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Managerial marketing and behavioral marketing: when myths about marketing management and consumer behavior lead to a misconception of the discipline

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Abstract

Marketing has become accepted and proven in science and practice over the past decades. Many principles of marketing have become self-evident, but have led to gross generalizations and simplified thought patterns. This article examines myths and metaphors in marketing. A distinction is made between myths of managerial marketing and of behavioral marketing. In both sub-disciplines, we are often dealing with complex and invisible phenomena that occur in a variety of contexts. Attempts to explain these phenomena are therefore particularly prone to the emergence of myths or misconceptions. From a managerial perspective, topics such as the philosophy and leadership role of marketing, the generation of innovation success, the development of strategic competitive advantages, and brand management are reflected. Since the change from a sellers' market to a buyers' market, consumer behavior research and marketing have been closely intertwined. Therefore, findings from consumer behavior research form a central basis for successful decisions in marketing management. Based on this background, the second part of the article focuses on myths of consumer behavior research, here addressing unconscious phenomena in consumer behavior, mainly the discussion of subliminal priming (and its impact on manipulation) and unconscious perception as well as of unconscious motives, and approaches to implicate attitude measurement. Finally, implications are derived as to what extent the presented phenomena and the unveiling of myths have an impact on marketing management and on consumer behavior research and what roles these disciplines should take in the future. In the era of climate change and digital transformation, particular challenges are emerging. Thus, facts and not myths should determine the future path of the marketing discipline.

Keywords Consumer behavior research · Attitudes, implicit and explicit · IAT, implicit motives · Innovation, Priming · Purchase decisions · Brand management · Marketing management · Misconceptions · Myths · Priming effects · Subliminal manipulation · Psychology · Unconscious behavior · Competitive advantage

JEL Classification M3

1 Marketing as a young academic discipline

The term “marketing” and the methods of marketing do not have a long history. They lead back to the United States of the 1940s and 1950s. The American Marketing Association was founded in 1937, and in the same year it published a book on marketing research techniques (Wheeler 1937). A short time after, the annals of the American Academy of Political and Social Science published an entire volume on the role of marketing in American business (Hovde 1940), and some years later the *Marketing Handbook* (Nystrom and Frey 1948) was published. At that time, the term “marketing” was largely unknown in Europe.

Marketing as a scientific discipline and part of business administration has a much younger “tradition” in Europe. Business administration had its beginnings about 100–130 years ago, and sales theory had several “precursors” with macro- and microeconomic analyses. These included, for example, trade and export economics, as well as many other manifestations (Sepehr 2014). The first impulses for the introduction of marketing into sales economics could be observed in Europe in the 1960s and 1970s, in the transition of many markets from sellers’ to buyers’.

Interestingly, the beginning of the establishment of marketing as a scientific discipline was characterized primarily by the application of mathematical models, such as brand choice models, conjoint analysis, innovation diffusion, econometric models, market structure research, stochastic models of consumer behavior, and others. These marketing origins leaned on the developments in the USA and tried to find acceptance in the community by formulating and mathematizing the discipline.

Building on this, a differentiation of the marketing discipline in the sense of “broadening” and “deepening” took place (Kotler 2018). While broadening deals with the expansion of marketing into other sectors of the economy and institutions, deepening began through a variety of theories, concepts, and methods. The differentiation of marketing took place in the functions of marketing, in the market systems and institutions in which marketing can be applied, in the target groups, and in the marketing instruments.

In this differentiation process, two central perspectives and views have emerged: managerial marketing and behavioral marketing.

Managerial marketing primarily takes the supplier perspective (e.g., McCarthy and Perreault 1960; Kotler 1967; Baker 2003). It examines the question of how the market can best be handled in terms of corporate objectives. Topics such as advertising effectiveness, branding and brand equity models, distribution channels, customer relationship management, digital and internet marketing, new product development, organizational buying behavior, pricing, salesforce productivity models, and sales promotions are in the focus to increase the effectiveness and efficiency of marketing measures in terms of corporate objectives.

Behavioral marketing reflects primarily the demand perspective (see, e.g., Engel et al. 1968; Howard and Sheth 1969; Kroeber-Riel and Gröppel-Klein 2019). The focus here is on discovering which effects the marketing measures have on customers and companies by analyzing customers' perceptions, thought patterns, and behaviors. Often based on experiments, dependencies and changes in customer decisions are investigated to explain the behavior of consumers and to identify reasons for behavioral changes. The analysis of "who buys what, when, how, and why?" was initially in the foreground, often—as mentioned—also referred to as behavioral marketing. But early on, consumer behavior research (CBR) debated whether consumer behavior (CB) was a sub-discipline of marketing or an independent research direction that was not just a "service provider" for industry, but was primarily dedicated to the well-being of consumers. Irrespective of this, interdisciplinary knowledge and methodology were indispensable from the beginning, perhaps also because of ambitions to prove the "scientificity" of the subject and desires to learn from other disciplines (e.g., psychology), which were often further ahead with their methodological and scientific-theoretical knowledge than the then mostly only descriptive business administration (Jacoby 1976).

CBR must be distinguished from behavioral economics (BE). In contrast to the still predominant doctrine of (neoclassical) economics, BE abandons the notion of the perfect market and thus the mathematical formalization and modeling based on non-contradictory abstraction and the homo economicus. The homo economicus is an economic subject who always acts rationally—i.e., logically and without contradictions—is time-consistent, has virtually no cognitive limitations and unlimited willpower, and ultimately always acts in a self-interested manner.

Though within BE it is still disputed as to what extent a person behaves in a limited way, researchers try to look at the markets in a much more realistic way based upon experimental research. For example, the typical utility concept of (classic) economics often fails in real life. The proponents of the BE doctrine therefore oppose the classical expected utility theory with the so-called prospect theory, which explicitly tries to uncover such "behavioral anomalies." "Prospect Theory," published by Kahneman and Tversky in 1979, is considered by many to be the beginning of BE.

At American universities, the discipline of CBR became a priority topic within marketing education, having developed earlier than BE, shortly after the Second World War (e.g., Clark 1955), owing to the fact that supply was higher than demand. In buyers' markets, products, brands, or advertising must be tailored more precisely to the wishes and needs of consumers. The behavioral approach in marketing and its contributions, especially for communication policy, brand management, or psychographic market segmentation, have become indispensable. This approach can largely be equated with the positivist approach to consumer behavior research, which aims to derive recommendations for marketing (Gröppel-Klein 2022). A similar development was observed in Germany at a later time.

Managerial marketing and behavioral marketing are not mutually exclusive, but rather complementary. The particular advantage of the two views is that marketing can be viewed from different perspectives, such as through the various topics

of communication, pricing, branding, purchasing behavior, and so on. Interestingly, representatives of the two views often come to similar conclusions regarding content.

Marketing as a scientific discipline has thus undergone many changes and differentiations. In the last decades, many marketing success stories have emerged in science and practice. These stories have been retold and have developed into multiple myths. One of these overriding myths is that only rigorous market orientation, customer orientation, resource orientation, etc., will lead to corporate success. They are reputed recipes for successful marketing decisions; however, they are often based on generalizations and misinterpretations. These simplified thought patterns or mental models have been told over and over again, but in many cases have remained untested and without evidence for application situations. Yet, the narrator is convinced of the truth of the story, which is firmly anchored in his patterns and has the status of belief.

The creation of myths and scientific work are often seen as contradictions. But there are similarities between myths and science: myths, like science, attempt to offer explanations for phenomena (Matsumura 2019; Djuric 1979). In the search for truth, however, scientists use logical arguments and theories whose validity can be verified. Myths, on the other hand, are also referred to as social concepts. The interpretive power of thinkers to explain phenomena is sought, and various interpretations arise, which have historically spread through narratives. Gehmann describes, for example, the concept of the free market, which stands for democracy and freedom, as a modern myth. This concept is associated with other myths, which in their sum as a system of myths are also defined as mythology (Gehmann 2010). In many cases, myths are also considered as precursors to scientific investigation, quasi challenging the scientist to examine subjective speculations and traditional views for their validity in reality. The logical thinking of scientists should finally contribute to demystification.

Some factors can be highlighted that foster the emergence of myths in the marketing discipline. Here, the complexity and non-observability of phenomena as well as their contextuality should be pointed out. A number of phenomena in behavioral marketing cannot be observed. Thus, for the complex explanations of consumer behavior, psychographic constructs are used in the models, which are beyond the scope of objective observation. Therefore, there are multiple attempts in research to explain and measure these psychographic processes. This leads to an expanded spectrum of interpretation that fosters the emergence of myths and misconceptions. In addition to explaining unobservable complex processes, the context factor can be emphasized. Marketing management insights are used in a wide variety of applicational contexts, and context-specific adaptations are often necessary. But there is a tendency for insights from one applicational context to quickly find attention in others. However, insights cannot be generalized to all applicational contexts. Nevertheless, generalizations and myths arise whose validity is not given in specific contexts.

As simplified thought patterns, myths are very popular, since they offer quick solutions. There is no need to think and question on one's own. Simple and reputedly conclusive explanations and behavior patterns often lead to a quick consensus

and quick decisions. The stories are catchy, and momentum develops as they are retold.

In the following, some of the myths of managerial and behavioral marketing that have shaped the patterns of thought in science and practice will be addressed. These myths appear to have developed a life of their own and are rarely questioned, even though they are based on overly simplistic generalizations, misconceptions, and errors in thinking. In the case of the following myths, the reasons for their emergence are sought, and the necessity of the demystification of these traditional and simplified thought patterns is shown. Likewise, the future handling of these myths and misconceptions is addressed. At the end of the article, these considerations lead to the question: Marketing Science – *Quo Vadis?*

2 Myths of managerial marketing

2.1 Myth of the primacy of marketing: marketing is a leadership philosophy for all of corporate management

With the change from a sellers' to a buyers' market, marketing gained increasing importance. The sales market became the new bottleneck, in the place of production. In buyers' markets, customers can choose between a variety of offers, and thus marketing gains significance. "The customer is king" became a popular motto during this period. The primacy of marketing is therefore associated with the philosophy that companies can only be successful if all corporate functions are aligned with the bottleneck, i.e., the sales market (McCarthy and Perreault 1960; Jones and Monieson 1990; Grove et al. 2006). This claim to leadership is often perceived as arrogance on the part of marketing managers.

If we look at empirical findings on the importance and impact of marketing and marketing departments within companies, there are contradictory results. Homburg et al. (2015), for example, have found a decreasing importance of marketing departments over the last two decades. In contrast, Feng et al. (2015) demonstrate that the importance of marketing departments has increased. Just as in Homburg's study, Feng demonstrate a positive impact on firm performance. Neither study helps to justify the primacy of marketing because of their contradictory findings regarding the importance of marketing departments. These studies also did not explicitly measure the importance of the cross-functional customer orientation as a corporate philosophy and how it is implemented operationally.

However, the primacy of marketing is only an assumed guiding orientation and requires critical reflection. Thus, access to and the retention of the customer in the sales market are generally considered a dominant bottleneck. Only the customer decides through his purchase whether the products and services offered by companies find his acceptance or not. However, this input–output thinking neglects the fact that companies are interlinked with a multitude of markets and, accordingly, also with a multitude of customer types. Thus, the primacy of marketing is no longer associated with a guiding orientation because it is not clear which market contains the dominant bottleneck. In addition to sales markets, companies are active in

procurement, labor, or financial markets. This leads to further development of marketing in the direction of personnel marketing, financial marketing, etc. Ultimately, bottlenecks in any of these markets can determine the success of a company. The myth that “the customer is king” signals a one-dimensionality that does not exist in this way. Rather, when resources are scarce, prioritization is necessary in the decision-making process.

Bottlenecks can also arise outside the market context and can be disguised by market defects and externalities. Market-oriented management runs the risk of trusting the market mechanism alone, although this can be accompanied by long-term mismanagement and the impairment of customers. In many cases, customers are not aware of negative externalities associated with the production of products and services; respectively they underestimate the relevance of negative long-term effects (Ringold 2006). These are also not captured by the market and price mechanism. This is where the primacy of market-oriented management reaches its limits because it ultimately does not include extended corporate responsibility for negative externalities. This is reflected today by the increasing use of natural resources worldwide and the progression of climate change with unforeseeable consequences. Only by imposing restrictions under environmental law is it possible to adjust markets in consideration of these externalities and to regulate demand behavior.

In the future, it will be important for corporate management to engage in an open dialog between different corporate functions. In contrast to the adherence to the primacy of marketing, an expanded corporate responsibility for negative market externalities must be demanded, which, among other things, needs to deal with the change of market restrictions (e.g., environmental regulations).

2.2 Myth of competitive behavior: marketing creates competitive advantage

The competitive strategic considerations in marketing were primarily stimulated by Michael Porter (1980, 1985) and were gratefully taken up by the marketing discipline. This was the birth of strategic marketing. In the context of the competitive strategy discussion, it was not only emphasized that companies need to take a close look at their competitors, but it was also pointed out that competitive advantages should be important and visible to customers so that they can decide in favor of the better offer when making a purchase. The concept of competitive advantage thus includes the customer perspective as a perceived advantage.

However, it must be stated that the marketing discipline very quickly integrated the discussion of competitive strategy, which was expressed in the expansion of the basic works of marketing to include Porter’s strategic concepts (e.g., Sharp 1991; Kotler and Keller 2016; Cravens and Piercy 2003). What was overlooked was that Porter’s value chain concept simultaneously exhorted companies to include all primary and secondary value creation activities in the development of competitive advantages and strategies. A competitive strategy thus requires a consistent cross-functional approach. In corporate practice, however, understanding of marketing at this time was still stuck in an abbreviated functional and instrumental concept.

Efforts toward a strategic orchestration of all value creation functions of a company by the marketing department thus found only limited acceptance. This was the golden age of strategy departments, newly established alongside marketing departments. They had implemented the cross-functional claim to develop competitive strategies. The marketing departments were included in this process as functional assistants.

The emphasis on competitiveness and subsumption of customer orientation inherent in the myth has also led to a variety of misunderstandings. In favor of creating differentiation in competition, the focus was placed on. This, however, was often not based on the product and service features important to customers, as Porter has repeatedly emphasized as a prerequisite for creating competitive advantage (Porter 1985). Together with inadequate cross-functional coordination, this often contributed to the phenomena of over-engineering, which made no real contribution to competitive differentiation from the customer's point of view. This led to an increase in price competition with insufficient creation of further competitive advantages. Today, we must also note that the realization of comparative cost advantages through the internationalization of value chains and outsourcing has significantly increased the vulnerability of supply chains to external shocks. Relocalization strategies are therefore becoming increasingly attractive.

As a consequence of these developments, it must first be stated that generating competitive advantage is clearly a cross-functional challenge. The large number of new providers with disruptive product and service innovations proves that the focus on competitive orientation has distracted many companies from developing innovations based on actual customer needs.

2.3 Myth of the creation of innovations: marketing creates successful innovations

The product is often referred to as the “heart of marketing” because all other marketing instruments relate to it (Meffert 1978). Product innovations and variations are interpreted as central decision elements of product policy, which are essentially located in the marketing discipline. Thus, in the basic works of marketing, innovation management is treated as a component of product policy activities. This gives the impression that product development and innovation management form a unit in which the customer perspective must also be integrated at an early stage (Hart 2003).

However, these considerations involve in turn a functional and instrumental shortening and “exaggeration” of marketing. Depending on the product category, companies have established innovation processes in research and development departments (Workman 1993). Over the past few decades, innovation management has become increasingly cross-functional. Through open innovation processes, impulses from external experts as well as from customers are considered at an early stage.

Even if the product is intended as the heart of marketing, a large part of the innovation process is not even anchored in marketing. In many cases, disruptive developments are also brought into a company from the outside. This can be seen very

clearly in the development of ecosystems in which intermediaries bundle novel services for the benefit of customers (Moore 1993; Williamson and De Meyer 2012; Jacobides et al. 2018). One current example is the development of e-cars, which was ultimately pushed forward by a company (Tesla) from outside the industry. Established automotive manufacturers seem to have been surprised by these developments and to be stuck in traditional product lines of thought, although they can access marketing departments and dedicated customer analyses.

Likewise, it is a myth that marketing is capable of successfully bringing innovations to market. As examples, we can cite a large number of environmentally oriented innovations that were able to establish themselves in the market only with difficulty and, in many cases, only with the support of governmental incentives or restrictions.

It becomes apparent that marketing is no guarantee for the process of successful innovation and market launch. Rather, market-oriented management should recognize the opportunity of cross-functionally oriented innovation processes in which customers are included in all phases as a co-creation process (Payne et al. 2008). At the same time, diverse competencies from all corporate functions or even impulses from startups are necessary to create and implement genuine and successful innovations.

In this context, it is interesting to ask whether the much-quoted statement by Peter Drucker, “There is only one valid definition of business purpose: to create a customer ... Therefore, any business enterprise has two—and only two—basic functions: marketing and innovation” (Drucker 1954, pp 39–40), has promoted the myth. Drucker’s statement simplified and generalized to a great extent, so that it became a myth itself. At the same time, it should be mentioned that Drucker criticized the functional understanding of marketing and very much understood and promoted marketing as a (cross-functional) management philosophy. Implicitly, he thus thought of marketing as a “cross-functional coordinator” for successful innovation processes.

2.4 Myth of brand management: marketing makes brands

There is semantic proximity between the terms “marketing” and “brand,” at least in the German-speaking world (“Marketing” and “Marke”). This has contributed to the idea that marketing is seen as responsible for creating brands. Customer communication is also assigned to the marketing function in the company. Since brands play a special role in communication and product policy, there was another reason to dub marketing managers as brand makers (Malhotra et al. 1999; Perrey et al. 2015). The instrument brand and its effect were sufficiently known so that the myth “marketing makes brands” also found wide acceptance in marketing practice as a thought pattern. The metaphor, “the marketing battle will be a battle of brands, a competition for brand dominance,” used by Larry Light in the early 1990s, clearly shows the importance attached to brand management in marketing (Aaker 1991). Brand management and marketing management were seen as more or less synonymous.

It can be noted at this point that the importance of marking products and the use of brands has been known for a long time, well before marketing became established as a scientific discipline. It goes back to the Middle Ages of the craftsmen's guilds and was very much pushed by the industrialization and standardization of product units and packaging. As a result, many important brands are already more than a hundred years old and represent an important asset for companies (e.g., Aaker 1991).

Regarding the findings of brand research within the marketing discipline, the concept of "identity-oriented brand management" (Kapferer 1992; Burmann et al. 2017) has been established. Here, the myth "marketing makes brands" needs to be questioned and demystified in several respects. Before a strong brand can establish itself in the minds of the target group, a company has to create a brand identity internally, which then needs to be anchored in the minds of the target group in the form of a brand image. Depending on the brand architecture—especially in the case of corporate brands—the creation of brand identity represents a cross-functional and cross-departmental process, which can indeed be initiated and coordinated by the marketing department. But brands are not "made" by marketing; rather, they require a cross-functional internal and external communication and interaction process. If the development of social networks and the increasing importance of cross-media communication are taken into account, it is further emphasized that brand management today must be aligned across departments, channels, and companies. Marketing can orchestrate this process of creating and developing brands, but it cannot dominate it (Burmann et al. 2017; Holt 2002).

In conclusion, it can be summarized that a brand can no longer be assigned to the toolbox of the marketing mix. Brand management goes beyond marketing and requires overarching internal and external coordination processes.

2.5 Myth of sustainability: marketing fosters sustainability

The report of the Club of Rome in 1972 became a critical reference point of a development (Meadows et al. 1972) which, in recent decades in the marketing discipline, has resulted in the concepts of environmental and sustainability marketing. On the one hand, marketing was criticized for causing problems by creating customer need and stimulating market growth with the associated environmental impact. On the other hand, marketing was seen as a problem solver, encouraging consumers to adopt more resource-efficient consumption and lifestyles to better achieve environmental and social welfare goals.

The concepts of environmentalism, sustainability, and demarketing have been developed in close cooperation between marketing science and practice (Meffert and Kirchengorg 1992; Belz and Peattie 2009; Bradley and Blythe 2013; Kemper and Balantine 2019). These corresponding concepts have been and are still used in marketing practice. However, after more than five decades, it must be summarized critically that excessive expectations were placed on these marketing approaches and only a relatively small portion of the consumer target groups have so far turned to sustainable product and service alternatives. When it comes to addressing environmentally

oriented consumers, there are definitely companies, such as Patagonia, that have successfully positioned themselves with sustainable marketing strategies. However, this only applies to a small proportion of suppliers (O'Rourke and Strand 2017). At the same time, the world's population is increasing and millions of poor people are waiting in developing countries to satisfy their consumer needs in the future as well. The result: climate change, waste, and resource issues are increasing worldwide, with unforeseeable consequences. These problems represent the greatest challenges facing humanity in the future (Arias et al. 2021).

The myth that marketing fosters sustainability is also a misconception. Here, one encounters a mixture of different market defects associated with the use of natural resources. Short- and long-term negative external effects are not taken into account in current market prices unless the legislature intervenes in a regulatory manner. Sustainability marketing thus reaches its limits when sustainable product and service innovations contribute to the avoidance of external effects (Kemper and Ballantine 2019). These, however, have to be offered at a considerably higher price than traditional competitive products to achieve sufficient economic success. Experience shows that legislators will be required to reduce distortions of competition by applying appropriate regulations. There is hardly a lack of sustainability innovations; rather, the demand conditions for them are developing sluggishly and require a change in the market-related framework conditions.

Finally, so-called "greenwashing" by some companies contributes to consumers' overall questioning of the credibility of sustainability marketing. Greenwashing is characterized by poor environmental performance of firms (at firm and/or at product level) and positive communication about environmental performance (Delmas and Burbano 2011). Such behavior compromises the success of companies that offer demonstrably environmentally compatible products.

In summary, the marketing discipline has been addressing sustainability issues actively for more than three decades, and different approaches to sustainability marketing have been developed. If marketing only responds to the needs of sustainable consumers, it would be justified by the principle of "customer centricity," but marketing does not meet the responsibility to proactively support the sustainable transformation process and prevent externalities of traditional products or services. This requires an extended responsibility of the marketing discipline, not oriented to the short-term needs of the customer but to the long-term well-being of all stakeholders.

3 Myths of behavioral marketing

Bargh (2021) declares that "the twentieth century was a tumultuous one in human history," and explains the aberrations and transformations of psychology since its beginning. Many misconceptions also showed up with a time lag in consumer behavior research, which is strongly influenced by (social) psychological findings. In retrospect, however, it is also apparent that "dead men live longer;" some assumptions about the human psyche and behavior that cannot be scientifically confirmed live on as myths, while other theories that have been falsified in the meantime can be revived by new methods (e.g., in neuroscience), since evidence for their validity

is nevertheless emerging. In this section of the article, those myths that are important for the future analysis of consumer behavior and thus for marketing (with regard to the development of strategies for brands and products as well as for the image of this discipline as such) will be addressed, since they have stimulated further research (regardless of their validity). Thereby, emphasis is placed in the area of impact analysis of *unconscious* stimuli. One rationale for this selection, which is certainly very subjective, is that many see a threat in marketing if the tools it uses appeal to consumers' unconscious.

3.1 Myth: behind every product there is a deeper meaning which is unconscious but which we cannot escape

Do we eat ice cream because we unconsciously have a need for the security and lightheartedness of childhood (Dichter 1964, p 339)? Does the use of a cigarette lighter reveal an unconscious want to act out a desire for power and domination over others (Dichter 1964, p 341)? As evidence for the last thesis, Dichter cites the example of a lighter manufacturer who (at Dichter's behest) addressed these unconscious motives in the product's advertising campaign and subsequently observed increases in sales. So, do we unconsciously have much deeper motives when we consume than simply lighting a cigarette or eating a delicious dessert?

In order to answer this question and thus to clarify whether Ernest Dichter's findings are better relegated to the realm of fables or whether they are scientifically substantiated and comprehensible and thus bring valuable implications for marketing, we need to take a look at the history of psychology and marketing.

In Europe, psychology in the (early) twentieth century was initially heavily influenced by Freud, who believed that our conscious mind was dominated by a dark, invisible unconsciousness, full of selfish and self-destructive motivations, and that ultimately everything had to do with sexuality. In the USA, consumer behavior has subsequently also been concerned with psychoanalytic motive research and henceforth distinguished between conscious motives (which could be easily queried in a standardized way) and unconscious motives. These were sought to be detected on the basis of psychoanalytic theory and by means of projective techniques and in-depth interviews. How did this development come about?

According to Fullerton (2007), in the middle of the last century, motivation research had been strongly influenced by Paul Lazarsfeld, who is now often considered to be the founder of modern social research. The latter had studied in Vienna, among other places, and had also been inspired by Freud's psychoanalytic approach. After emigrating to the USA, he headed up the Bureau of Applied Social Research at Columbia University in New York from 1940 to 1949 and enriched research with a new scientific perspective. At that time, US science was very much influenced by the Stimulus-Response (SR) model of Skinner (1938), who—to put it pointedly—believed that the mind was virtually superfluous and that human behavior was merely a function of the reward contingencies of the given environment (Bargh 2021, p 3).

Even though Skinner's learning theories are still legitimately used—even in marketing—as a basis for explaining (buying) behavior, the focus on SR models and thus the neglect of the psychological processes that stand between the stimulus and the response was not justified. The Stimulus–Organism–Response (SOR) model, and thus research on the “O” (organism) component, is still the focus of consumer behavior research today. (Some modern market researchers, however, now believe that, thanks to digitization and the tracking methods that accompany it to measure individual behavior in real time after confrontation with marketing stimuli on the internet, the “O” component can be dispensed with.) For Lazarsfeld (1934), exploring the true motivations for behavior, i.e., answering the question of why, was essential. He emphasized that what he called “motivational research” was not necessary to “solve problems that can be answered by merely counting noses,” e.g., public opinion surveys, but that it was crucial to understand why opinions were held. Research, he said, must try to uncover the “deep” underlying motivations that actually determine buyers' market behavior, even if people are not even aware of those motivations. Thus, according to Lazarsfeld (1937), motive research must address the unconscious motivations of buyers and also take into account that buyers may forget or subsequently rationalize their motives. Similarly, he said, in interview situations, people may say things that are different from what they think, especially if they believe they have seen through the purpose of the investigation and an honest answer would put them in a bad light. This phenomenon continues to be discussed today as the problem of social desirability bias (SDB).

The findings and claims outlined by Lazarsfeld 80 years ago are still relevant and can be supported today by new studies on psychophysiological and hormonal mechanisms. Today we know that motives are indeed often not conscious and yet can influence behavior. In other words, implicit and explicit motives exist (Puca and Schüler 2017, p 231), which can correlate with each other, but do not have to (Brandstätter et al. 2013). The former are captured indirectly, i.e., using procedures that bypass conscious self-reflection, such as is possible with the Thematic Apperception Test (TAT, McClelland et al. 1989), whereas the latter are captured directly via questionnaires. Implicit motives form the affective basis of all motivational processes by directing behavior to optimize the individual's well-being. Affect anticipation ensures that we approach pleasant events and stimuli, while unpleasant ones are avoided. Neuroscientific and biochemical studies help us better understand the process of affect anticipation. According to these studies, the limbic system is a crucial switching point between environmental stimuli and behavior; moreover, stimulation of motives leads to increased dopamine release in the nucleus accumbens, the “reward system” in our brain (Puca and Schüler 2017, p 230).

Implicit motives are thought to be based on associations between actions and emotions learned in early childhood (assumed to be the pre-linguistic phase). If the child experiences joy or pride in increasing performance, the achievement motive becomes pronounced (achievement). Satisfaction at being able to influence others (including parents) leads to the formation of the power motive. Experiencing positive emotions while building social relationships causes the formation of the affiliation motive.

These three sociogenic motives are dispositions formed in the course of socialization (in contrast to genetically pre-programmed, so-called biogenic motives such as thirst or hunger), and later determine which goals are pursued. Implicit motives have a major influence on the extent to which individuals adopt goals and thus succeed in achieving them (Schultheiss and Brunstein 2010). But this should not give the impression that there are two independent systems of unconscious and conscious in the human psyche, each playing by its own rules, as assumed by Freud (Bargh 2021, p 4). Today, it is assumed that the unconscious is in many cases merely upstream of the conscious (Bargh 2021, p 8).

Dichter picked up on many of Lazarsfeld's findings (Fullerton 2007, p 372). Dichter's general hypothesis that consumer goods, if positioned and advertised appropriately, can satisfy unconscious motives sounds plausible. However, if the unconscious motives remain hidden, how could Dichter be sure that oranges are unconsciously associated with friendliness and grapefruits with reserve, as he claimed (Dichter 1960, pp 102ff)? Moreover, alternative explanations are also conceivable. Is a marketing campaign that picks up on these unconscious associations only successful because it appeals to the unconscious, or could market success be explained in a completely different way, e.g., simply because the product becomes more salient through the advertising or because the technique of evaluative conditioning is carried out by repeatedly linking oranges with friendliness in the advertising so that as a result the orange becomes more attractive?

In Germany, Dichter was initially much revered: "During his visits to Germany in 1955 and 1958 business people queued up like desperate patients for a miracle medical doctor, awaiting the chance to press money into the hands of 'The king of market researchers' (Kropf 1960), hoping to receive a few words of advice" (Fullerton 2007, p 2). But not only in Germany; in many countries Dichter was temporarily a very popular management consultant, perhaps also because he formulated the catchy thesis "sex sells," which fitted the zeitgeist of the time. Fullerton (2007 p 372f), however, also points out that although Dichter had studied psychology, he was only a layman in *psychoanalysis* and above all an ingenious self-promoter. Lazarsfeld (1955) was already at that time urging diligence in data collection; he was convinced that qualitative analysis must stand up to quality criteria and that all steps must always be disclosed. He was not convinced about Ernest Dichter's methodological carefulness and expertise in exploring the deeper motives (Fullerton 2007, p 376).

"He (Dichter) left no methodological legacy—nothing that could be passed onto future adherents of motivation research" (Fullerton 2010, p 58).

Dichter conceived many ingenious advertising campaigns in his time; he was regarded as a very creative mind. But he is no longer considered the father of (serious) motivation research (Fullerton 2007, p 369). With a progressive "scientification" of marketing, with the advent of experiments and multivariate analysis methods as well as elaborate goodness-of-fit tests for qualitative research (e.g., triangulation), Dichter's star sank (Fullerton 2007, p 387). It was difficult to trace exactly how Dichter arrived at his findings and how he differentiated the chaff of irrelevant statements from the wheat of relevant statements reflecting the unconscious in the in-depth interviews. From today's point of view, it would be interesting to find out how Dichter would have felt about the demand that research results should be

replicable and that findings obtained by qualitative means should also be validated by triangulation.

Dichter was primarily a popular management consultant, not a meticulous scientist. To his credit, he popularized motive research and thus indirectly ensured that science subsequently shed so much light on the darkness of the unconscious. In addition, later articles (e.g., Kroeber-Riel 1979; Singh and Churchill 1987) argue that arousal-inducing stimuli (including the erotic stimuli that Ernest Dichter identified as particularly relevant) have a high advertising effectiveness. Today, however, some of his findings must be relegated to the realm of the fabulous. There may always have been products or product features that satisfy unconscious motives (Bargh 2021), but raisins do not necessarily make you anxious, and cheese may not be perceived as mysterious.

Closely related to Ernest Dichter's career is the critical book by journalist Vance Packard (*The Hidden Persuaders*, 1957). In this internationally acclaimed book, Packard portrayed Ernest Dichter as a charming but primarily shady character who posed a threat to society. Packard assumed that Dichter could really see deeply into the consumer soul. In his view, much of what Dichter brought to the surface was simply embarrassing to the consumer, but there was a danger that this knowledge could be used to manipulate the consumer. If marketing success is based on helping repressed urges to be acted out, by reducing inhibitions and bypassing resistance, then this also means that controlling consciousness must be switched off. Packard was particularly concerned about the findings of the so-called Vicary experiments.

3.2 Myth: the subliminal manipulation—humans can be degraded by non-perceptible stimuli to “will-less consumer monkeys”

James Vicary, owner of an American advertising agency, claimed in 1957 that he had flashed the words “Drink Coca-Cola” and “Eat Popcorn” for a few milliseconds each during a movie screening, resulting in an 18% increase in sales of Coca-Cola and a 50% increase in sales of popcorn. This announcement startled the public, who felt they were being manipulated by forces beyond their control. Vicary later admitted to lying about the size of the sales increases (Strahan et al. 2002). According to Smarandescu and Shimp (2015, p 716), Vicary's “research is scientifically meaningless” since “he failed to use proper experimental procedures.”

In 2000, a similar story broke. During the US presidential election, a TV channel showed a report about the Democratic candidate Al Gore. When the name of the Democratic party was displayed, the word “rats” was allegedly briefly flashed in order to create a negative attitude toward this party and its candidate among the viewers. The party protested against this feared “unconscious” smear campaign. Whether the incident actually played out that way remained unclear (Kiefer 2017, p 154). Al Gore lost the election, and the rumor about the effect of unconscious messages on voting behavior remained.

The question remains about the actual influence of such unnoticed perceived stimuli on behavior. A meta-analysis by Trappey (1996) declared that the effect of

subliminal stimuli was very small ($r < 0.06$) and concluded (p 528) that the influence of subliminal stimuli on the decision behavior of consumers is “negligible.” However, Kiesel (2009) points out that it has only been possible since the mid-1990s to reliably verify the “unconsciousness” of the presented stimuli empirically.

Is it possible, then, to manipulate people through such stimuli and educate them to become will-less consumer monkeys? This question is still relevant today and does not only concern marketing, as Stajkovic et al. (2019) recently asked (and answered in the affirmative) the question, “Can a CEO motivate employees without their awareness?”

Before we try to explain how this myth came about, we need to revisit the notions of “unconscious,” “conscious,” and “subconscious” perception. The term “subconscious perception” is no longer used because it associates a clear boundary between unconscious and conscious perception, which does not exist. Instead, one assumes a gradual transition from unconscious to conscious processes. Kiefer (2017, p 155) explains the heterogeneity of the term “consciousness,” which can refer to different states of wakefulness, sensory perceptions, the degree of control over behavior, and self-reflection. Interestingly, he also points out that for the term “consciousness” in some languages (e.g., Chinese), there is no word with an equivalent meaning, and neither for the term “unconsciousness.” This would be an indication that particularly the Western world had been influenced by Descartes, who made the knowledge of mental states (and thus their controllability) the central characteristic of human beings. Today, it is assumed that information processing starts at any strength of a stimulus without the individual always being aware of these processes (Kiefer 2017, p 164). Therefore, the idea has been abandoned that there is a threshold of perception in the sense of an all-or-nothing principle.

In daily life, the influence of the unconscious is present when external stimuli affect our feelings, decisions, choices, and goals without us being aware that we have been confronted with these stimuli (Bargh 2021, pp 155f). Basically, we distinguish between two groups of unconscious perception: subliminal priming and unregistered stimuli.

3.2.1 Subliminal priming

Unconscious perception is present with stimuli that cannot be perceived consciously, even when attention is directed to them. This includes very weak stimuli, e.g., visual stimuli presented for only a few milliseconds (Bargh 2016). Even though the term “subliminal perception” has been abandoned, the word “subliminal” is used here, but in connection with priming. One tries to find out by experiments of subliminal priming whether such stimuli can nevertheless influence behavior (as postulated by Vicary).

Priming generally (not just subliminal) refers to the enhanced ability to detect or identify stimuli if those stimuli are known in the same, similar, or associable form from previous experience. It is also referred to as the “facilitation of a response to a target stimulus (target) due to the prior presentation of a pathway stimulus (prime)” (Kiefer 2017, p 179). If we see a blue picture and are then asked what the first letter of the word “?lood” is, we say “f” because we automatically think of flood; if

we have seen a red picture, we think of blood. According to Bargh (2016, p 49), in subliminal priming experiments per se, the prime is presented in such a way that it cannot be perceived consciously. The main issue here is to analyze its effects. The Vicary study probably never took place, but various serious scientific experiments have tested whether we can indeed be influenced by subliminally presented stimuli.

In one well-known “cola experiment” that echoed the Vicary claims, two experimental groups were primed with beverage terms (“drink” or “cola”) and a control group was primed with neutral terms. Subsequently, all subjects were offered beverages and had to choose between mineral water and cola. Both experimental groups drank more than the control group; however, there was no effect of the “cola” term on beverage choice, i.e., there were no effects regarding brand choice (Dijksterhuis et al. 2005).

Strahan et al. (2002) explain that subliminal priming works only when the prime encounters an existing and appropriate motivation. They divided subjects into thirsty and non-thirsty groups and performed subliminal priming in both groups with words that had something to do with thirst. After priming, the thirsty subjects rated a presented beverage better than the non-thirsty subjects. Karremans et al. (2006) also found that a subliminally presented brand name (here Lipton Ice Tea) led only to a preference for the brand when subjects were thirsty.

Bermeitinger et al. (2009) conducted a similar experiment. Here, the logo of the Dextro brand of grape sugar was subliminally incorporated into a computer game. This time, real-world behavior was measured, i.e., an exact count was made of how much dextrose was offered to the subjects as a snack and how much the subjects consumed after priming. It was also measured how tired or active the participants felt. The results showed that the tired (primed) test subjects reached for the glucose more, while the primed but lively participants took only a little of the glucose pieces. According to the authors, subliminal priming again only works if the prime refers to an existing need and if the test subjects are in a situation in which this need can be satisfied.

Finally, Verwijmeren et al. (2011) show that not only a match between prime and motivation must be present to influence behavior; moreover, a subliminally presented brand name should not be the top-of-mind brand or the brand habitually preferred by the subject. For example, if a consumer habitually drinks Pellegrino mineral water, then the competing brand Perrier may act as a subliminal prime and lead to increased consumption, but not Pellegrino as the brand habitually chosen anyway. According to the authors, the study also explains *why* many subliminal priming experiments have failed, namely because too often habitually purchased brands were chosen as prime (such as Coca-Cola).

A publication by Smarandescu and Shimp (2015), however, comes to somewhat different conclusions. Here, three experiments are presented that show that (subliminal) priming of beverage brands (market leader vs. unknown brand) does benefit the market leader when participants in the priming experiment are thirsty. However, the effect fizzles out when there is a 15-min time gap between priming and beverage choice. On the one hand, the authors conclude that priming only has a very short-term effect; on the other hand, they call for much more realistic experiments under

actual marketplace conditions (which, for example, also take into account distraction effects, which are often present at the point of sale).

Overall, the results point to effects of subliminal priming. Vicary's study most likely has to be labeled as fake, but his statement that people can be unconsciously influenced has to be taken seriously (Elgendi et al. 2018; Bargh 2021). But what exactly happens in an individual's brain when confronted with subliminal stimuli? Elgendi et al. (2018, p 8) point out, among other things, the possibility of measuring event-related potentials (ERPs).

ERPs "are brain signals that arise as the result of a thought, internal stimuli, or an individual's perception of an external stimulus. ERP signals can be measured through EEG signals, and ERPs involve multiple neurological processes, such as memory, expectation, attention, and/or changes in mental state." In summary, the authors (Elgendi et al. 2018, p 7) conclude, among other things, that by means of these signals it can be demonstrated that subliminal priming of (mainly affective) stimuli triggers deflections and thus processing.

However, the question arises as to the durability of such primed behaviors. It would be desirable to conduct experiments in which eating or drinking behavior is measured only after a time delay. Is there still an effect to be observed? Moreover, it seems to be emerging that subliminal priming in advertising messages works primarily with respect to those behaviors for which consumers have already developed a predisposition. In addition, many studies to date have dealt only with products that appeal more to biogenic motives (hunger, thirst); more studies on the sociogenic motives outlined above should follow.

In Germany, the Interstate Broadcasting Treaty regulates that advertising must be easily recognizable as such. In addition, subliminal influence techniques may not be used in advertising. Subliminal advertising is also banned in other countries, such as Australia and the UK (although there is no such law in the US). However, irrespective of the question of what is legally permitted or prohibited, from a marketing perspective the question arises as to whether influencing through subliminal stimuli makes sense at all and whether marketing objectives are achieved as a result. For example, studies on evaluative conditioning, in which consumers are confronted with advertising messages "above the surface," show that various repetitions are necessary before a brand is linked to a certain experience or associated with a certain image. The probability is high that only fleeting reactions are triggered with subliminal stimuli (see again the experiment of Smarandescu and Shimp 2015), and lasting attitudes toward advertisement are not formed.

This may be different for the second form of unconscious perception.

3.2.2 Unregistered stimuli

A second form of unconscious perception of stimuli occurs when these could be perceived consciously but are not consciously processed because attention is not focused or not fully focused on the stimuli. This includes stimuli that are taken in only casually or which share the consumer's attention with other stimuli (Shapiro and Krishnan 2001). Do these forms of advertising have comparable effects as subliminal stimuli? Examples include advertising billboards on the side of the road,

products on supermarket shelves that are not noticed, or shopping bags with company logos. How do such stimuli affect consumer behavior? It may well be that a customer makes an unplanned visit to a particular store in the city center, simply because he was previously confronted with the retailer's logo without noticing this.

Fragrances and background music in stores are also often perceived unconsciously because the consumer concentrates on the visual stimuli. We are then dealing with a multi-sensory combination of at least two senses (Drewing 2017, p 77), where the concentration is on one sense while the other stimuli are only perceived casually. This is to be distinguished from a conscious, quasi-simultaneous perception of different stimuli, such as we experience during a wine tasting (Gröppel-Klein 2021). We see the color of the wine, smell the bouquet, taste the beverage, and try consciously to determine whether it is a Riesling or a Pinot Gris through the various stimulus impressions.

In view of the fact that consumers only pay full attention to a small part of their environment (it is estimated only 10% of all available stimuli), the possible effects of casually perceived stimuli are highly relevant.

Ferraro et al. (2009) conducted an interesting experiment on this topic. They assume that consumers are unintentionally exposed to many different brands in everyday life ("incidental consumer brand encounters"). This happens, for example, through posters or other consumers wearing T-shirts with brand logos or bringing Coke cans to their mouths on the street. All these stimuli are visible, but attention is focused on other environmental stimuli. However, if the unconsciously perceived logos or brand names are designed in such a way that they can in principle be grasped quickly—i.e., they have a high "perceptual fluency"—then the probability increases that these brands will be preferred later in the purchase situation.

A study by North et al. (1999), which has since gone down in the literature as a "classic" experiment, compared German and French music titles in terms of their influence on the sale of German vs. French wines. Using a clever experimental design that controlled for alternative explanatory factors, the authors were able to show that more German wines were purchased in stores on days with German music and more French wines on days with French music. Follow-up interviews with customers revealed that they were unaware of the influence of the music. In a more recent experiment by North et al. (2016), the authors make the point that certain music genres (e.g., classical music) can evoke certain associations (e.g., high quality or educated) that are unconsciously transferred to the selling product and thus can change preferences.

The examples outlined so far have focused on typical marketing contexts (e.g., stores as well as encounters, and stimuli on shopping streets). In principle, other contexts can also be included here, e.g., how (unconsciously) perceived odors in subways, airplanes, or cars affect or change the perceived quality of stay (Spence 2021). Two interesting experiments in this regard come from Girard et al. (2019), who find that pleasant but only unconsciously processed scents in German trains can increase perceived service quality in the short and long term.

The studies described here demonstrate that unconscious stimuli can alter psychological responses and directly influence behavior, what Dijksterhuis and Bargh (2001) refer to as the "perception-behavior expressway." Bargh (2022, p 25)

explains, “The cognitive unconscious is not merely a laboratory phenomenon; applied researchers have shown how it permeates all aspects of life.”

At this point, a reference to the very popular topic of “nudging” is also relevant. A “nudge” can be understood as a “gentle poking in the ribs” (Thaler and Sunstein 2008). It is intended to result in alerting, reminding, or warning others of something in order to ultimately make better decisions or promote the common good. When fruit, for instance, is presented at eye level instead of candy, the likelihood that the fruit will be perceived more quickly and thus chosen increases (Thaler and Sunstein 2008). However, since such “social techniques” (Kroeber-Riel 1988) were in use long before the term “nudging” became public, it can be stated from the perspective of consumer behavior research that the term is “old wine in new bottles.” The term “nudging” (in contrast to the certainly more cumbersome term “social engineering”) has perhaps become so popular because the instruments of nudging are to be used explicitly for socio-politically “higher” goals (e.g., improvement of health, environmental protection), as envisaged by libertarian paternalism. Moreover, it is emphasized that nudges must be transparent so that the individual in principle retains freedom of choice (Thaler 2015).

Even though Thaler (2015) explicitly points out the ethical necessity of the transparency of nudges, the likelihood is that many times they go either unnoticed or unconsciously change behavior. This is to be expected in the case of “digital nudging” in particular (Lembcke et al. 2022). “Inattention blindness” can be observed in many digital environments; for example, in online marketing we know the phenomenon of “banner blindness.” It is likely that “nudges blindness” can therefore also be observed. Thus, the digital nudges would be transparent, but either would be ineffective or would also develop unconscious effects. Furthermore, from an ethical point of view, the question arises whether digital nudging should be evaluated differently if either a human decision-maker selects the nudge or an artificial intelligence algorithm, and whether generally binding rules of the game should be established.

Or is this not necessary at all as the impact of nudges is actually small? The meta-analysis by Mertens et al. (2022) shows that the effects of nudging are only weak to moderately high. No evidence is found even when publication bias is taken into account (Maier et al. 2022). Though Maier et al. (2022) thus unmask nudging as a myth with their meta-analysis, the authors also write in their article that the heterogeneity of the empirical results to date is high and it is therefore possible that specific nudges can still have an effect. Szaszi et al. (2022), who also attest only low effectiveness to nudges, come to a similar conclusion: “nudge interventions may work, under certain conditions, but their effectiveness can vary to a great degree, and the conditions under which they work are barely identified in the literature.” Further studies on nudging should actually control (e.g., by eye tracking) whether the nudge is perceived at all. In digital nudging, such approaches can be found sporadically (e.g., Hummel et al. 2018). The scientific discussion of the impact of nudging will therefore certainly continue, especially with respect to digital nudging.

3.3 Myth: choices are made consciously and intentionally

Williams and Poehlman (2017) conclude in their literature review that still today most research models assume that consumption decisions are made consciously and intentionally and that consumers have accurate, introspective, and conscious access to the internal cognitive processes underlying their decisions. This is accompanied by a strong dominance of the interview method in leading journals, such as the *Journal of Consumer Research* or the *Journal of Consumer Psychology*, indicating also that many consumer behavior researchers still believe that people are capable of accurately representing their internal processes by means of verbal scales or descriptions. However, regardless of the SDB problem already outlined (which is a common problem with surveys), it has been shown time and again that people do something different from what they say they would do (i.e., even if they do not consciously want to put themselves in a different light). A recent study by Sommers and Bohns (2019) shows this very clearly (according to Bargh 2021). The authors asked a group of participants what they would do if the experimenter were to ask them to unlock their smartphone and hand it over so the researchers could see what was stored on it. More than 82% said they would definitely not agree to this. For a second group of participants, no hypothetical question was asked; instead, the researchers simply asked participants to unlock their smartphone and hand it over. In this actual situation, more than 97% agreed and handed over their phone.

Self-reported behavioral intentions are thus only valid to a limited extent. People are often unable to verbally express what causes their behavior and are poor at predicting future behavior, in part because unconscious perceived stimuli can directly control behavior. So free will in decision-making is often just a theoretical conception.

This misconception goes back to the so-called “cognitive revolution” (Baars 1986), which assumes control of the conscious mind over all decisions, opinions, judgments, and behavior. The proponents of the cognitive revolution rejected the idea that there could still be a “hidden unconscious” and that, if there were, these drives would be primitive or dumb (Greenwald 1992).

Bargh (2021) points out that the impact of the unconscious is ubiquitous: “hidden motivational influences occur in mundane, real-life settings” (p 8), and that a “person’s primary evolved needs and motives operate unconsciously to exert a transformative effect on selective attention, preferences, and purchases, and consumption” (p 3). These can be triggered by incidental perceived stimuli from the environment. Likewise, “immediate preconscious perceptual inputs from the external environment influence seemingly ‘free’ conscious choices” (p 3).

Bargh (2021) substantiates his conclusions with a large number of empirical studies, including an experiment by Fitzsimons et al. (2008), which appeared in the *Journal of Consumer Research* and looked at the effect of brands with different connotations used as primes. Their study shows that the unconscious can empower consumers. The authors chose Apple and IBM. Both brands were equally familiar to consumers at the time and both came from the same industry, but Apple had associations of innovation and creativity, while IBM was associated with the attributes of

tradition, intelligence, and responsibility. Participants (experiment 1) were subliminally confronted with images from either IBM or Apple and then had to perform a creativity test. The authors chose the “unusual use test,” in which participants had to think up unusual uses for a product. The study revealed a significant main effect: as predicted, participants in the subliminal Apple priming were able to report a higher number of unusual uses and thus showed more creativity than participants primed with IBM. Further experiments by the authors, however, also show that the priming only works when the goal (e.g., “to be creative”) fits with the desired self-concept of the participants or the desired self-states. In other words, goal relevance plays an important role that the prime can act on accordingly.

So unconscious desires can inspire us. Or could we also conclude that the unconscious can unfold powers unimagined?

Chartrand and Fitzsimons (2011), for instance, draw attention to the fact that consumers’ unconscious decision-making processes are usually not only adaptive, but also effective or functional. In such situations, the consumer need not worry. These processes save valuable conscious cognitive resources in a world where individuals are increasingly burdened and consumers wish to save time, as we can observe again and again in habitualized (automatic) shopping. But if the unconscious system leads to an undesirable outcome, the authors ask the important question, how can the consumer turn off the unconsciously automatic system? This is an important question that should be addressed in the future by consumer behavior research, and also by consumer protection.

3.4 Myth: unconscious perception of stimuli controls our behavior

Bargh (2021) explains that many observations, including unconscious ones, influence our behavior. When we see what other people are doing, it directly and immediately increases the likelihood that we will do the same. This imitation or copycat effect applies in particular (but not only) to physical actions, such as facial expressions (mimicry), body movements, and posture, and is presumably genetically programmed. Basically, this perception–behavior link functions via the automatic activation of already existing internal representation. The perception–behavior link bypasses conscious thought. When a participant in the Lee et al. (2010) experiment watched another person sneezing (vs. not sneezing), this led the respondent to rate a number of health risks (e.g., heart attack) as significantly more serious.

Bargh et al. (1996), in a particularly well-known experiment, showed one group of subjects words associated with age (e.g., “old,” “gray,” “wise,” “forgetful,” etc.) and another group of subjects age-neutral words (e.g., “thirsty,” “clean,” “private,” etc.). Subsequently, the subjects were told that the experiment was over and they could now leave the floor via the elevator. The time it took the subjects to get to the elevator was measured by a hidden observer.

It was found that the subjects primed with the age stereotypes beforehand took significantly longer to travel the distance compared to the subjects primed with neutral concepts.

However, the validity of this experiment has been criticized, casting doubt on the entire “perception–behavior expressway” research. For example, Doyen et al. (2012) attempted to replicate the Bargh et al. (1996) experiment on the effect of age stereotypes. They chose this specific experiment for the following reasons: “The beauty of the experiment lies in its unusual dependent measure: walking speed. Those participants who had been exposed to words related to old age walked slower when exiting the laboratory than the participants who had not been so exposed. Further, the effect was claimed to occur without awareness, as participants were found not having noticed the link between exposure and their behavior. This striking finding, now widely cited, established that priming may occur automatically and influence behavior with little or no awareness. It subsequently generated considerable further research in social psychology.”

In replicating the experiment, Doyen et al. (2012) conducted two studies. In the first, the authors tried to replicate Bargh, Chen, and Burrows’ experiment as closely as possible, but chose to measure walking speed not by observer timing but by infrared sensors, i.e., an objective measurement that eliminates error. They found no significant differences in the walking speed of people who were primed unnoticed (participants were told it was a test of their French language skills) with either age stereotypes or neutral. The authors’ second study showed inconclusive results but, in summary, the famous experiment of Bargh, Chen, and Burrows was not replicable. Is the perception–behavior link therefore also just a myth?

Payne et al. (2016) basically conclude that just because some experimental results cannot be replicated does not mean that the entire body of research on the effects of priming on behavior should be condemned. They themselves conducted various replications of a priming experiment in which they more or less masked primes. The authors looked at the effects of priming on behavior in games of chance (poker, blackjack) and found that those participants who had previously been primed with action words from the world of gambling (“bet,” “gamble,” “wager”) were significantly more likely to make a bet or gamble than those who had been primed with a request to drop out of the game or not make a bet.

Yet controversy continues in social psychology about the validity of the perception–behavior expressway thesis. Goldstein and Hassin (2017) give the cryptic answer “definitely maybe” to the question of whether unconscious processes can perform similar functions to conscious processes.

Closely related to unconscious motives and perceptions are *unconscious attitudes*.

3.5 Myth: the implicit association test measures unconscious attitudes

Attitudes, simply summarized, reflect on the one hand our self-evaluations, and on the other hand all sensations in relation to the whole environment, i.e., other people, objects, real and virtual spaces, fictional and real occurrences. Everyone has a natural predisposition to characterize something as “good” or “bad” (Gawronski et al. 2018, p 2), a process that may be more or less conscious. In many cases, unconscious attitudes are referred to as implicit attitudes, while conscious attitudes

are referred to as explicit attitudes (Rydell et al. 2006). Explicit attitudes are those that are at the conscious level, are deliberately formed, and are easy to self-report. Respondents can consciously control their expressions. Therefore, explicit attitudes can be surveyed relatively easily using verbal scales (Bearden and Netemeyer 1999), and the majority of marketing studies use such methods. However, the scales bear the risk that socially desirable response biases may occur (King and Bruner 2000). Implicit attitudes are those that an individual cannot consciously access or actively control the influence of. Implicit attitudes are automatic links between object and evaluative response. They are measured via reaction time. The validity and relevance of such implicit procedures will be discussed in the following.

Almost 25 years ago, Greenwald et al. (1998) presented the implicit association test (IAT), a set of instruments that is supposed to make it possible to reveal the automatic processes of attitude toward an opinion item. With this procedure it is possible to measure via reaction times (and not via voluntarily controllable self-reports) whether consumers have more- or less-positive implicit attitudes toward certain objects. This test is also intended to capture those attitudes that the respondent would not willingly disclose. Since consumers are much less able to control their reaction times voluntarily than self-disclosure, this can reduce the problem of socially desirable response behavior that is often observed with explicit self-disclosure. So does the IAT measure true attitudes?

Critically, regarding the distinction between implicit and explicit attitudes, it must be noted that it is actually not the attitudes themselves that are explicit or implicit, but rather the associated measurement methods that are explicit or implicit in nature (Fazio and Olson 2003, p 303). Gawronski and Brannon (2018) make the point that simply equating “implicit” with “unconscious” is not entirely accurate. Gawronski et al. (2006, p 485) answered the question of whether implicit attitudes are always unconscious as follows: “(a) People sometimes lack conscious awareness of the origin of their attitudes, but that lack of source awareness is not a distinguishing feature of indirectly assessed versus self-reported attitudes, (b) there is no evidence that people lack conscious awareness of indirectly assessed attitudes per se, and (c) there is evidence showing that, under some conditions, indirectly assessed (but not self-reported) attitudes influence other psychological processes outside of conscious awareness.”

So the simple equation of implicit and unconscious is dubious. Gawronski and Brannon (2018) explain that it is likely that people have conscious and unconscious attitudes that may differ from each other and influence behavior differently. However, just because an implicit procedure can be used to determine a measurement that can then be interpreted as positive or negative, this does not automatically tell us anything about the true view of the unconscious, as this is beyond introspective access. This conclusion is therefore speculative.

The argument that the correlations between the values determined by explicit and implicit attitude measured (e.g., by the IAT) are often very low and that the lack of agreement must be interpreted as a sign of different (explicit and implicit) attitudes also falls short, in the opinion of Gawronski and Brannon (2018). The low correlations can, but do not necessarily have to, be a sign of dualism. For example, it is possible that, for reasons of socially desirable response behavior,

subjects deliberately conceal their responses to explicitly self-report or deliberately try to present themselves in a different light. In this case, the explicit answers are distorted and, as a consequence, there must be low correlations between the explicitly and implicitly determined values – assuming that they do not see through the measurement technique of the implicit procedures. However, the latter is quite conceivable, as studies by Hahn et al. (2014) have shown. Here, participants could indicate with good accuracy beforehand how they would perform on IATs. Hahn et al. (2014, p 1369) concluded from their findings that one should not simply believe that the IAT reflects unconscious attitudes.

In summary, even an IAT is likely to be an inadequate reflection of true unconscious attitudes. The marketing manager should not rely exclusively on these measurement results when making decisions. At this point we should mention that there are a number of other implicit test procedures besides the IAT. In principle, they are also based on reaction times (such as GNAT, approach-avoidance test). However, it would go beyond the scope of this article to discuss in detail whether these tests measure implicit attitudes more reliably; reference is made here to the literature (e.g., Gawronski and Brannon 2018; Znanewitz et al. 2018).

4 Marketing science – *Quo Vadis?*

The outlined discussion about the myths of managerial marketing and behavioral marketing shows that generalizations and simplified thought patterns have persisted for decades in marketing science as well as in marketing practice. In both sub-disciplines, we are often dealing with complex and invisible phenomena that occur in a variety of contexts. Attempts to explain these phenomena are therefore particularly prone to the emergence of myths or misconceptions.

Myths have often arisen in the pre-scientific phase when scientists formulate hypotheses of whose meaningfulness they are deeply convinced. But it may happen—just owing to their conviction—that these are not empirically examined in a sufficient form because the necessary methodology is not (yet) available. As a consequence, the hypotheses appear to be well confirmed, but de facto they are not (also a reason why today the review procedures are much more rigid). However, the apparent validity of the thesis has often been transmitted from generation to generation.

Scientists are still educated in certain schools of thought; the knowledge and mental models (Wind 2015) that are learned in these circles (one could also speak of a kind of academic filter bubble) are often passed on from generation to generation, and knowledge from other schools of thought is often ignored or regarded as stupid, also according to the motto, “It cannot be what must not be.” As a result, certain misconceptions become entrenched, and only massive “counter-evidence” leads to paradigm shifts. In addition, the founders of such schools of thought are sometimes very revered, quite rightly, because they have often achieved great things. But this veneration sometimes leads successive generations to shy away from putting the findings of the legacy to the test and carrying out the necessary replication studies. In the social sciences, proven recipes for success in the past do not have to be valid

in the future under new environmental conditions. Thus, practitioners also benefit from findings in the social sciences being repeatedly put to the test.

Gröppel-Klein (2022) draws attention to a remarkable presidential address by Jacoby, former ACR president. In 1976, Jacoby (pp 3ff) declared:

[...] it is all too apparent that much too large a proportion of the contemporary consumer research literature is not worth the paper it is printed on or the time it takes to read it. [...] There is a strong necessity for us to replicate our findings using different subject populations, test products, etc. [...] Given the numerous sources of bias in verbal reports and the known and all-too-often demonstrated discrepancy between what people say they do and what they actually do, it is nothing short of amazing that we persist in our slavish reliance on verbal reports as the mainstay of our research. [...] More incredible than the sheer number of our measures is the ease with which they are proposed and the uncritical manner in which they are accepted as meaningful indicants. In point of fact, most of our measures are only measures because someone says that they are, not because they have been shown to satisfy the standard measurement criteria of validity, reliability, and sensitivity.”

This speech is just as relevant today, more than 40 years later. So is it also a myth that subsequent scientific generations learn from the mistakes of their predecessors?

The myths of managerial marketing have been created over decades by a claim of dominance by marketing, which today has to be critically assessed in this form. The reality of marketing is too complex for such an approach. At least a certain degree of modesty and critical self-reflection would seem to do marketing some good. The claim to dominance should rather be transformed into a claim for balance.

If we look at behavioral marketing, we have dealt with the creation of myths about unconscious phenomena and the processes of buying behavior. Here, too, we have been able to recognize that invisible and unconscious processes promote the emergence of myths in a special way, because objective knowledge is difficult to bring to light. Some theories have proved untrue, some have had to be relativized, and the influence of other phenomena have had to be limited. Vicary has been called a charlatan. The seriousness of Ernest Dichter's research has been questioned, but perhaps these doubts have encouraged scientific investigation of his hypotheses. His attempted explanations and the resulting simplified patterns of interpretation have motivated behavioral scientists to develop alternative theories and methods. One thing remains to be said: unconscious influences permeate consumers' everyday lives (Bargh 2021). Considering these phenomena in marketing and consumer protection is therefore highly relevant, and there is still a great need for research in this area.

Finally, some implications will be derived. In this context, we discuss what influence the previously described myths in marketing, and also their demystification, have on the theoretical, methodological, and empirical orientation of marketing science and practice.

4.1 Implications for the theoretical foundation of marketing

A review of the theoretical foundation of marketing shows that a general marketing theory is not in sight. There is a variety of theories with complementary as well as competing explanatory models. This is a fertile breeding ground for the emergence of myths.

How did this diversity of theories come about? In the first phase of the development of the marketing discipline, marketing scientists often transferred theories from other scientific disciplines to the body of knowledge of managerial and behavioral marketing. At the same time, the broadening of the marketing discipline took place (Kotler and Levy 1969; Kotler 2011), i.e., insights from marketing were transferred to different institutional and applicational contexts (Burton 2001). This process has encouraged the “mutation” of theories originally adopted from other disciplines and developed in other applicational contexts. The advance of empirical research in marketing has increasingly led to inductive epistemological processes (Stewart and Zinkhan 2006), i.e., generalizations about interrelationships have been derived from empirical findings without testing their appropriateness for different applicational contexts. This again supports the meaningfulness of the requirement for replication. The supposed variety of theories can also be characterized by the fact that existing theoretical models have been extended by additional variables or moderators in order to improve their explanatory contributions in specific contexts. To call these extensions new theories is not justified, because they only represent situational relativizations of basic theoretical explanatory contexts. Moreover, every researcher should at least now and then recall the blessing of “parsimony” when models are sometimes bloated.

It should be noted that the marketing discipline is characterized by a variety of theories that have emerged through the adaptation of theoretical models from other scientific disciplines and through empirically driven, sometimes inductively shaped explanatory processes. The extension of the SR model to include the Organism component has brought to light a variety of findings that have contributed to explaining consumer behavior and can be used to optimize the use of marketing instruments in managerial marketing. It is advisable to shed light also on the unconscious processes. The outlined studies and their controversial discussion show how challenging this research is and how responsibly it should be handled. Marketing ethics are particularly evident here.

In summary, three recommendations can be derived. They refer to the consolidation of a variety of theories, the transfer of partial findings from other disciplines to marketing, and the examination of a critical theory of marketing. In consolidating and integrating theoretical insights, reference should be made to Hunt's (1990) paper *Truth in Marketing Theory and Research* and Stewart and Zinkhan's call in her 2006 editorial *Enhancing Marketing Theory in Academic Research*. The authors emphasize that a theory is not given solely when references, variables, data, diagrams, or hypotheses are used. Rather, good theories provide logically justifiable and generalizable explanations that meet the requirements of empirical testing.

Furthermore, a more critical reflection of the marketing approach seems to be needed in the future. It has been shown that the myths of managerial marketing are

mainly the result of narrow and one-sided interpretations and explanations. Also, errors in the empirical testing occurred.

In 1999, Burton pointed out the lack of a critical marketing theory and worked out which requirements such a theory should meet (Burton 2001). Although in its early phase the marketing discipline undertook an interdisciplinary enrichment of its theories and models, a phase is imminent in this decade in which the negative effects or externalities of marketing on other interdisciplinary fields are to be critically considered. Zeithaml et al. argue for the original development of marketing theories involving all relevant stakeholders in a theories-in-use approach (Zeithaml et al. 2020). Thus, stakeholders can become co-creators of a critical marketing theory. Looking at resource consumption and ongoing climate change, the use of marketing to promote the individual consumption of products and services leads to further escalation of the problems. At the same time, however, marketing insights can be used, for example, to accelerate the ecological transformation process of production and consumption processes. The marketing discipline can be understood as both a problem causer and a problem solver.

4.2 Implications for the use of research methods and frameworks in marketing

The variety of marketing theories has also fostered a pluralism of methods and frameworks in marketing science. The inductive nature of many research approaches and the increasing availability and automatic generation of empirical data via online processes has continuously increased the arsenal of multivariate analysis methods. Owing to the availability of SR data from online processes, a renaissance of SR models in marketing practice as well as marketing science can be observed. The professionalization of A/B testing in practice has led to the optimization of marketing processes, whereby a psychographic explanation for the changed behavioral response of consumers is often not given. Rather, increased conversion rates motivate suppliers to push those stimuli whose test results yield better outcomes. Marketing scholars are also fascinated by the richness of Big Data and are using sophisticated multivariate analysis methods to investigate SR relationships. However, the question of the influence of the stimuli on the psychographic processes remains unanswered, and the significance of the intermediate SR variables outshines the knowledge deficits of the underlying psychographic processes. While managers can often achieve short-term optimization of their goals via the results of A/B testing, the question of the causes and negative long-term effects remains unanswered. This is where science is challenged to come up with comprehensive theoretical explanations.

Further on, especially in the marketing practice of internet companies, methods of artificial intelligence are used to trigger automated and algorithm-driven reactions with marketing tools toward customers. Thus, the arsenal of methods and data integration will continue to increase. This also applies to new digital methods. As mentioned, previously it was feared that Big Data and customer journeys would displace SOR models, but more recently it has become apparent

that IT has recognized this deficit. “Affective computing” (e.g., Wang et al. 2022) is becoming more important, and attempts are being made to track down the “O” component via automatic emotion recognition on the screen or via psychophysiological measurement parameters. Perhaps this will also make it possible in the future to conduct better research into unconscious processes. However, it is important that marketing and consumer behavior researchers continue to search for meaningful hypotheses that take the “O” component into account.

The scientific marketing literature is rich in insights into how marketing tools work from a company’s perspective, and consumer behavior research is rich in insights into why they do so. The methods of computer science can help to merge these views efficiently.

4.3 Implications for the empirical foundation of marketing

Ultimately, marketing science in managerial and behavioral marketing deals with the explanation and control of decision-making and behavioral processes on an individual as well as on an organizational level. In the explanations outlined above, it became clear that myths arise when there is no objective evidence for the explanations of certain phenomena. Therefore, the empirical verification of marketing theories is of particular importance for demystification. Increasingly, data-driven marketing will be observed. Researchers will be confronted with a wealth of data in the future. At least with SR data, the days of using student samples as convenient for research will be over. However, the question increasingly arises concerning the quality of the data and samples obtained automatically. The emergence of myths in behavioral marketing has shown that, in many cases, there is no true transparency in the sample quality and the conditions controlled in experimental designs or surveys. The comparison and consolidation of study results suffers from this because no replication of the study design can be ensured.

In managerial marketing, the individualization of customer approaches as well as product services will increase in importance over the next few years. The reasons for this are to be seen in the availability of individual data. Numbers, texts, and image formats will be recorded and processed as data, just like language information or geodata of the consumers. As mentioned above, this data can be increasingly integrated and used in real time to operate marketing instruments. In addition to integrating the data for the customer-oriented use of marketing instruments, other corporate functions such as procurement, production, logistics, or service will be able to access the data in order, for example, to create customer-specific products and services.

Finally, the research methods available in the future will increasingly allow automated collection of behavioral and business data as well as the integration of different data formats collected from different consumer life domains. Owing to the automated collection and integration of target group data, marketing will increasingly have to deal with data protection issues in the future.

Will the time of marketing myths be relegated to the past? Looking at the potential developments in marketing science over the next few years, we can generally expect a more data-driven foundation for managerial and behavioral marketing. This could lead to the empirical verification of theoretical models and to a fundamental trend toward “objectification,” which would make the emergence of myths more difficult or lead to a stronger demystification than in the past. But the marketing discipline is a complex scientific field, and many phenomena will not be easily explained. That is why marketing myths will continue to exist in the future.

In our contribution, we have endeavored to discuss some myths from the marketing perspective. Of course, the question arises in this context whether this is a special feature of the marketing discipline. This is especially true against the background that the framework conditions of the economy have changed considerably in recent decades and that the current crises also require a reassessment of many principles. In this respect, the consideration is whether it would not be important for the further development of scientific disciplines that other areas of business administration also deal with in regard to the question of the formation of myths.

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