantiate why it is correct to maintain that the comprehension of an advertisement is supported and determined by its composition, that is, how differences in the combination of

inference fields produces differences in the kind and array of processes in the cognitive construction of comprehension. Furthermore, the purpose is to present a perspective that is actually able to function as a supplement to the influential classical DAGMAR formula and the derived ACCA-model and the implied hypotheses concerning the status and function of comprehension in the generation of effect.

The starting point for the reduction analysis is an example of the category of print advertisements that we elsewhere call “the abductive hypothesis shaping type”, that is, the example is based on the already mentioned article “A Peircean inspired Typology of Adverts” (2008). Hence, the example which could be said to be the basis for the reduction analysis is an advertisement for “Scandic”.

Regarding the choice of analytical example, it is necessary to ask oneself: Why is it exactly this category, and not another or several other categories, that serve as the illustrative foundation of the development of the method? The answer is simple – namely that the abductive hypothesis shaping category, amongst the other developed categories, is by far the most fundamental; that is, this category mediates the most basal and/or original comprehension amongst the categories^[7]. This implies that the abductive hypothesis shaping category is very appropriate as the starting point for a reduction analysis. This is the case as the category – at least from a theoretical view – seems to forestall the other categories of advertisements. Consequently, this category contains a major perspective with regard to the reduction analysis and the possibility of proving the hypothesis: If it is actually the case that the abductive hypothesis shaping category can prove the hypothesis of this article – that composition is a major supportive factor in comprehension – it can be deduced that every other category can also be subject to reduction analysis. In contrast to this it is also clear that a positive reduction analysis of the other developed categories, as for example the inductive or the deductive, do not contain predictive power or

represent any kind of validity for the more basic categories like the abductive hypothesis shaping one.

The actual reduction analysis – the demonstration that composition is a major factor in comprehension – here includes three operative stages. Thus, we relate to the composition as we demonstratively remove its inference fields one by one. This happens with the intention to demonstrate how changes in the very structure that anchors perception prompts a change in the effect or kind of comprehension that can be formally built.

The first stage of operation consists of an analysis of the comprehension as this is formally constructed *without* a reduction in the inference fields. The second stage consists of an analysis of the comprehension that is built when the *illustration* is removed. The third stage involves an analysis of the comprehension that is formally built without the *text*. Hence, the reduction analysis is a study of the effects of comprehension if the composition is manipulated in the same advertisement. Furthermore, the reduction analysis is a method that is useful in the preliminary development of hypotheses concerning how differences in comprehension are a function of differences in composition, and therefore also how to decide which hypotheses are relevant to put to an experimental test alike.

The Reduction Analysis: The Abductive Hypothesis Shaping Category

As already mentioned, the purpose with reduction analysis is to show how differences in a composition support specific differences in the kind of comprehension that can be formally built in the receiving process of an advertisement. Furthermore, the purpose is to substantiate how the cognitive construction of comprehension is not only anchored in the actual interplay between the different fields of inference, but also to show how different part-comprehensions – are determined by the interplay of the fields. The reduction

analysis is completed with point of departure in the abductive hypothesis shaping structure and with reference to Scandic as a prototypical example of such a structure^[8]. As it is kept in memory that composition is defined as a varying structure of inference fields, and that both structure and comprehension can be represented as relations between abductions, deductions, and inductions, our attention is firstly directed towards the reduction analysis. Furthermore, it is necessary to point out that there are many possible combinations of the inference fields. However, the effects of such combinations are not to be analysed here. The reduction analysis and the hypothesis concerning composition as a supportive factor in the cognitive construction of comprehension is therefore solely founded in an analysis of three variations of the composition of the Scandic advertisement; that is, first an analysis of the comprehension as it is formed without removing any fields from the composition, secondly an analysis of the comprehension without the illustration, and thirdly an analysis based on a removal of the text. This is due to the principled character of the purpose: To show that composition in a crucial way affects how the message is built up and not least how it is comprehended. It is a Danish advertisement but the translated meaning of the relevant inference fields is as follows: "According to experts it produces lower productivity, if one has to wait on a meeting to begin and end on time. Would you like to know more about our control of the equipment before the meetings and other solutions that makes your meetings more effective? Let us present to you our MEETING-concept. Dial 33 48 04 04 directly to the hotels or enter www.scandic-hotels.dk".

First Stage - the Comprehension as an Effect of the Whole Compositional Structure



Without an operation in the advertisement, its composition prompts two part-comprehensions and one major-comprehension, that is, three kinds of interwoven comprehensions. Hence, the illustration and the text together support the construction of an abductive dominated kind of comprehension. In the cognitive construction of comprehension, the illustration is the inference field that is perceived first. In the processing of this field, a perceptual judgement is provoked as a surprising phenomenon. This is part-comprehension 1. Furthermore, the cognitive construction of comprehension includes the text as an inference field, because this field supports the *explanation* of the surprising phenomenon. This is part-comprehension 2. Finally, the signatur line is involved. This has a deductive quality, related to the illustration and the text. It is not until this field is processed that the major-comprehension of the message is realised.

The development of comprehension, as this is realised as a function of the composition in the interplay between the inference fields – illustration, text, and

signature line – comprises the following *content* in the relation of inference. *Illustration*: Abduction, perceptual judgement: “a collection of paper clips of which all except one are bend” (this is a surprising phenomenon). *Text*: Abduction, the hypothesis is formed: “if one is waiting for a meeting to start and end on time, one can be bored. When one is bored, one can do useless things such as bending paper clips. Here are a row of paper clips (the surprising phenomenon). These paper clips were bend by a person who has been bored, and who therefore has been doing useless things because the person has been waiting for a meeting to begin and end on time (hypothesis – part-comprehension). Signature line: Deduction: “everybody can make their business meetings proceed more effectively if they choose Scandics Meetingconcept. I myself can also choose Scandics Meetingconcept, therefore I too can make my business meetings proceed more effectively”.

Second Stage – the Comprehension as an Effect of a Removal of the Illustration

Vil du gerne vide mere om vores kontrol af udstyret før møderne og andre løsninger, der kan gøre dine møder mere effektive? Lad os præsentere dig for vores MEETING-koncept.
 Ring på 33 48 04 04, direkte til hotellerne eller gå ind på www.scandic-hotels.dk.

Scandic
 Nordic common sense.

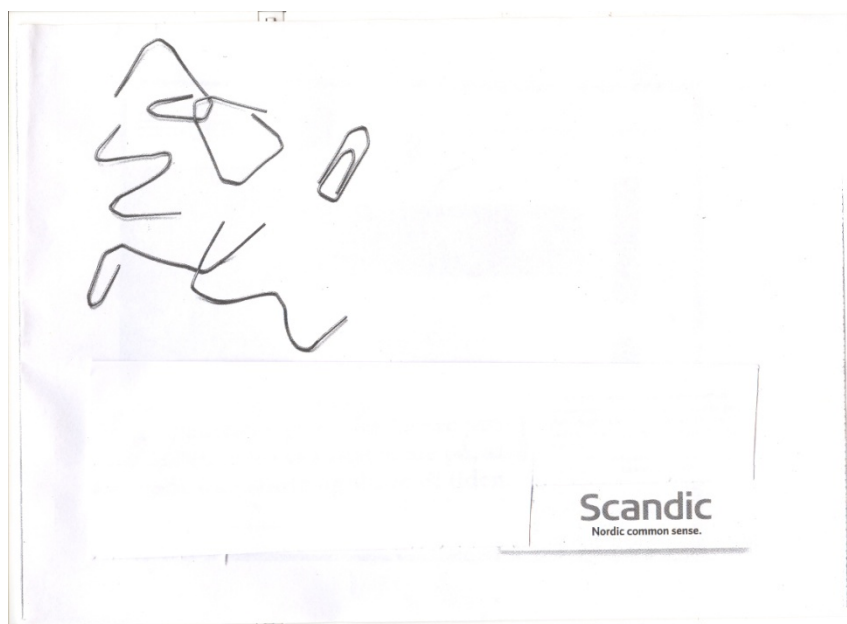
Ifølge eksperter giver det lavere produktivitet, hvis man skal vente på, at et møde kan starte og slutte til tiden.

Kilde: Robert S. Nelson og Peter Economy, Better Business Meetings (© Richard Swain Inc., 1992)

By intervening in the composition and remove the illustration as a basic field of inference, also the surprising phenomenon as it was present in the basic structure of the advertisement disappears. Consequently, the composition now underlines the construction of one part-comprehension and one major-comprehension. Thus, the text and the signature line together support the cognitive build up of a comprehension effect dominated by deduction. In the cognitive construction of comprehension, the text is the inference field which is perceived and involved first. In the processing of this field, a deductive dominated type of comprehension is supported. The cognitive construction of comprehension subsequently includes the signature line as inference field, and on this basis some consequences regarding the text are derived.

The development of comprehension as this is realised on the basis of a reduction analysis of the inference fields in the composition – in this case on the light of the interplay between the text and the signature line – comprises the following content in the relation of inference: “if you are to wait for a meeting to start and end, productivity is lowered. With Scandic you do not have to wait for a meeting to start and end on time, you are therefore with Scandic able to maximise productivity”. From the signature line, some deductive consequences regarding the text are derived because the absence of the illustration implies that the abductive basis in the composition – here the paper clips evaluated as a surprising phenomenon – are changed. Consequently, without the illustration as an inference field, a deductive dominated kind of comprehension is supported by the composition.

Third Stage – the Comprehension as an Effect of a Removal of the Text



By intervening in the composition and removing the text as an inference field, the opportunity to construct a hypothesis that explains the embedded perceptual judgement in the illustration or the surprising fact disappears: “here is a collection of paper clips...”. With point of departure in this operation the composition now supports two part-comprehensions but no major-comprehension. Thus, the illustration and text together underline the cognitive construction of an effect of comprehension based in abduction. In the construction of comprehension, the illustration is the first involved inference field. In the processing of this field, a perceptual judgement as a surprising phenomenon. This is part-comprehension 1. Furthermore, the cognitive construction of comprehension includes the signature line. However, this does not explain the surprising phenomenon. The signature line represents part-comprehension 2.

The development of comprehension as this is realised on the basis of a reduction of inference fields in the composition – here in the interplay between illustration

and signature line – comprises the following content in inference. *Illustration*: Abduction, perceptual judgement: “a collection of paper clips of which all except one are bend” (a surprising phenomenon). Signature line: Deduction: “If Scandic, then common sense”. With the reduction of the text, the basis for propounding hypotheses that can explain both the surprising phenomenon and the signature line’s relation to this phenomenon or fact no longer apply. Compared to both the whole structure of the composition (which is abductive hypothesis shaping) and the structure with the illustration removed, its composition supports no major-comprehension if the text is removed.

Implications: Alternative Explanations

The implicit starting point has been that the comprehension of a message is realised in an elliptical manner, that is, in a reciprocal process between a source and a cognition. The inference fields of an advertisement constitute the starting point or source of a process by which the comprehension of the message finally is realised. The previous remarks, therefore, implies the premise that even though the advertisement does not communicate what one could call the full message as a starting point, it is none the less capable of supporting a process of comprehension that is non-arbitrary. Via its inference fields, the effective advertisement, then, is capable of producing some kind of shoulder that means it supports and directs the shaping of hypotheses in the receiving process. This, not least, happens in an order that implies a certain cognitive construction of the comprehension of the message. Our starting point, therefore, is that the different inference fields of an advertisement actually forestall different hypotheses and arguments. In addition, these arguments – both alone and in interplay – function as premises of an incomplete argument that nevertheless is completed in the receiving process.

It seems obvious that this line of reasoning has its limitations. On the one hand, it has been demonstrated that variations in a composition actually prompt

different effects in comprehension, on the other it is actually not certain that the starting point – and not least the order or sequence – in the construction of an effect of comprehension is also the fields that has been suggested. It has not been supported whether the relations and the stipulated relations of dominance between the inference fields are in accordance with the order actually involved with the assimilation of the message in a *concrete* receiving process. However, what actually has been supported is that composition underpins and gives direction to a certain kind of comprehension, that is, composition is a major factor in the cognitive construction of the message. Starting from the abductive hypothesis–shaping category, it is suggested that the construction of comprehension is anchored in the illustration as inference field. This is the case as the receiver here is confronted with a so–called surprising phenomenon, and the cognitive build up of comprehension further proceeds with support in the text. Thus, the text is capable of deepening and explaining the surprising phenomenon. The following operations on the composition, the modifying reductions of its inference fields, showed that composition supports or even determines the effects of comprehension. Consequently, the foundation for further development of the categorisations (2004, 2008) was substantiated. However, even though the effects of comprehension are formally changed if an inference field is removed, it is important to stress that the reduction analysis as a method suitable in the preliminary development of possible hypotheses to test experimentally, must be considered a mere suggestion.

Thus, the reduction analysis and the explanation of comprehension as a function of composition implies careful examination, in so far as it is based on a number of presumptions and hypotheses with regard to relations of dominance between the inference fields (and therefore also the different categories). This means, presumptions that explain the effects of comprehension as a consequence of specific perceptual starting points in certain fields. Hence, the reduction analysis implies further experimental examination of the actual interplay between

composition and perception in the explanation of comprehension. Consequently, we will shortly outline two such possible experiments. One of these is designed for tracing the visual perceptual process as it *actually* goes in the processing of the composition. The method in question is obviously *eye tracking*. The other experiment is intended for tracking the meaning of the advertisement as this meaning is stressed by its composition. The method in question is obviously the *interview*. By combining and comparing data from these two kinds of, in a certain sense, opposite approaches, it seems possible to show how composition (eye tracking) determines the construction of the message and its comprehension (interview).

With regard to eye tracking, it should be initiated with an eye to a more precise determination of the possible dominant relations between the inference fields (in a category). The experiment should be structured on the basis of the following question: which inference field constitutes the starting point for the cognitive construction of the message? This question should be formulated with the purpose of determining the actual order with which the fields support the basic perceptual process. In this way, it is also possible to present an alternative explanation to the principles involved with the development of the two typologies of print advertisements (2004, 2008). This with a view to tracking and examining the validity of the typologies, regarding the realisation of the effects of comprehension that are suggested with the respective categories.

The interview should be developed with a view of examining the end result of the analysed relations and relations of dominance between the inference fields. By asking about the *meaning* of a message as this is realised by an actual receiver, it can be explored which inference fields the receiver *actually* perceives actively, and which may have been supporting the comprehension process. In asking about the end result of the process of comprehension, the realised meaning of the message, the absorption of information can be analysed

backwards – so to speak. Consequently, it becomes possible to show the hypotheses concerning the dominance of the inference fields involved in the perception relative to the already elapsed cognitive construction of comprehension. However, to realise such experiments must be future work.

Concluding Remarks - A Peircean Perspective on Effect modelling

The previous has demonstrated that the composition of an advertisement supports the cognitive construction of comprehension in the receiving process. It has been shown how Peircean Semiotics allows the forming of relevant hypotheses with regard to uncovering a long row of causal relations in the analysis of factors involved in the realisation of advertising effects. It has been shown how Peircean Semiotics permits a systematic preparation of alternative hypotheses that explains the cognitive effect as a function of composition. At the same time, it has been shown that Peircean Semiotics is able to thematize whether there are any clear causal relations between composition and comprehension.

The stance has been put forward that composition is a determining factor in an advertisement's delivery of effect. Scandic was an example. If composition is changed, the perceptual basis of the effects of comprehension also changes. Through gradual operations in the composition, that is, a systematic removal of its inference fields, it was shown why it is promising to assume that the composition of an advertisement is a determining factor in the cognitive construction of comprehension. With the analysis *three* operative steps were implied. This is due to the structure of the source or the example: With Scandic, the effects of comprehension are formed with basis in its *three* fields of inference.

Hence, the basic-line of the analysis and the first step was an analysis of the Scandic composition as it appeared without reduction – its basic and original

structure. The effects of comprehension here were analysed in accordance with the source from 2008. The second step included an operation in the composition as the illustration as an inference field was removed. The illustration is relevant as a starting point for the reduction analysis due to the hypothesis that it is from this field that the basic effect of comprehension emanates. With this change in the composition, it was evident that the implied comprehension got a deductive mark. Thus, by intervening in the composition and removing the illustration as a field of inference, at the same time the surprising phenomenon as it was represented with the basic structure, disappeared. Without this field, the composition supported a deductive construction of comprehension as a general relation because the following inference based construction of comprehension was implied: "If you have to wait for a meeting to start and end, productivity is lowered. With Scandic you do not have to wait for a meeting to start and end on time." This means that with Scandic one is able to maximise productivity. Hence, without the illustration as inference field, the composition prompts a deductive dominated kind of comprehension. The third change in the composition – and in this concrete case the last step – included a reduction analysis of the text as inference field. The surprising phenomenon, the bend paper-clips, was present, but the foundation for the following construction of comprehension, namely the text, was absent. Consequently, the following specification of the comprehension could not occur in any notable degree. In this way, it is probably only with the presence of the text that the receiver is able to infer what the bend paper-clips actually mean. In other words, the text suggests that: "when you wait for something to happen, you can be bored – and bend paper-clips". Without this part of the composition, the basis for a specification of the surprising phenomenon, as this is represented with the illustration, formally disappears. In comparison to the original Scandic composition – an example of the abductive hypothesis-shaping category – this means that the forming of hypotheses here is even more difficult.

In this way, it can be noted that the reduction analysis in some way showed that *potentially* there are several more instances of the abductive hypothesis–shaping advertisements, which are actually even more abductive, than the analysed example. However, we will maintain that the example does not break with the validity of the categorisations, because the example can still be included under the abductive hypothesis–shaping category, but as a potential sub–category^[9].

The purpose of the above analysis have not been to put the *categorisations* (2004, 2008) to the test even though the analysis, as mentioned, quite easily can be a part of such an effort. Instead, the purpose has been to show the following hypothesis: Important aspects of an ad’s cognitive construction of comprehension is a function of its composition. And more precisely to show that if the inference fields in a composition are varied and also changed, then comprehension also changes.

With the present example of a reduction analysis and the presented hypotheses that explain the cognitive construction of comprehension as a function of composition, an alternative question more closely related to issues in consumer research seems to force its way to play: Is it possible that an approach which explains comprehension as a function of composition is able to contribute to the cognitive modelling of effects as described within the cognitive framework of consumer research? Based in the Peircean inspired development and conception of composition as a major contributing factor in comprehension, the following is focused on an important classical hierarchy–of–effect form, and in connection with this, a specific effect model that stresses *comprehension* as the prerequisite of additional, later effects.

In 1961, Colley developed the now classical DAGMAR form. This acronym represents the words and terms: “Defining”, “Advertising”, “Goals” for “Measuring”, “Advertising”, “Results”. As a matter of fact, the form represented

a paradigmatic shift when compared to the ruling modelling and different attempts to predict effect at the time. DAGMAR was the first *serious* attempt to explain effect where the integrated communication goals of advertising were put to the test as explicitly defined *cognitive* goals. Within the framework of DAGMAR, several sequential models or hierarchies-of-effect developed with the ACCA model as the most important. The acronym represents the cognitive sequence of: “Awareness”, “Comprehension”, “Conviction”, and “Action”. The sequential aspect implies in the case of ACCA a hypothesis that can be construed like this: If the receiver after attention (processing stage 1) does not comprehend the content of the message (processing stage 2), then conviction is impossible (processing stage 3), and also action (processing stage 4). Thus, the rationale of the model is that learning cannot take place without an explicit evaluation of the meaning content of the message, or that the advertisement’s ability to realise the other communication goals requires a clear comprehension of the message. In other words, one could say that ACCA represents a specific *sequentiality-hypothesis*. If an advertisement is meant to result in a given identifiable cognitive effect, the activation of a row of other identified cognitive processes are presupposed, but without the opportunity of creating recurring effects. For example, it is impossible to question whether a previous attention effect is maybe able to affect the processing of a present exposure and vice versa.

As we have plead elsewhere^[10] within a linearly, sequential cognitive approach to advertising effect, it is indeed problematic to operate with attention as the prerequisite to comprehension, because the cognitive, linearly framework actually excludes that certain, basic features and processes in comprehension can be formed without any attention processes involved. Moreover, the ACCA-modelling can only predict comprehension from attention as the linearly aspect implies that it cannot be explained how any possible previous attention on the message maybe influences the forming of current attention – especially the interception of more basic features in the process of attention. In other words,

the sequential aspect excludes an idea of memory. This means that the effects of attention always are thematized as new – even though the message has been subject to exposure and processing several times. Hereby, it is actually overlooked how attention, when involved in advertising effect, is always formed in interplay with something already experienced. It is based in memory. Consequently, the sequential models – e.g. ACCA – can only very difficultly predict how cognitive effects are realised when several exposures of identical advertisements are processed.

With the suggested reduction analysis that shows how the cognitive construction of comprehension is a function of composition, it is possible to supplement some of the factors influencing the receiving of the message and its effects. The reduction analysis can be further specified, varied, and related to the modelling of advertising effects. In other words, the idea is to insert the Peircean based explanation of comprehension as a function of composition in a theory of advertising effect, as the notion of “inference fields” is now re-focused. Thus, the explanation of comprehension as a function of composition is possible to relate to the sequentiality-hypothesis that is an integral part of the hierarchies-of-effect modelling. In this connection, it seems possible to show how it is actually possible to put forward a model of effect that is able to predict and explain cognitive effects of advertising, but based on a Peircean inspired notion of composition and comprehension. The sequentiality-hypothesis involved with ACCA – how the linearly aspect and the cognitive construction of the message actually presuppose a specific row of identifiable cognitive processes – is indeed problematic. In the light of the hypothesis that comprehension is a function of composition, the ideas of sequentiality in the building of effect seems possible to deepen. As already stated, Peirce observes that every mental effect can be described as a set of inferential relations: “every sort of modification of consciousness – Attention, Sensation and Understanding – is an inference”. Within a framework that explains comprehension as a function of composition,

the paragraph can constitute a possible form in the description of the cognitive processes involved with different compositions. Additionally, it can make up the foundation for the formulation of a specific model with predictive power based in composition, that is, the development of a model within which hypotheses regarding relations of effect between comprehension and composition can be formulated and put to the test.

With the content of the Peircean passage present in mind, it is possible to suggest an alternative form consisting of the following acronym: *ASU* (Attention, Sensation, Understanding – or - Comprehension). This form rests exactly upon a realistic idea of inference as the precondition for every cognitive effect, including attention and the different perceptual judgements, and where the last mentioned process is enforced by the composition, and not least comprehension. Where the different hierarchies-of-effects models, as stated, in reality only contain predictive power on a postulated level, a model based in composition on the contrary can potentially be attributed predictions that can be tested in controlled experiments. On the basis of criterions anchored in composition, it is possible to contribute to the classical modelling of advertising effect and in some sense resurrect the idea of the possibility of predicting advertising effect. Consequently, the Peircean inspired hypothesis that explains comprehension from composition implies an alternative form, which is able to not only explain the cognitive construction of comprehension as a function of composition, but also to explain how other effects are realised as a result of composition. The forming of advertising effect is a dynamic process. However, from a criterion that focuses on composition as the foundation for advertising perception, and in turn the construction of comprehension, it seems possible to predict and systematise the effects. Thus the idea is to pursue the hypothesis that print advertising – as a result of its composition – spread with different emphasis on the communication goals as these are described within the hierarchies-of-effect modelling, but with the goal of comprehension as the

pivotal turning point in the development of an alternative, Peircean based modelling of effect. In this connection, it seems obvious to mount the six categories (2008) as fundamental variables, and to put forward more defined predictions of the general cognitive effects based on these categories and how they prompt varying kinds of comprehension in the receiving process.

Notes

1. When reading important text books in market communication and advertising (e. g. Sutherland & Sylvester, 2000; East, 1997, 2003; DuPlessis, 2005) it is evident that explicit hypotheses which on a Peircean basis explain the advertisements' cognitive construction of comprehension as a function of its compositional structure actually being absent. As far as we know, there do not exist explicit formulated semiotic hypotheses that explain the cognitive goals of advertising on the basis of composition – and when it comes to the explanation of the formation of comprehension as a function of composition there is nothing coherent to be found in the literature at all.

2. Humanistic research is able to display a rather extensive corpus of syntactic oriented analyses of advertising (for example Ingemann 1998, 2002; Saint-Martin 1990). For all of these analyses, it is true that they are rather precise in their description of different structures – preferentially in the composition itself. In such analyses, different types of syntactic “cuts” and principles of structuring *in* the composition are brought into play. However, in spite of a well-developed conceptual framework, it is also true for such analyses that direct consideration of whether the syntactic cuts and organisations in the composition also determines the way whereupon the message is cognitively built, remains very implicit. How composition is a factor in the formation of cognitive effect in the reception is not an issue. This means that the analyses appear disconnected, because the core of what advertising is all about – namely producing cognitive effects – is not taken into account.

3. Christian Alsted & Hanne Hartvig-Larsen (1991) apply the concept “meaning-field” which in a very clear manner shows how their typology is based in Barthean, linguistic theory. This fact is taken into account later on, as we show why it is necessary to substitute the concept “meaning-field” with the concept “inference-field”. Due to its ‘immanence-thinking’, the linguistically based semiotic theory is not able to explain the connections between, one the one hand, language, and perception and memory traces and cognition in general. This theory is not able to thematize how language is connected to perception and cognition. This is a major problem as the communicative goals of advertising has to do with cognition exactly.

4. This article is yet to be published.

5. And where this pre-established knowledge can be of a more or less conscious nature. In any case, it seems correct to assert that abductive reasoning always presupposes a certain degree of pre-established knowledge which constitutes the background for the possibility of explaining a surprising fact at all.

6. In the literature, the comprehension is not thematized on the basis of Peircean semiotics. However, this is a cause for wonder, because exactly a Peircean approach to comprehension or understanding as an ongoing process emerging from different signs involved in perception makes it possible to put forward hypotheses concerning the relation between, on the one hand, the type of comprehension that is dominating in the message, an on the other hand, its potential for

creating attention and memory. An advertisement that triggers an *abductive* dominated kind of comprehension will probably also contain a higher degree of attention, whereas its potential for creating verbal (declarative) memory in this connection may be weak. The more abductive an advertisement seems to be, and therefore the less comprehensible it is, the more capable it also is of creating attention in the first place.

7. If this assumption is correct, it is possible to make the suggestion that composition and cognition is paradoxically related in the case of advertising. The formally most sophisticated category seems to trigger the formally most primitive/original kind of comprehension in the reception. The hypothesis–shaping category is formally the most sophisticated category but at the same time we are here dealing with a category which in the widest possible sense is perceptually anchored in the abductive process in cognition – the origin of comprehension from a semiotic point of view.

8. For further explanation of this structure, see “A Peircean Inspired Typology of Print Advertising” (2010).

9. Here it must be emphasised that the different (sub)categories are not empirically anchored, but actually emerged as possible consequences of the reduction analysis. In the mentioned case – where the reduction analysis leads to some kind of “hyper–abductive hypothesis shaping category” – the type actually refers to a somewhat imagined category. Since advertising taken as a general category, always has an incorporated comprehensional effect, examples of the presented hyper–abductive hypothesis shaping category will be very few – if existing at all.

10. See the articles “Effects in Print Advertising: The Moment of Exposure and the Significance-Effect” (2007a) and “Reklamens eksponeringsøjeblik” (2007b)

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