

DARWIN IN FASHION: FASHION INNOVATION AS A CO-EVOLVING CULTURAL PROCESS

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ABSTRACT

In this paper the Darwinian framework of variation, selection and retention/speciation is used to assess the possible success of fashion innovations. For this, the question about ‘fitness criteria’ in the realm of consumer products is addressed. Moreover, not only consumers are selectors. First of all firms select product ideas which are further developed and presented to a market. And on the market experts, opinion leaders and peers (other consumers within sub-cultures) co-define the value of – especially - fashion innovations. For different fashion items this system works differently, according to different aspects of value which play a role: functional, emotional, symbolic, social. We can ask ourselves to what extent new technologies (the e-part of the 2006 IFFTI conference) have an influence on this process, or to what extent they are mediated by certain selectors.

Moreover, as different actors – co-selectors - attach value to different products, they co-create value. Increasingly they are also rewarded for this.

1. INTRODUCTION

In this paper it is argued that it is useful to use the Darwinian framework of variation, selection and retention/speciation in the field of fashion innovation. It allows to think more systematically about possible success (‘fitness’) criteria in different selection environments. Moreover, evolution is always co-evolution, the interactive development of units and species with their relevant environments. This paper is part of a larger project on the cultural aspects of all kinds of innovation (including technical innovation). Working on the case of fashion innovation has allowed me to better understand the multitude and complexity of relevant interactions. Therefore, mapping relevant selection environments (‘selection systems’) allows to think more systematically about the more decisive elements within these systems and concentrating on these in order to increase the possible success of innovations.

In the following section I introduce the basic Darwinian framework and its relevance for innovation in general and fashion innovation in particular. In the third section I address the question what possible fitness criteria of (fashion) innovations are. Basically I come to a distinction between two kinds of fitness criteria: technical elements (objectively measurable functionalities) and cultural ones (more subjective valuation). It is, however, important to understand that also the technical realm is part of the cultural environment. The chances for success of new technologies which are far from the existing cultural frame of people, are much lower. This brings us to the issue of incremental and radical innovation, also in the realm of fashion, which I address in section four. Radical innovations are radical because they are relatively far from the existing cultural framework. For this reason, sometimes experts play a decisive role in ‘framing’ these innovations, relating them to existing frameworks and possibly also to other innovations and social developments. As a consequence, ‘selection systems’, to which I come in section five, are not just markets, but quite complex, co-evolutionary systems in which subcultures, peer groups, experts and other opinion leaders play important roles. Mapping these systems helps to see where the more decisive elements are and address these in order to increase the chances for success of the different kinds of innovation. In the last section I conclude.

2. A DARWINIAN FRAMEWORK OF INNOVATION

In the framework of Darwinian evolutionary theory each innovation is a kind of genetic recombination or mutation ('variation') which is accepted ('selected') or not by its environment (the 'selection system') and possibly survives for a longer term ('retention' or even 'speciation'). Most variation is mere recombination of the genes of the parents (thus incremental or marginal innovation). Only from time to time mutations (random mistakes in copying) happen. As a consequence of mainly external shocks (the impact of meteorites, volcanic eruptions...) more rapid evolution may take place ('punctuated equilibrium'). So, more radical innovations (originating from new concepts or new technological insights) are most comparable with mutations. Such innovations may lead to new categories (comparable with 'speciation' or 'phylogenetic development', the coming into being of new species, in natural selection). As can be seen from the concepts between brackets, evolutionary approaches as a rule look for three mechanisms: variation, selection, and retention/speciation¹ (Aldrich 1999: 21). Moreover, in many cases the term 'sorting' is more correct than 'selection', following the distinction neo-darwinian authors like Gould, Vrba and Eldredge make. Sorting relates to relatively random survival as a consequence of sheer chance, whereas selection implies causality: survival as a consequence of greater fitness in a given environment (Hodgson 1993: 46; Eldredge 1997: 393).

If we transfer this to the level of innovations in the realm of the economy and fashion these concepts mean:

- Variation: the generation of variety, from an evolutionary perspective any departure from routine or tradition, intentional or not, is a variation. Also in the realm of fashion innovations are not always intended. Some people dress in a certain way and this may influence others.
- Selection: the survival of an innovation as fitting in a certain environment, a selection system. In the field of fashion, innovations must first be accepted by an organisation (of course this can be a one person firm) and then by a market. Moreover, this selection is seriously influenced by what for example certain experts of opinion leaders in the informal environment find about it.
- Retention (possibly speciation): an innovation may be just one item which survives for a certain period, but it may also be the starting point for a new 'species', a new category which survives for a longer term and within which new innovations occur: for example pyjamas, bikinis, mini-skirts, catsuits. New categories are important, because they provide the cultural frame with the help of which more radical innovations can be understood. I come back to this in section four.

Before going on with the discussion on the selection of innovations, it has to be emphasised that selection in socio-economic systems differs from that in biology, especially in the way that learning is possible (Nooteboom 2000: 75, 83-87). Cultural information can 'jump' from one lineage to another in a way that genetic information cannot (Eldredge 1997: 395). In this sense, in socio-economic evolution Lamarckism, involving both purposeful behaviour and the inheritance of acquired characters, is important – in contrast to simple biological variation and selection which are random and without possibilities for hereditary transfer of learned skills. But group processes and the coming into being of cultures historically have emerged

¹ Aldrich (1999: 21) mentions diffusion as a fourth mechanism, but diffusion is never static: it nearly always implies at least marginal innovation and adaptation, i.e. new variety oriented at specific customer groups (Gold 1983: 107; Jacobs 1990: 11-12).

from these more 'simple', blind evolutionary processes. So, they are just a new development of natural selection itself². As a consequence, in socio-economic systems more rapid developments are possible through the combination of imitation, improvement, learning and the purposeful transfer of these to newer generations (Hodgson 1993: 47).

All of this does not take away that also in human cultural systems a lot of trial and error - random variation and sorting - take place. Moreover, seemingly inefficient or useless innovations may be examples of successful selection, as they possibly fit in a certain (selection) environment. The survival of the QWERTY keyboard, not an example of optimality, has its reasons. When it was adopted, this keyboard design had its use, as it helped to prevent the cluttering of typewriter keys. And now it is an example of 'lock-in'. As so many people use this standard across the world, it is difficult to change it (David 1986). This example illustrates that fitness, adaptation and learning are always related to a specific environment. When we study the selection of innovations, it is, therefore, necessary to relate these to their relevant selection systems, each with its specific rules, culture, selectors and 'fitness criteria'.

3. WHAT CONSTITUTES 'FITNESS' IN A FASHION ENVIRONMENT?

In the Darwinian framework only the fittest survive, i.e. the units which fit best into a certain environment. But in all ecological systems, including the human ones, we also see a co-evolutionary development in the direction of ever more differentiation (Jacobs 2000: 16-17). All kinds of species find niches in which they fit best. So, increasingly there is room for ever more species which only to some degree compete for the same resources. As a consequence, 'fitness' is not a 'one size fits all' criterion – contrary to what many economists assume. Of course, from a biological point also a more general success criterion can be defined: the relative increase in the descendants of a lineage. So it is not a surprise that for example Metcalfe has proposed to identify fitness of economic units with their propensity to accumulate. which, in turn, by Hodgson is associated with economic efficiency (Hodgson 1993: 49-50). This reminds of Williamson's statement that 'economy is the best strategy': economic units have to adapt rapidly to lower prices and to eliminate rigorously all waste (Williamson 1991: 76, 87). But this reasoning presupposes that the economic environment is uniform and has only one selection criterion. Of course, in most markets price (and therefore also cost) is an important element of fitness, but not the only one. Not every customer is just looking for the lowest price. Moreover, following Williamson's advice there would be an undifferentiated race to the bottom. Porter anticipated this traditional economist's view long time ago, by stating that beside cost leadership, a "second generic strategy is one of differentiating the product or service offering of the firm, creating something that is perceived *industrywide* as being unique. Approaches to differentiating can take many forms: design or brand image (...), technology (...), features (...), customer service (...) dealer network (...), or other dimensions. (...) It should be stressed that the differentiation strategy does not allow the firm to ignore costs, but rather they are not the primary strategic target" (Porter 1980: 37). So, cost is certainly an important criterion for valuing process innovations – even when

² Other animals also show forms of cultural transfer of skills within the group, which illustrates the fact that human learning is only a further biological development at a higher level of emergent 'learning', which is already present in other species (De Waal 1996: 210-212). For this reason I disagree with Nooteboom who tends to view the use of an evolutionary framework as mainly metaphorical (2000: 77, 89). For the same reason I see no necessary contradiction with the use of learning or complexity approaches which he proposes (Nooteboom 2000: 87-90).

certainly not all firm reorganisations can be reduced to this -, but not necessarily for product innovations.

Porter's differentiation strategy leaves more room for strategies aimed at different niches within an environment. In each niche customers value products differently. In this respect economics literature talks about 'customer preferences', which for a long time have been seen as fixed and given or at least exogenous to the economy. These preferences are, however, continuously endogenously reconfigured on the basis of innovative economic activities (Bowles 1998) and social change. A preference is, however, a demand category. What connects preferences and characteristics of an innovation are therefore values: values at the basis of preference and apparently recognisable in certain innovations. So 'value', a clear cultural concept, is probably the best economic equivalent of fitness from an evolutionary point of view. Behind every economic value there is a cultural value, which connects the customer's valuation with tangible and intangible features of products.

Value to a large extent is subjective, different to different actors and actor groups, 'selectors'. "[T]his means that the value of an innovation can only be determined within the context of a set of preferences of selectors" (Wijnberg 2004: 1472). Since the marginalist revolution at the end of the nineteenth century most economists see value as individual subjective preferences. Sociologists and institutionalist economists, however, disagree. Already in the beginning of the twentieth century institutionalists like Veblen and Commons argued that value is socially constructed (Mirowski 1990; Throsby 2001: 21-23).

Is all value socially constructed? Yes, to a very large extent. But of course, also biologic predispositions and technical performance aspects play a role. We acquire preferences through genetic inheritance, and also through learning. We need air, water, sleep, warmth, nutrition, affection..., but most of these needs are 'secondarily reinforced' through all kinds of cultural 'socialisation' processes. Think for example of different food tastes (Witt 1991: 564-569; Bowles 1998: 79-84). In selection also relatively technical criteria play a role. This is quite obvious for the more purely technical products, like for example steel, where technical criteria like strength and durability in relation to price will prevail. In general, an innovation, like for example EDI or a system for processing POS data, has to 'work', to fulfil its promise. But beside technical criteria, non-technical preferences in the form of conventions, tastes and fashions play a role. Why is a certain material selected for a certain application? Why choosing steel for a building and not aluminium, marble or wood? And software systems as a rule are more chosen on the basis of their supplier's tactics, than on the basis of their reliability. "The aspects that are technically necessary are those aspects of a product which selectors can specify in advance and which could, in principle be checked by other actors, or even robots. If such other actors exist, they have a purely technical role and not an economic one; they have no personal sets of preferences. The role of the other actors still leaves selectors with the task of determining or attributing value in an economic sense. The other actors could check the speed of microprocessors, but the selectors would have to specify beforehand (a) that speed makes a microprocessor valuable and (b) which type of measurement of speed are acceptable to them" (Wijnberg 2004: 1477).

In a similar way from diffusion literature it emerges that the two most important features which determine the speed of adoption of an innovation are its 'relative advantage' and its 'compatibility' (Rogers 2003: 229-257). Relative advantage, "the degree to which an innovation is perceived as being better than the idea it supersedes" (Rogers 2003: 229), most resembles the technical aspects of innovation, but as can be seen from Rogers' definition, to a large extent this is a perception. Even with technical innovations perceptions may be more

important than precise measurements. Moreover, 'relative advantage' also relates to status aspects. Especially the adoption of highly visible innovations (cars, clothing, hairstyles, but also advanced technical gizmos) may be status-conferring (Rogers 2003: 231). Compatibility is mostly seen as compatibility with existing cultural ideas and values and recognised needs, but of course may have a technical component as well: compatibility with existing technical standards (Rogers 2003: 240-350).

Each selection system functions within a certain culture, with certain norms and *values*: general and more specific ones. As a consequence, different selection systems function according to different fitness criteria. Some of these norms and values may look very particular or even inefficient from another value perspective, but still be the decisive in their own environment: "If for example, selection criteria favor administrative rationality and formalized control structures within an industry, then adaptive organizations will switch to the new practices" (Aldrich 1999: 26). A small change in the criteria in a selection system may lead to a totally different selection.

In most industries there is a kind of socially constructed 'industry recipe', mental model or 'paradigm' of what is valuable, of what 'critical success factors' are (Porac et al. 1989; Debackere et al. 1994). But as a rule a lot of variety within these models will remain. At this level preferences of individual people, peer groups and subcultures play a role. Different actors (suppliers and customers) make different choices between competing 'value propositions', leaving room for a multitude of strategies. Think for instance of the different subcultures in the realm of fashion: some people always wear the same, whilst other continuously monitor the latest fashions. Different professions and other cultural scenes have different clothing habits and requirements and of course religions play a role too. Increasingly we also see the increasing influence of fashion in realms like those of sports and outdoor... So, there is also co-evolution, interaction between the cultural valuation in different subcultures. This leaves a lot of room for co-evolutionary strategic profiling and niche finding. I come back to this in section 5.

So, as a rule the economic environment consists of a multitude of niches, each with its own fitness criteria. Behind the general concept of economic value, there is a variety of cultural *values* in continuous development. So, in the core of economic fitness we observe the importance of the non-technical aspect of culture, norms and values in their different manifestations: different 'ideologies', cultures of professions and other peer groups, paradigms, fashions, stylistic movements, leading to more general basic criteria like price, functionality and status on the one hand, and very particular and sophisticated ones in the realm of quality, defined in a multitude of subcultures on the other.

4. INCREMENTAL AND RADICAL INNOVATION AND THE ROLE OF EXPERTS

A traditional distinction made in the realm of innovation is that between incremental and radical innovation. Some observers only see radical innovation as 'real' innovation. But the classic question is then where to draw the line between both. Moreover, just like in biological variation, the overwhelming majority of innovations is incremental or even marginal. Without them the economic system rapidly would come to a standstill. According to Gilles Lipovetsky (1994: 131) the continuous flow of style, design and content innovations and small improvements can be seen as an extension of the fashion logic to all kinds of industries, "the overall process that forces companies to innovate, to keep on introducing new articles that are

sometimes truly new in conception, but that sometimes (most often) simply incorporate minor refinements in detail (...). [A] firm that does not regularly create new models loses its market penetration and weakens its image of quality in a society where consumers spontaneously hold that the new is by nature superior to the old. (...) [O]ur economic system has been propelled into a spiral in which innovation is sovereign whether on a large scale or a small one, and in which obsolescence is accelerating (Lipovetsky 1994: 135). “We have reached the era of *consummate fashion*, the extension of the fashion process to broader and broader spheres of collective life. (...) Everyone is more or less immersed in fashion, more or less everywhere and the triple operation that specifically defines fashion is increasingly implemented: the operation of *ephemerality*, *seduction* and *marginal differentiation*” (Lipovetsky 1994: 131). ‘Marginal differentiation’ is a concept quite near to incremental innovation, but without the latter concept’s connotation with improvement. A new product is not necessarily better; it does not necessarily lead to a higher degree of welfare, beside possibly the welfare found in the newness itself and a larger degree of choice. ‘Ephemerality’ emphasises the temporal character of many of these innovations, leading to at least increased economic obsolescence. Many people argue that this even leads to a lower level of welfare, as a consequence of increased waste problems. And ‘seduction’ draws the attention to the fact that there is an increased need for marketing investments to make innovations succeed. In many cases these marketing endeavours cost even more than the expenditures necessary to develop the innovation itself.

Radical innovation, by contrast, is more difficult and risky, because of its relative incompatibility with existing norms and values. Many radical innovations fail for lack of compatibility with existing demand, values, or a lack of fit with existing technical and non-technical systems of testing, implementation, production, commerce or distribution. Such lack of fit is sometimes called the ‘Leonardo effect’, referring to Leonardo da Vinci who conceived many ideas that could not be realised or even tested with existing technologies (Nooteboom 2000: 11, 182, 194). But when radical innovations succeed, their social impact is much larger: think of historical examples like electrification or the introduction of the car system.

Wijnberg makes an interesting contribution to the understanding of the radicalness of innovation, where he proposes to link it to its impact on processes of selection of innovation: “The importance [i.e. the degree of radicalness] of an innovation is the extent to which the innovation is connected with changes in the relative valuations of products satisfying the same set of preferences, of the set of preferences, of the composition of the set of selectors or of the characteristics of the selection system itself” (Wijnberg 2004: 1474). So Wijnberg distinguishes between four possibilities:

- Incremental innovations lead existing selectors to reconsider the relative value of products satisfying the same set of preferences. When I see a new type of car, do I want to replace the one I have?
- A more radical innovation causes the selectors to reassess their preferences. Think about the introduction of mobile phones. At a certain moment younger people started to spend more money on these than on clothes.
- Even more radical is the case where the set of selectors is changed. Also this happened with mobile phones. Their main customer base relatively rapidly moved from business people to younger people.
- Most radical or important in Wijnberg’s view are innovations, which lead to a change in the selection system itself. Previously telecommunications were seen as a public utility, but as a consequence of new technological opportunities and social developments, this

industry has become a highly competitive deregulated industry.

In the second paragraph it was said that also in the biological realm radical innovations (mutations) only rarely happen, unless radical events happen in the (selection) environment. When they happen as a rule new species come into existence. In economic life new species as a rule are new kinds or new families of products, 'new concepts'. Also this has been taken literally: a new concept is a new cultural category. But as a rule such concepts have a link with (the 'descend' from) existing categories. Otherwise we would not be able to understand them. E-commerce is the combination of electronic and commerce and also descends from the mail order concept. The monokini descends from the bikini and the catsuit from the ladies' suit which in turn was a development of the men's suit. Without these new concepts or categories these radical innovations cannot be understood or even perceived! Hence the important role of experts in explaining the meaning and relevance of more radical innovations to larger audiences. Sometimes these experts even 'invent' the new categories. In such cases we can observe with our own eyes the actual construction of new meanings. And we also see how experts literally add value to the innovations: they place the innovation in a (possibly changing) value framework.

5. MAPPING SELECTION SYSTEMS AND IDENTIFYING KEY SELECTORS

Because economic valuation to a very large extent is a cultural process, as a rule 'market selection' is at least co-determined by valuation in all kinds of groups or subcultures, possibly supported by expert valuations. In this sense a market as a rule never is simply a market.

Economic selection therefore takes place in a complex combination of different selection systems. Mirroring Williamson's (1975) traditional distinction between markets and hierarchies, to start we can distinguish between two basic idealtypical forms of economic selection – which are often combined in one or another hybrid form: hierarchical and market selection.

- Hierarchical selection is selection by selectors who have received the authority for this. Policy makers and managers at higher levels in organisations are the typical examples of this. Other examples are juries and editorial boards. In hierarchical selection the selectors usually have some room for personal preferences, but mostly act within a set of rules and criteria, formal and informal. The editorial board of a scientific journal probably works in the framework of the rules of the publishing house combined with the rules of the scientific community in general and a certain discipline and maybe even a paradigm in particular. In organisations producing for markets, we can expect that ideas about success in the market are an important selection criterion. But this is never precisely the case. All organisations are also governed by political rules and games, with which people with innovative proposals have to deal.
- Market selection is selection by customers in a market place. Here it is important to understand that these customers do not select in a vacuum, as clarified above. Of course, customers also have personal preferences (which more often are not explicitly defined), but mostly they are influenced by their broader culture and their direct environment: family, colleagues and other members of peer groups, or by experts they value (reviewers, DJ's, critics). From communication theory we know that opinion leaders have an influence, but also that people select the opinion leaders they like. And opinion leaders take into account the opinions of their 'followers'. So, there is mutual selection. Moreover, all these people are part of a culture and possibly one or more subcultures or peer groups (ethnic, professional, age... groups) with specific values and role models.

always a battle between different ideas and projects. When hierarchical selection is the preliminary stage before market selection, we may expect that the ultimate market perspective directs this hierarchical selection. But this is not necessarily the case. The success factors related to internal selection (e.g. secret or more open agendas, favouritism between departments, manager's hobby horses, short- and longer-term political games within organisations) may be completely different from those on the market. People initiating innovative proposals better take this into account.

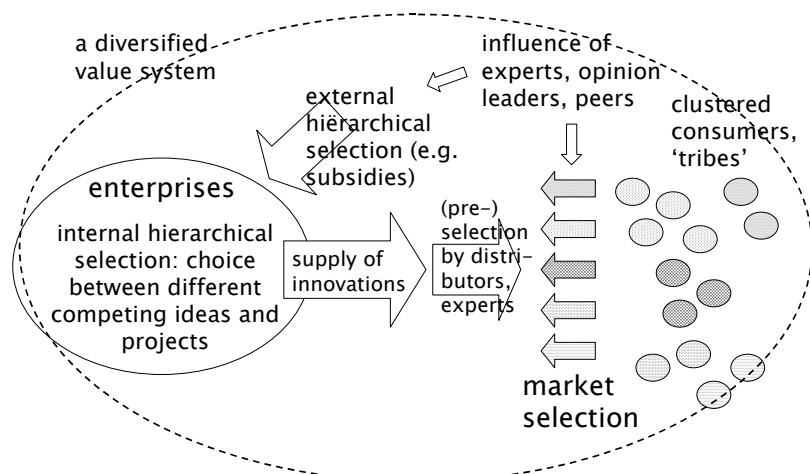


Figure 2: hybrid selection from the perspective of enterprises

When we look at hierarchical selection outside the organisation, the success criteria may be even more different, compared with those on the market - for obvious reasons. Many public regulations are specifically devised to remedy 'market failure', so we may expect a different logic. In order to be subsidised, theatre or music productions for example have to be 'experimental' (i.e. not commercial) or research and development has to be 'pre-competitive'. In concrete terms this may mean that high art has to be difficult to digest and R&D may not lead to practical solutions. As a consequence: innovative 'entrepreneurs' within or outside larger organisations better know in which selection systems they are acting at a certain moment, with which specific rules. At a later stage they may have to shift to other selection systems with totally different rules. All of this requires quite some strategic and tactical flexibility. There are also situations where tax or subsidy schemes have only an additional role: because public cultural valuation is higher than 'normal' economic valuation, some extra money is provided to fill the gap.

From this comprehensive, but this partial understanding of selection, we could also move to cultural fields which are also connected to that of fashion. To figure 1, for example also the fields of sport, movies or music could be added, as these provide role models who may endorse (often on a contract basis) some of the fashion products. Think for example of the increasing importance of product placement in movies and television series. Ever new business models are developed on the basis of these interactions, partly related to new forms of e-business. Some commercial television stations for example do not only earn money on the basis of product placement, but also try to exploit related e-business sites, together with manufacturers. Advertising on search engines on the internet is another recent business model innovation... Others find a subcultural niche (e.g. punkrockers, kite surfers, Moroccan immigrants) with which they develop a special relationship, possibly with the help of special websites. Markets and industries are indeed increasingly fragmented *and* (re-)connected.

Increasingly we live in an ‘attention economy’ in which, as a consequence of oversupply, human attention is one of the most scarce resources. So literally firms and innovators have to ‘pay attention’, for example in the form of publicity (Davenport, Beck 2001: 2-10). The figures 1 and 2 help to understand the increasingly complex and fragmented way in which this is happening: experts, critics, reviewers and all kinds of peers take a role in valuing innovations and in this way in adding value to these (or taking away from them). Increasingly they are also rewarded for this. Think for example of the practice of ‘payola’ in the music and other cultural industries. Payola is a kind of bribe, paid to influence the choice of experts and gatekeepers to bring a product under the attention of the public. The term comes from the music industry where DJ’s or broadcasting stations are being paid for giving certain music airplay. Some DJ’s or programme directors may be bribed personally, but the practice can also be part of the business model of the radio or television station. They are then paid for airplay instead of having to pay themselves for the rights to this music. In a similar way bookstores may be paid by publishers to push certain new books by displaying large quantities of them in the shop or shop-window. The market for product-placement has even lead to the development of its own brokerage industry (Caves 2000: 286-294). Quite a few movie or music stars get expensive couture dresses for free, as designers hope they will wear them at the Oscar presentations or similar occasions which attract a lot of attention.

In the meantime there are now, however, so many ‘experts’ on the market that the value contribution of each of these is decreasing. The internet with its many millions of blogs and chatrooms makes this situation ever more nontransparent. The exception here are the ‘superstars’, the few programmes, magazines or experts which get most of the attention. It is said that for example even a bad review in *The New York Times Book Review* already generates the sale of 6,000 additional copies of a book. Even better is Oprah Winfrey’s endorsement which easily leads to a few hundred thousands extra books sold. So it is understandable that she established her own book club to capture some of the value she creates (Green 2005). An important asset of experts is, however, their supposed objective valuation. So by accepting payola-like payments they put their reputation at risk.

Also peers may create value, by bringing certain items under the attention of their friends and colleagues and praising these. Only incidentally these peers are rewarded for this by the innovators. They may for example receive a certain present if they provide a firm with the address of a possibly interested customer (for example for a magazine subscription or a mail order catalogue). The more marketing endeavours are personalised, however, the more these peers probably will be rewarded by firms for their share in creating value. Also modern ‘viral marketing’ approaches more or less successfully try to imply in a commercial way these connectors (Rogers 2003: 313-314). So, some of the ‘peers’ at a certain moment are promoted into recognised and compensated experts. They may be paid to promote products (especially the ones they like themselves), to ‘hunt’ cool trends, to write reviews, or to become paid advisers or brokers. But most peers only get informal compensation from their peers themselves: I help you, because you helped me. If you helped me a lot with certain suggestion, I maybe pay you a meal or give you another present. Here we remain in the realm of anthropological exchange approaches, which draw the attention to forms of informal ‘bookkeeping’ of mutual favours between actors. All of this illustrates the fact that there is no economic value creation without at least a reconfiguration of cultural values, with the ‘help’ of different actors outside organisations, who increasingly are compensated for this.

6. CONCLUSIONS

Concluding, in this paper it has been argued that:

1. It is useful to make use the Darwinian framework of variation, selection and retention/speciation to assess relative success of fashion innovation.
2. Fitness of innovation in economic environments can best be defined as value to (different kinds of) selectors in a certain selection system.
3. Selection of innovations takes place in hierarchical and market selection environments, and in hybrid combinations of these – all of them with different criteria of success or fitness (value).
4. Value entails a quantitative and qualitative evaluation, related to a culturally determined set of preferences. Some of these are translated into explicitly ratified selection criteria, most remain more tacit.
5. Technical aspects of the fitness of innovations mostly relate to their ‘relative advantage’, non-technical aspects to their (non-) compatibility with existing norms and values. But also relative advantage is based on perceptions and non-technical norms and values.
6. Creating economic value through innovation always entails the reconfiguration of cultural norms and values leading to a reconfiguration of customer preferences.
7. The more radical the innovations, the more radical the reconfiguration of cultural values and the more important the role of new concepts and categories – and experts explaining these to larger audiences.
8. Fashion entails, however, mostly marginal innovation which is easier to understand. Fashion-like ‘marginal differentiation’ has spread to most other industries, where it has increased the rate of innovation.
9. Experts, opinion leaders and peers play an important role in the cultural creation of economic value. Increasingly they are taken seriously by marketers and rewarded for this.
10. Tools for e-business (like EDI or the processing of POS customer data) are themselves selected within the hybrid selections systems, described in this paper, but also change the character of these in turn. To some extent e-business tools allow for new business models (for example combining product placement in television shows with actual sales), to some extent they reinforce the fragmentation of markets; they also have stimulated an explosion of self-appointed blogging ‘experts’ and in this way even further fragmentation of meaning and attention.

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