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UNDERSTANDING MARKET PLASTICITY: THE DIALECTIC DYNAMICS BETWEEN STABILITY AND FLUIDITY

'Perspectives from FMM12' session

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ABSTRACT

Purpose: Several researchers have pointed out that for marketing to develop as a discipline as well as to contribute to solving complex business and societal challenges, it should question the traditional neo-classical view of markets and develop a new theory of markets (Buzzell 1999, Venkatesh et al. 2006, Vargo & Lusch 2008, Ellis et al. 2010). Emerging conceptualizations acknowledge that markets are malleable, dynamic, subjective, and subject to multiple change efforts (e.g. Rosa et al. 1999, Kjellberg & Helgesson 2006, Depeyre & Dumez 2009, Storbacka & Nenonen 2011, Kjellberg et al. 2012). Borrowing a term used by Alderson (1957:277) we propose that markets are characterized by *plasticity*, i.e. having a "potentiality for being remolded and responding in a different way thereafter". However, this plastic character of markets remains under-researched. This paper investigates the meaning and manifestations of market plasticity, drawing analogies from the physical, natural and social sciences.

Methodology/approach: The topic is approached by conceptual development through a process of identifying, delineating, and differentiating (MacInnis 2011). Illustrative empirical examples are provided to exemplify plasticity of markets.

Findings: Market plasticity can be conceived as a continuous interplay between fluidity and stability; with markets varying along a continuum ranging from high degrees of fluidity and flux to very stable, even rigid forms. Market entities such as actors, exchange objects, exchange relationships, norms and symbols embody both fluid and stable characteristics. These are manifested in the specific market practices performed, which consequently can move markets either towards increased fluidity or stability. As a result, markets change through dialectic dynamics between fluidity and stability. However, there are limits to market plasticity, i.e., under conditions of extreme fluidity it may become impossible to achieve resource integration through market exchange.

Research implications: The study provides a definition of market plasticity and suggests it as a valuable construct to describe the characteristics and the transformation of markets. Additionally, the paper discusses the different manifestations of market plasticity and introduces a framework for categorizing them.

Practical implications: Understanding of the plastic nature of markets and the dialectic dynamics between fluidity and stability helps commercial and non-commercial organizations to inform strategic decisions on how to shape and engage with markets.

Originality/value: The article contributes to the discussion on how markets emerge, evolve and facilitate resource integration by introducing and discussing a new concept of market plasticity.

Introduction

In 1965, Wroe Alderson called for a theory of marketing to "explain how markets work" (Alderson and Martin, 1965: 123). Rather than simply being, as previously assumed, markets seemed to become through human effort – but this was poorly acknowledged by marketing scholars who had invested "little thought (perhaps none) to the fact that someone has to exert great effort continuously if there is to be the intricate organization required to inform potential buyers and sellers, to bring them together in the actual negotiation of a transaction, and to make it possible for them to carry out all transactions negotiated" (Alderson and Cox, 1948: 142). More than 50 years later, criticism is still being directed at marketing discipline's disconnect with markets (Venkatesh *et al.*, 2006; Vargo, 2007; Araujo *et al.*, 2008). Recent years have seen the emergence of an effort aimed at extending the dominant economic conceptualization of markets, i.e. as mechanisms for price formation, into a broader view that perceives markets as social phenomena (Kjellberg and Helgesson, 2007; Araujo *et al.*, 2010; Storbacka and Nenonen, 2011; Vargo and Lusch, 2011)

We seek to contribute to this overall effort of gaining better understanding of socially constructed markets by investigating the dynamics of markets. Particularly, we are interested in the interplay between market change, or market fluidity, and market stability. Previously, marketing has approached the dynamics of markets by creating comprehensive models such as product life cycle (cf. Lewitt, 1965; Utterback and Abernathy, 1975; Gardner, 1987), conceptualizing the overall evolutionary process of markets (such as Lambkin and Day's (1989) model inspired by population ecology), or by modelling certain sub-processes influencing market dynamics (such as the sociocognitive model of product market dynamics proposed by Rosa *et al.* (1999)). In the present research, however, we have taken a different approach to investigating market dynamics. Instead of providing a process description or a model for market dynamics, we seek to contribute to improved understanding by studying a special characteristic of markets that enables market dynamics, i.e. the plasticity of markets.

Plasticity as a term was briefly used by Alderson (1957: 277) to denote "potentiality for being remolded and responding in a different way thereafter". More recently Kjellberg *et al.* (2012) suggested that markets have a plastic character: They are malleable, always in the making, subject to multiple change efforts and thus take on multiple forms. It is relatively easy to detect the malleability and multiplicity of markets in practice. Consider, for instance, the competing visions of Bill Gates and Steve Jobs for the future personalized computing market in the early 1980's. Sometimes, on the other hand, markets change almost imperceptibly as actors continuously make gradual improvements to their offerings and operations. However, there is little theoretical understanding of the plastic character of markets beyond such statements acknowledging its existence. Therefore, the purpose of the present study is two-fold. *First, it provides a definition of market plasticity, drawing analogies from social and natural sciences. Second, the paper discusses the different manifestations of market plasticity and introduces a theoretical classification and a managerial framework for categorizing them.*

The topic is approached by iterative conceptual development, drawing on literature from physics, engineering, biology, neurosciences, systems theory, philosophy, sociology, economics, organizational theory, strategy, and marketing to gain insights regarding the various meanings and uses of the term 'plasticity'. Based on these insights, an initial working definition of 'market plasticity' was put forward. This definition was used to structure the conceptual inputs from the covered literature streams. These conceptual inputs also helped the

researchers to understand the general mechanisms that allow plasticity and to seek corresponding facets in the markets. This enabled the researchers to create a classification of market plasticity, providing a richer description of the plastic character of markets. After this, the theoretical definition of market plasticity was applied in a managerial framework, enabling practitioners to categorize different markets based on their plasticity and thus identify more appropriate ways to engage with them. Finally, the theoretical contributions of the present study were discussed and avenues for further research were identified.

Defining markets and market plasticity

Inspired by recent contributions in marketing and economic sociology (e.g., Callon and Muniesa, 2005; Araujo and Spring, 2006; Peñaloza and Venkatesh, 2006; Kjellberg and Helgesson, 2007; Chandler and Vargo, 2011), *we define markets as on-going socio-material enactments that organize economized exchanges*. A few clarifications are in place regarding this definition. First, markets are *on-going enactments* in the sense that they are both created and maintained through sets of interconnecting practices. Second, they are *socio-material* in the sense that the practices that create and maintain them comprise interactions between materially heterogeneous entities. Third, they *organize economized exchanges* in the sense that economized exchanges (plural) are a necessary outcome of the constitutive practices in order for something to be recognized as a market. This does not mean that *all* exchanges taking place in markets have to be economized; indeed non-economic exchange is likely to be important in many, if not most markets. It should be noted, that the definition places few limits on markets apart from this, thus acknowledging the wide variety of "really existing markets" (Boyer, 1997) as well as the blurry boundaries between markets and other forms of economic co-ordination.

Our thesis in this paper is that markets defined in the above way are characterized by (varying degrees of) *plasticity, defined as capacity to take and retain form*. This means that markets can be moulded in terms of their shapes and functions, and that they are able to retain such changes in their various properties also after a moulding effort ceases. *Plasticity is thus a dual construct*; it requires both *fluidity*, defined as the capacity to take form, as well as *stability*, defined as the capacity to retain form. In principle, we maintain that all markets are plastic, even though their degree of plasticity can change, and that the interplay between fluidity and stability helps us understand market change in more detail.

There are two important consequences of the plastic character of markets. First, the ability to retain form allows markets to *form* (give form to) other entities, e.g. to affect the shape of a particular exchange object, the mode of a specific economic exchange, or the characteristics of an exchange agent. Markets are thus performative, in the broad sense of the term (Law and Urry, 2004). Second, the ability to take form allows markets to support/host multiple forms simultaneously. As actors enact 'their' market, markets thus tend to multiply into overlapping versions (Kjellberg and Helgesson, 2006).

Existing definitions. When investigating the other disciplines for the various meanings and uses of the term 'plasticity', various similarities and differences with the proposed definition were identified. In natural sciences, plasticity is a construct that is used to describe suppleness and deformation in various contexts. For example, in physics plasticity is defined as the deformation of a material undergoing non-reversible changes of shape in response to applied forces (Lubliner, 2008; Bigoni, 2012). In biology, the term plasticity is most often used to discuss 'phenotypic plasticity', i.e., the ability of organisms to alter their phenotypes

(observable characteristics) in response to changes in the environment (West-Eberhard, 1989) and 'neuroplasticity', i.e., capability of the cerebral cortex to alter its physical structure and functional organization (Pascual-Leone *et al.*, 2005). Systems theory, on the other hand, differentiates between structural and organizational plasticity. Structural plasticity is defined as a social system's ability to drift towards greater congruence through recurring perturbations. Organizational plasticity refers to the system's ability to neutralize external structural changes by making internal structural changes (Forrester, 1961; Maturana, 1978; Sterman, 2000). In philosophy, Malabou (2008, 2010) discusses the concept of plasticity with a three-fold definition: 1) the capacity to receive form; 2) the capacity to give form; 3) the powerful rupture or annihilation of all form (explosive). She also extends the discussion on plasticity to ontological level, proposing 'ontological plasticity': "there is perhaps no reason to talk of the plasticity of Being - as if plasticity were some kind of quality - but of saying that Being is nothing but its plasticity" (Malabou, 2000: 36)

In the social sciences, the plasticity construct occurs less often and as a more peripheral concept than in natural sciences. For example in sociology, the term plasticity is loosely referred to as variability (Turner *et al.*, 1995) and hence, the difficulty to describe or define or demarcate the boundaries of something (Donaldson, 1987). In economics, it is possible to detect two explicit uses of the term plasticity: First, Alchian and Woodward (1988) use *asset plasticity* "to indicate that there is a wide range of discretionary, legitimate decisions within which the user may choose" (1988 p.69). This characteristic is said to explain which resources are vulnerable to morally hazardous exploitation, i.e. giving agents opportunities to bias their actions towards their own interests. Second, Strambach (2010) discusses the notion of *institutional plasticity*, emphasizing that institutions are both enabling and restraining. Their plastic character is linked to interpretative flexibility; which in turn depends on the sanctions associated with a particular institution, e.g. whether it is socially and/or legally sanctioned. Since actors take action in situations where firm, industry, regional, national and international institutions overlap, there are opportunities for new combinations of earlier institutional components. Finally, complementarity between institutions is identified to have an ambiguous role, both contributing to stability (via lock-in) and change (through accumulation of incremental changes).

In marketing, Alderson (1957: 277) has used the term plasticity to signify the potentiality for remoulding and subsequently responding differently – but the plasticity concept has not been central to Aldersonian thought or other marketing researchers. Similarly, the plasticity concept does not belong to the core lexicon used by organization theorists or strategy researchers.

Table 1 compares the proposed definition of market plasticity and other identified meanings and uses of the term plasticity.

Type of plasticity	*Theoretical domain*	*Definition*	*Take form*	*Retain form*	*Give form*	*Annihilate form*	*Change function*	*Epistemology*
Material plasticity	Physics	Deformation of a material under-going non-reversible changes of shape in response to applied forces	x	x				Empiricism
Phenotypic plasticity	Biology	Ability of organisms to alter their phenotypes (observable characteristics) in response to changes in the environment	x	x			x	Empiricism
Neuro-plasticity	Biology	Capability of the cerebral cortex to alter its physical structure and functional organization	x	x			x	Empiricism
Structural plasticity	Systems theory	Social system's ability to drift towards greater congruence through recurring perturbations	x	x			x	Rationalism
Organizational plasticity	Systems theory	System's ability to neutralize external structural changes by making internal structural changes	x	x			x	Rationalism
Malabou's plasticity	Philosophy	Capacity to receive form, to give form, and the powerful rupture or annihilation of all form	x	x	x	x		Constructivism
Asset plasticity	Economics	Range of legitimate courses of action available for the users of the resource to choose from					x	Empiricism
Institutional plasticity	Economics	The degree of interpretative flexibility of institutions					x	Empiricism
Market plasticity	Marketing	The capacity of markets to take and retain form	x	x				Constructivism

Table 1. Comparison of various definitions of 'plasticity'

During the literature review, five main facets of 'plasticity' were identified: Take form, retain form, give form, annihilate form, and change function. Most of the exiting plasticity constructs discuss the duality of taking and retaining form. Malabou's (2008, 2010) definition of plasticity is the most extensive, as it acknowledges also the performative and destructive forces of plasticity. Additionally, especially the plasticity definitions rooted in natural sciences differentiate between the plasticity of form and the plasticity of function. However, differentiating structural and functional plasticity becomes increasingly challenging when investigating social phenomena. Therefore, we define market plasticity through markets' ability to take and retain form, while acknowledging that 'form' in the market context is not limited to mere structure of the market but it also contains 'functional' characteristics.

Related terms. The literature review also unveiled several constructs that are related to plasticity and may increase our understanding of the plastic character of markets. For example physics makes a clear difference between *plasticity* and *elasticity*: Elasticity is the propensity of material to temporarily deform when force (stress) is applied, but to recover its original shape and size upon elimination of stress. Materials may first be elastic, but with enough force applied, they can become plastic. Elasticity is similar to the concept of *resilience* in systems theory, which is often defined as the persistence of a system resulting from the system's ability to absorb disturbance and to maintain unchanging relationships between e.g. populations (Holling, 1973). Physics also differentiates with different types of plasticity: *Ductility* is a solid material's ability to deform under tensile stress; this is often characterized by the material's ability to be stretched into a wire, whereas *malleability* is a material's ability to deform under compressive stress; this is often characterized by the material's ability to form a thin sheet by hammering or rolling (Rich, 1988).

Neurosciences, on the other hand, provide us with another interesting learning-related construct called *metaplasticity*, which refers to the plasticity of synaptic plasticity (Abraham and Bear, 1996). Metaplasticity proposes that the synapse's previous history of activity determines its current plasticity. It is hypothesized that mechanisms such as long-term potentiation and long-term depression (durable increase/decrease in the synaptic strength from stimulation; essential to learning and memory) depend on the current synaptic "state", as set by on-going extrinsic influences as well as the prior history of synaptic activity.

Market plasticity in the light of extant literature

In this section, we discuss briefly the main findings related market plasticity in existing economics, sociology, strategy, and marketing literature.

Economics. The industrial organization paradigm (Scherer and Ross, 1990) suggests that markets are plastic in terms of their *structure* and *conduct* (Bain, 1959). Empirical markets vary in terms of their *structure* – the extent to which output/sales is concentrated to a few sellers. The structure of a given market may change (take form) as a result of strategic actions and rivalry between firms that alter market shares; through entry into or exit from the market; and via changes in the degree of product substitutability (which redraws the market boundaries, including or excluding products and/or firms). The market structure is stabilized (retains form) by the technological, economic and policy conditions that apply, e.g. if there are barriers to entry or exit, economies of scale, or specific regulations in place. This provides markets with a certain amount of resilience, since firms who seek to alter market structure in a way that ignores the existence of e.g. scale economies will face disadvantages relative to other firms (higher costs). The market conduct of incumbent firms can also act to conserve a particular market structure, e.g. pricing their offers so as to keep new firms from entering the market.

From evolutionary economics, we derive the idea of organizational routines as genes (Nelson and Winter, 1982). This suggests that *market actors* may be an important source of plasticity. New routines can be created, or old ones modified, as a result of actors learning new things. It is thus the actors (organizations) that provide markets with the ability to take form, via learning. The ability of markets to retain form follows the familiar evolutionary logic of selection, i.e. only the organizations employing the most beneficial routines enjoy market success. In addition, actors are also assumed to have a tendency to retain their routines, due both to an irrational resistance to change, and to the costs associated with adopting new routines.

Institutional economics suggest *institutions*, defined as ‘humanly devised constraints’ (North, 1991), as a vehicle for market plasticity. Institutions are stabilized (retain form) by both the benefits they offer to transacting parties (a form of lock-in/path dependence) and the elaborate systems for monitoring and policing that uphold them and make them inert. That said, institutions evolve over time as a result of the interactions between individual actors, which are fuelled most importantly by growing specialization and division of labour, resulting in the need for co-ordinating additional transactions. The current institutional order could also provide incentives for market actors to engage in institutional development as actors are assumed to strive to reduce transaction costs.

Austrian economics, finally, identify *offers* (their prices and qualities) as a potential area for market plasticity. The main engine of this is the *alertness* to possible opportunities which is

assumed to be characteristic of human beings (Kirzner, 1997), and the competitive process. Entrepreneurs make bold conjectures and take action, resulting in the generation of variety in offers (they take form) (Mises, 1966 [1949]). These actions provide signals to others, who adjust their plans and actions (offers), for instance by copying the innovator (Hayek, 1945). This provides an equilibrating tendency to markets, i.e. a tendency for the market to coalesce on a particular form of offer, although this tendency will be offset by subsequent entrepreneurial actions.

Organizational Theory. Early writings in management theory treated the organisation as a closed system (Thompson, 1967) and centred on understanding how the organisation worked from within. Taylor's (1911) scientific management approach, Weber's (1947) bureaucratic model and Fayol's (1949) classical management theory did not look outside the organisation. They focussed on efficiency aspects and their aim was to identify an organisational model that could best be applied to all organisations, in all situations.

It was Dill (1958) who invited academics from administrative science to pay more attention to environmental factors and their constraints on the organisation's structure and its behaviour. Moreover, Dill introduces the distinction between task and general environment linking this distinction to the degree of impact the outer setting had on the organization. The market belonged to the task environment. Initial OT literature, institutional, neo-institutional theories (Scott, 1987; Zucker, 1987) and contingency theory (Burns and Stalker, 1961; Lawrence and Lorsch, 1967) focuses on how the environment affects the organization (labelled *out-in*). Though not monolithic in their views, at their core they argue that because the environment becomes institutionalized (Scott, 1987; Zucker, 1987), survival is achieved through maintaining congruence with shifting *industry norms* and *shared logics* (Meyer and Rowan, 1977; Lewin and Volberda, 1999). These schools indirectly refer or discuss the propensity of markets to reach stability (i.e. institutionalization).

It is later, with Weick's (1969) introduction of the concept of enactment that a radical shift occurs: rather than the environment affecting the organization, organizations were seen as affecting (actually, creating) the environment (labelled *in-out*). For these academics, rather than searching for the optimal fit, the top management coalition creates the situation, domain and industry in which they choose to operate and managements' values and preferences override any dicta (Bourgeois, 1984; 1985). The environment is not something objective or external to the perceiver that can be apprehended correctly or incorrectly. Rather, the environment is defined through a process of social interchange in which perceptions are affirmed, modified, or replaced according to their apparent congruence with the perceptions of others (Chaffee, 1985), and where "separate objective environments simply do not exist" (Smircich and Stubbart, 1985: 726). From this approach, organisations and environment are seen as labels for *patterns of activities* that are generated by human actions and accompanying efforts to make sense out of these actions (Smircich and Stubbart, 1985). Thus, it is possible that different organisations will read different things into the same set of data (Antal *et al.*, 1997). It follows that for scholars adopting this view, boundaries of the primary contextual setting are enacted. The organisational ecology approach introduces the concept of *pattern*. It builds on modern system theory and the work of biologists. From system theories, it adopts the idea that organisations are not discrete entities, even though it may be convenient to think of them as such. From biologists comes the belief that it is the whole ecosystem that evolves and the process of evolution can really be understood only at the level of total ecology. This has important implications; it suggests that evolution is always evolution of a pattern of relations embracing organisms and their environment. It is the pattern, not just the separate

units comprising this pattern, which evolves and introduces the concept of survival of the fitting, not just the fittest (Boulding, 1956; 1981). Therefore, organisations and their environments are engaged in a pattern of co-creation, where each produces the other. Environments then become in some measure constantly negotiated environments, rather than independent external forces.

Sociology. From a sociological perspective, markets are conceptualised pluralistically. According to Fligstein and Dauter (2007), sociological approaches to markets can be categorised as network, institutional and performativity theories. Besides these mainstream theories, social movements and population ecology can be considered relevant to conceptualising about markets as social structures. Therefore, the different sociological approaches to market theorizing provide different perspectives to the mechanisms and manifestations of market plasticity.

The network approach to markets (White, 1981; Baker, 1984; Granovetter, 1992; 2005; Burt, 1992) is built on the notion that economic action is not carried out by individual actors, but it is always embedded in networks. Taking form occurs through *capitalising on opportunities* whereas retaining form follows *stability-inducing mechanisms* that generate trust between market actors. The institutional view to markets (DiMaggio and Powell, 1983; Dobbin, 1994; Fligstein, 1996) emphasizes the role of market rules, power and norms in influencing cognition and action of market actors. Institutionalists such as Fligstein (1996) assume that actors seek to promote market stability in order to ensure their own survival. Such market stabilization can be achieved through the application of *power* and *authority* or the emergence of *institutional logics.* Change in a market, on the other hand, can be induced by actors' *competitive pricing behaviour*, *disappearance of market actors*, or by instituting new or altered *shared conventions.* The performativity school of thought views economic action is a result of calculative processes and emphasizes the role of technology, non-human objects, and artefacts (Callon, 2007; MacKenzie, 2005). The performativists propose that markets take form as actors solve problems with the help of *tools* that define, interpret and organise interactions. Correspondingly, markets retain form as *practices* are being repeated continually. Such repetition can be encouraged by solidifying situations through material investments that make the performance of certain practices more likely and/or easier.

When discussing social movements, King and Pearce (2010) introduce the term 'contentiousness of markets'. They argue that economic sociology has been overly focussed on stability and stabilising forces (via institutions, relationships, etc.) over the dynamics of the marketplace. Social movements represent another aspect of 'taking form', which is the breaking up or destabilizing of markets. These movements make up the fabric of social life by producing and contesting social practices, norms, values, beliefs and institutions. These are *disruptive motives* that destabilise dominant market forms, ideologies or practices, particularly for vulnerable actors who have been socially displaced or who wish to create a distinctive identity based on an oppositional format in the market. Social movements *mobilize resources* to create direct changes in the market - rather than relying on government regulation – and they are often characterized by *charismatic leadership* and *engagement*. Population ecology, with intellectual linkages to evolutionary economics, focuses on the relationship between organizations' resource dependencies and their fit with their environments. Organisations that cannot adapt to their environment will likely perish (Hannan and Freeman, 1987). Thus taking and retaining form happen as organizations *compete for resources*, a process that separate winners from losers (Friedman, 1957).

Strategy. Traditionally the strategy literature views the environment – and the market – as something separate and detached from the organization, and the role of the strategy is to enable the organization to adapt to the changes in the environment and/or market (e.g., Chandler, 1962; Teece *et al.*, 1997; Kim and Mauborgne, 2009). Thus, markets are mainly seen as (relatively) stable entities to be entered or retrieved from, and change is foremost discussed on an intra-organizational level, in terms of adapting to market changes[1]. However, in this literature review we have focused on strategy and management literature discussing taking and retaining form on inter-organizational, external, or market levels as this is more compatible with the market plasticity construct.

First, strategic taking and retaining form can be observed in the *managerial mental models*. The learning literature suggest that higher level learning can lead to transformative change that goes beyond mere adaptation (Cope, 2003) and that learning can also occur on a network level (Crossan *et al.*, 1995; Knight and Pye, 2005). This type of learning is often triggered by exogenous learning events, critical incidents, or even crises (Argyris and Schön, 1978; Fiol and Lyles, 1985; Cope, 2003; Knight and Pye, 2005). However, the managerial mental models also express considerable stability. Various authors have researched how mental models become "dominant logics" (Prahalad and Bettis, 1986; Prahalad, 2004) or "industry recipes" (Spender, 1989) that cause "active inertia" (Sull, 1999) for the firms and the market alike.

Second, the strategy literature discusses change and stability of the *structure* of the industry, cluster, or market. Most often the industry evolution is explained with the help of product lifecycles (Abernathy and Utterback, 1978): How industries evolve from a birth of a new product to maturity in terms of the number of actors, competition intensity and focus, and market growth (cf., Abernathy and Utterback, 1978; Menzel and Fornahl, 2010). The Porterian competitive strategy (Porter, 1980; 1985) builds on industrial organization, and discusses market change in a similar manner to product lifecycle theories, through concepts such as the threat of new entrants and product substitution. The strategies built on these notions focus on stabilizing the field: finding defendable positions at the market, building barriers to entry, and so forth. Some researchers argue, however, that individual firms can induce systemic change by creating uncontested market spaces through value innovations (Kim and Mauborgne, 2004) or by utilizing reconstructionist strategies that are aimed at shaping the environment (Kim and Mauborgne, 2009).

Third, strategy can be viewed as a *set of practices* (cf., Jarzabkowski, 2004; Whittington, 2006), linking the intra-organizational and extra-organizational activities. Strategy discourses (such as 'competitive strategy') and practices (such as 'environmental scanning') have the capability to remain the same for long periods of time – or to change, even rapidly, in the wake of, e.g., a new management fad. Whittington (2006) argues that strategy practices are relatively stable, and that practitioners transfer and reproduce these strategy practices in a similar manner in differing contexts. However, from time to time new strategy practices are created, often when deep understanding of the strategy praxis meets outstanding ability to conceptualize, and these strategy practices are most often distilled to strategy praxis through strategy consultants and management gurus (Whittington, 2006).

Finally, an interesting discussion within strategy relates to a more holistic, systemic view on organisations and networks: organisations and networks are not built out of loosely coupled

[1] For a good review of the history of strategic thought and how strategy has approached taking form and retaining form, please see Demers (2007).

elements. Rather they can be viewed as *configurations*, viewed as gestalts, i.e. tightly coupled wholes (Demers, 2007). Order in systems emerges from interactions between elements as a whole, as the configurations evolve toward fit (Siggelkow, 2002). It has been shown that internal consistency, fit, congruence, alignment between elements is positively correlated with performance (Venkatraman, 1989; Siggelkow, 2002). This has two specific implications. First, it implies that configurations may have in-built inertia as they attempt to strive towards certain ideal types (Miller, 1981). Second, configurations are equifinal to their nature, meaning that there is not one "best" market configuration. Several configurations may be equally effective (Doty *et al.*, 1993), as long as the elements reinforce each other in order to achieve a high degree of configurational fit (Siggelkow, 2002).

Marketing. The marketing management school (e.g., Smith, 1956; Levitt, 1960; McCarthy, 1960; Bartels, 1964; Borden, 1964; Kotler, 1967; Walker and Ruekert, 1987; Kolhi and Jaworski, 1993) has little to contribute to the debate on market plasticity. It is in keeping with contingency models and holds a deterministic view of the environment (Brownlie, 1994). This approach follows a positivistic ontological position, conceptualizes the market as given and restricts the organization to a adapting itself to given market conditions.

As from the 70's, alternative approaches to this view of markets have emerged. These approaches adopt a broad scope of ontological and epistemological positions (e.g. critical realism, social constructionism, phenomenology, relativism, realism). They build on the work of colleagues from economics, sociology, organizational theory, systems theory, and strategic management, in search of a more dynamic understanding of the environment in which marketing activities unfold. Though their focus varies, the approaches are more susceptive to the idea that markets are malleable. Amongst these we highlight, inter-organizational marketing (Håkansson, 1982; Håkansson *et al.*, 2009), relationship and service marketing (Grönroos, 1994; Gummesson, 1987), RBV/resource-advantage theory of competition (Barney, 1991; Day, 1994; Hunt, 2000; 2002), marcomarketing (Arndt, 1981), and, more recently, the Service-Dominant Logic (Vargo and Lusch, 2004). As a result a new set of concepts and terms are incorporated into the marketing literature, including: interdependence, relationships, networks, co-creation, interaction, resource integration, mutuality, and marketing systems. Even though these works are not uniform, they build on the notions that marketing theory should explicitly adopt a proactive, entrepreneurial orientation to managing the external environment (Zeithaml and Zeithaml, 1984); that organizations are not isolated (Håkansson and Snehota, 1989); and that the environment is a mental representation embodied in a cognitive structure which is enacted in retrospect and fashioned out of the discrete experience of managers (Brownlie, 1994).

Scattered insights on market plasticity include aspects of taking from (fluidity), aspects of multiplicity in understanding the form, and aspects of retaining form (stability). With regards to taking form (fluidity), the debate on ´market driving strategies´ calls for deliberately changing the configurations of actors and/or their behavior in the market (Jaworski *et al.*, 2000; Varadajaran, 2010). Adopting an effectual logic, it has been argued that *entrepreneurial initiatives*, in a similar fashion to social movements, may determine what the new market will look like depending on their success in mobilizing followers (Sarasvathy and Dew, 2005). Furthermore, research on *market practices* propose that markets are continuously performed by interlinked exchanges, normalizing and representational practices (Kjellberg and Helgesson, 2007). With regards to multiplicity, it has been argued that the market is a set of culturally constituted *institutional arrangements* allowing for diverse interpretations of their *boundaries*, and whose legitimacy lies in the value created for the producer, the consumer,

and the various intermediaries (Venkatesh *et al.*, 2006). With regards to retaining form (stability), research in relationship marketing and the IMP Group suggest that *actor bonds*, *activity links* and *resource ties* between market actors affect the constellation of relationships and networks (Håkansson and Johanson, 1992; Håkansson and Snehota, 1995). Finally, a long line of macromarketing research shows how marketing activities form local and global *marketing systems* (Layton, 2007) and that though in continuous exchange, markets emerge from simultaneous, continuous processes at different levels and layers of context (Chandler and Vargo, 2011).

Theoretical classification of market plasticity

Based on the literature presented in the previous sections, we argue that the dual character of market plasticity, i.e. the interplay between fluidity and stability, can operate on multiple levels. As proposed in our definition, markets do indeed seem to be able to both take and retain form as *aggregated* markets. Such observations are dependent on techniques for aggregating (as in IO-theory) or connecting (as in the various network approaches) a set of components (firms, actors, exchanges) into a (market) structure, whose boundaries and internal constitution may change. However, the interplay between stability and fluidity can also be observed on a more *disaggregated level:* Different constituents of markets such as market actors, institutional arrangements and market practices may also take and retain form.

In order to support future research into this multi-faceted character of market plasticity, we suggest a *classification scheme*[2] that *deconstructs market plasticity*: What provides plasticity in markets? Our proposed classification examines different manifestations of market plasticity through five different, but interrelated aspects of markets that are derived from the literature review: Exchange object, market actors, market structure, market institutions, and market practices. Table 2 provides an overview of the proposed classification.

[2] As McKelvey (1975) points out, the current classification studies display significant semantic confusion, as terms such taxonomy, typology and classification scheme are used relatively liberally, with often using the same label to refer to fundamentally different classification devices. In the present research, we build on the definitions by Doty and Glick (1994) that differentiate between typologies and taxonomies: Typology is a set of ideal types that are able to predict the dependent variable whereas taxonomies and classification schemes categorize the phenomena into mutually exclusive and exhaustive sets with discrete decision rules. Furthermore, Meyer *et al.* (1993) suggest that the term taxonomy is often reserved for empirical classifications based on multivariate analysis of multiple dimensions. Therefore, in this research we put forward a *classification scheme* for market plasticity.

Plasticity in	*Take form*	*Retain form*
Exchange object	Introduction of a new or modified exchange object Customers purchasing exchange objects in different configurations (e.g. product-service bundles) or by using different evaluation criteria (e.g. from lowest price to most economical life-time cost)	Commonly accepted object of exchange that is evaluated using institutionalized evaluation criteria and exchanged over established interfaces
Market actors	Learning by both 1) individual market actors and 2) several market actors as a group New ideas (or mental models) and resource configurations (or business models) of actors, often driven by entrepreneurial initiatives and motives	Shared ideas and mental models turn into dominating logics and industry recipes Successful resource configurations and business models have a high degree of configurational fit that creates inertia
Market structure	Change in the number of actors participating in the market or in the roles of the market actors and the relationships between them Emergence of an alternative conception of the market, resulting into novel market boundaries and structures	Barriers of market entry (e.g. regulation) or exit (e.g. vested investments) Long-term collaboration between market actors becomes routinized and is often supported by integrated infrastructure (e.g. integrated ICT systems)
Market institutions	Emergence or introduction of new or modified market institutions such as product standards, legislation or orders of worth	Diffusion of market institutions to affect increasingly large number of market actors Various market institutions reinforcing each other and being materialized into e.g. exchange infrastructure Solidification of institutions through monitoring and enforcement systems
Market practices	Change in the routinized actions and/or the related artefacts in exchange, normalizing and representational practices	Further institutionalization and materialization of exchange, normalizing and representational practices

Table 2. Classification of the manifestations of market plasticity

When investigating how the different facets of markets take form, it is possible to further categorize 'taking form' into *intentional* and *emergent*: sometimes market changes as a result of intentional efforts of a market actor or an external party, whereas occasionally market transforms gradually without intentional market shaping from any actor. The intentional and emergent taking form resonates with the notions of deliberate and emergent strategies brought forward by Mintzberg and Waters (1985). Additionally, Aspers (2009) in his study of markets in the making differentiates between spontaneous, state-governed, and self-governed market making.

In a similar vein, it is possible to detect similarities in how different facets of markets retain form. It seems that the capacity to retain form in markets is often explained by increasing *formalization*, *institutionalization*, *routinization*, and *materialization*. The various theories reviewed above provide support for different form-retaining 'mechanisms'. The natural sciences (e.g. physics) as well as some social science traditions (e.g. industrial organization theory, and the performativity program) put considerable emphasis on materialization. Among the various institutional theories reviewed some emphasize learning and routinization (sometimes explicitly linking this to economization), whereas others highlight formalization (as in monitoring and policing of particular institutions). Evolutionary approaches and systems theories tend to emphasize the fit between individual components and some aggregate (population or system).

What is the interrelation between these capacities to take and retain form? Drawing on Van de Ven's (1992) overview of process theories, we propose that these capacities stand in a dialectic relationship to each other. ''Stability and change with a dialectical process theory are

explained by the relative balance of power between opposing forces" (ibid: 178). We suggest that the table above outlines potential mediators of such opposing forces in markets. As suggested in the table, each of the five manifestations can potentially both take and retain form, and hence display internal dialectics. However, with respect to the overall plasticity of markets, the dialectics may also take place between the taking of form in one such dimension (e.g. change in market actors) and the retaining of forms in other dimensions. Further research is required to detail the character and prevalence of such dynamics.

Managerial classification of plastic markets

From a managerial perspective, we suggest that the most relevant classification scheme does not focus on categorizing different manifestations of market plasticity. As practitioners require forward-looking and normative framing devices that enable them to decide how to engage with different markets, we propose a separate managerial classification that categorizes markets based on their expected plasticity.

The proposed managerial classification is described in Figure 1. In this classification matrix, the two constituents of the dual construct of market plasticity, i.e., a market's capacity to take and retain form, are examined separately. This results into four categories of markets that vary in terms of their expected plasticity.

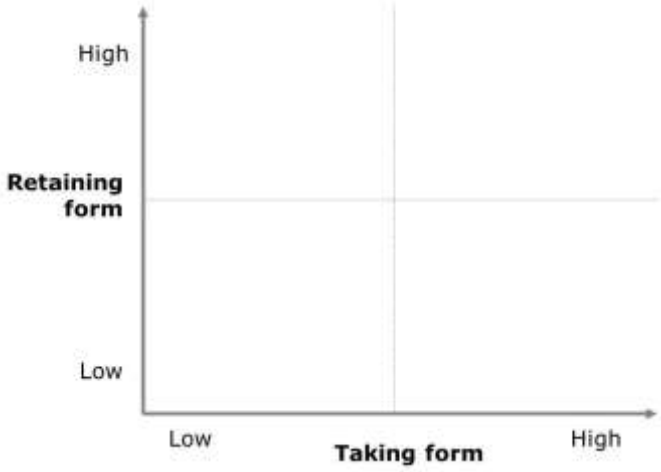

Figure 1. Managerial classification of markets based on their expected plasticity

Markets that are classified as 'high in retaining form, low in taking form' are likely to resist most of the emergent and intentional attempts to change them, as the market has considerably higher capacity to retain its current form than to take on a new one. Thus, such markets are expected to be characterized by stable structures, institutions and practices, widely shared dominating logics, high levels of inertia, and relatively slow pace of change. Examples of such markets are for example the Nordic pulp and paper cluster or the global pharmaceutical industry. If an actor wishes to engage such a market in order to shape it, the actor in question should ensure sufficient market shaping power to shake the sluggish market onto a change path. Market shaping power can be improved by e.g. partnering with other actors with a similar agenda or by piggybacking external events that are favourable for the actor's market shaping efforts.

‘Low in retaining form, low in taking form’ markets take us close to the limits of economized markets as without any ability to take or to retain form there is no recognizable phenomenon to be labelled as a market. However, for example many entrepreneurial ventures could be categorized as markets with low capacity to both retain and take form. Such markets emerge in the face of need and/or opportunity: When there is an unmet customer need to be met or when an entrepreneur can turn his knowledge and resources into a revenue-generating venture. Due to the low capacity to retain form, such markets are not necessarily long-lasting – in the contrary, the market might exist only during one single transaction. Due to the transient nature of these markets, actors wishing to engage with them need to possess a thorough understanding of the other related socio-material enactments as these markets are often best identified and shaped indirectly.

Markets that are categorized as ‘high in retaining form, high in taking form’ are often characterized by rapidly changing phases of stability and change: on one instance a market expresses its high capacity of retaining form through stable structures and shared ideas – only to transform next into a state of flux. Such sequential development can be observed for example in many consumer electronics markets that are driven by both fast technological development and the need for dominant standards. For instance, home recording of television broadcasts has witnessed several battles for dominant standards since mid-1970, VHS vs. Betamax and Blu-Ray vs. HD DVD being the most legendary ones. Engaging with such markets successfully requires strategic and operational ambidexterity: Actors should be capable of both exploiting the phases of stability as well as influencing the market development during the phases of fluidity.

Finally, ‘low in retaining form, high in taking form’ markets are likely to be in a constant state of change as no new form is retained for a long period of time. Examples of such highly dynamic markets can be found especially from the virtual domain such as mobile application development, e-commerce and labour market for freelance knowledge workers. The fluidity of these markets is partially explained by the limited material infrastructure and the ability to transport the object of exchange electronically nearly without any costs. Engaging with such markets requires good market-sensing capabilities and an agile business model as actors have to be able to read the market development in a correct manner and to adjust their operations accordingly. Additionally, especially larger actors with sufficient market shaping power are often inclined to attempt to stabilize the market – by increasing the market’s capacity to retain form – in order to benefit from the likely resulting economies of scale.

Classifying markets based on their expected plasticity reveals the *temporal aspect of market plasticity*: the capacity to take and retain form does not have to manifest itself on both dimensions simultaneously all the time. On the contrary, it seems that the dialectic dynamics between fluidity and stability vary over time. Thus, the concept of plasticity with its dual fluidity-stability character has the potential of providing practitioners with additional insights in understanding and envisaging how markets change over time.

Conclusions

The present study has a two-fold objective: To provide a definition of market plasticity, and to introduce a theoretical classification scheme as well as a managerial framework for categorizing different manifestations of market plasticity.

Drawing on literature from physical, natural and social sciences, we defined market plasticity as "the capacity of markets to take and retain form". Even through the literature review revealed that plasticity as a term is not widely used in social sciences, the fluid and stable characteristics of markets are discussed from various viewpoints in systems theory, sociology, economics, organizational theory, strategy, as well as in marketing. We propose that the market plasticity construct, illuminating a special characteristic of markets, provides a complimentary perspective to market dynamics to existing process-based models such as product life cycle (cf. Lewitt, 1965; Utterback and Abernathy, 1975; Gardner, 1987) and development stage models (e.g. Lambkin and Day, 1989; Aspers, 2009). Additionally, the terms such as 'plasticity', 'fluidity' and 'stability' enhance our lexicon regarding market development and change, enabling more nuances than the commonly used terms such as 'maturity' (limited by its association with market growth rate) and 'readiness' (imprecise in the context of socially constructed, continuously transforming markets).

The proposed theoretical classification scheme deconstructs market plasticity and examines different manifestations of market plasticity through five aspects of markets: How exchange object, market actors, market structure, market institutions, and market practices contribute to fluidity and stability in markets. The classification contributes to the extant understanding of socially constructed markets in three ways. First, it highlights that market plasticity can operate on multiple levels; both aggregate markets and disaggregate market constituents can express plastic character. Second, it reveals recurring undercurrents in both taking and retaining form: Taking form can be either intentional or emergent, whereas retaining form is often explained by formalization, institutionalization, routinization, and materialization. Third, it offers a more granular view of market plasticity, and thus provides a platform for further research in the dialectic dynamics between fluidity and stability.

The suggested managerial classification examines the two constituents of market plasticity, taking and retaining form, separately and sorts markets based on their expected plasticity into four categories: "High in retaining form, low in taking form", "low in both retaining and taking form", "low in retaining, high in taking form", and "high in both retaining and taking form". The managerial classification of markets based on their expected plasticity helps practitioners in deciding how to engage with different markets, enhancing further the extant 'market driving strategies' (Jaworski *et al.*, 2000; Varadajaran, 2010).

Further research

To the researchers' knowledge, the present study is the first one focusing on defining and delineating the market plasticity construct. Thus, this exploratory and conceptual investigation opens various avenues for further research. First, the market plasticity construct should be exposed to empirical investigations. In particular, both of the proposed classification devices should be populated with empirical data, as such an investigation is likely to increase our understanding of market dynamics. Additionally, it would be beneficial to investigate longitudinally how the dialectic dynamics unfold in markets, as the present research has only identified the temporal aspect of market plasticity as relevant – but provides little conclusive evidence on the subject matter. Managerially, the proposed classification of markets based on their expected plasticity could be developed into normative guidelines or 'simple rules' for contextually sensitive market shaping strategies. Finally, the limits of market plasticity should be investigated further: Under which conditions markets cease to foster resource integration and what are the moral limits of market shaping and marketization.

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