Part A: Media, Globalisation and the European Imaginary

In this first part of the book our authors focus on different aspects of popular culture in a European and cultural perspective. Their interest is in how audiences are responding to and managing the shifting landscape of an increasingly globalised culture available to them through the media. Stig Hjarvard shows how the mediatization of toys is an important part of the globalization and commercialization processes. Toys are not just to be played with; they convey and mediate important meanings for their users. The article on the one hand offers a detailed study of this historical development from a national company to a global media industry, but on the other hand also introduces general concepts of mediatization, imaginarization, narrativization and virtualization as strategies for developing cultural identities and consumer products. Roberta Pearson and Máire Messenger Davies in their empirical reception study of Shakespeare and the American TV-series Star Trek offer an empirical investigation into audience responses to products normally placed at either end of a traditional taste hierarchy. But in this study of how audiences react to classical European and American popular culture, Pearson and Messenger question too crude oppositions between European high culture and American mass culture and ‘dumbing down’, and they discuss broader issues of popular imagination and popular culture in the cinema and on television. The dynamic between a global media power and a more local-national cultural context is also in focus in Kirsten Drotner’s article on audience responses to Disney media products. The specific focus of the article is again related to larger questions of cultural identities, homogenisation and diversity in the readings of global media products. The article presents a bottom-up perspective on globalisation and the whole of media in mundane discourses. Finally, Daniel Biltereyst analyses the highly debated forms of ‘Reality-TV’ in general, as a new popular form of factual entertainment, and in relation to concrete data on the debate and reception of reality-TV in Belgium. The concepts of media panics and moral panics that have a long tradition in European media research are used to shed light on this new media phenomenon. In his discussion descriptive, sociological perspectives meet with aspects of a more normative media theory.

Stig Hjarvard

From Bricks to Bytes:
The Mediatization of a Global Toy Industry

Introduction

Half a century ago, kid’s toys were made of solid materials: wood, iron, plastic etc. To play was synonymous with physical activity. Kid’s toys often resembled the material inventory of the adult world: they were miniatures of mother’s and father’s real worlds. Girls played with small copies of the inventory of the household, in particular clothes, kitchen utensils, and baby accessories. Boys played with building tools or artifacts from the modern world: ships, cars, trains, guns, airplanes etc.

Today, toys are increasingly of an immaterial nature. This is particularly the case with software for computer and video games, but other toys increasingly involve immaterial aspects like role-playing, programming etc. Play has become synonymous with mental activity: imagining, planning, simulating, reacting, communicating etc. Physical activity is, to a limited extent, still a necessary part of playing, but the manipulation of objects no longer involves the same concrete sensor-motoric action. Objects are visual representations on a screen and they are manipulated through a media interface: the mouse, the joystick, game pad etc. Kid’s toys seldom resemble the inventory of their mother’s and father’s world. Instead, they are very often part of a fantasy world, situated in a distant past or future, a faraway galaxy, or a supernatural environment. The actors inhabiting
these imagined universes are seldom of a realistic nature; on the contrary they often possess superhuman strength, power, wealth, or beauty, or they are only partly human: half machine - half man, half animal - half woman, half zombie - half human etc.

This chapter puts forward the hypothesis that this gradual move from solid to immaterial toys can be conceptualized as a mediatisation of toys. Through a case study of the history of the Danish toy manufacturer LEGO, it discerns three different aspects of this process of mediatisation: imaginarization, narrativization, and virtualization. The process of mediatisation is certainly not limited to the world of toys and play. On the contrary, it is to be considered a core element in current social, economic and cultural transformations, and, as such, a key feature of the current move towards a global network society. Mediatisation goes hand in hand with both globalization and commercialization. The 'logic' of mediatisation applies to a whole range of social institutions: politics, economics, sex, culture - and, among others, to the play world of children and its cultural artifacts; toys.

Media and Information in the Global Network Economy
In his analysis of the global network society, Manuel Castells (1996) emphasizes the crucial role of information technology for the development of what he calls an 'informational economy'. The social and economic dependency on information and information processing is not new - most societies' economies have relied on information. However, what is definitively new in the economy of the network society is the key role attributed to information. Society becomes 'a specific form of social organization in which information generation, processing, and transmission become the fundamental sources of productivity and power' (Castells, 1996, p. 21).

Communication media are responsible for this generation, processing and transmission of information and as such they facilitate the greater degree of interdependency, the extension of social networks, action at a distance etc. that characterize the global network society. Paraphrasing Marshall McLuhan's notion of the 'Gutenberg Galaxy', Castells (2001) talks about the emergence of the 'Internet Galaxy'. As the printing press paved the way for a social and political revolution, so will the Internet - as a kind of generalized media platform - promote a whole new social infrastructure. Thus, media are not only channels of interaction, but mould the ways in which the interaction takes place. Communication and media structures will play the same role as natural and physical infrastructures have played in the past. Just as towns were founded along rivers and coasts, the 'nodes' and 'hubs' of the network society will be founded adjacent to vital centres of communication. As a consequence, the positions of individual actors in this new communicative infrastructure will be decisive for their ability to manoeuvre in a global society: Access to the media and the conditions attached to their use, the areas of the world connected by them, and to what ends - factors like these will be the sources of power and influence.

Manuel Castells calls this new communication infrastructure a 'culture of real virtuality' (Castells, 1996). By this he means that the virtual world is not merely a simulation or 'pseudo world', but is in fact a social reality. He points out that previously distinct media are converging, melding into a multimedia system that soon will be able 'to embrace and integrate all forms of expression, as well as the diversity of interests, values and imaginations, including the expression of social conflicts' (Castells, 1996, p. 374). This global media system creates a new reality, where visibility becomes crucial to social actors: Whether or not something is real and can be of consequence depends on its presence in the global communication structure. Lack of visibility means exclusion from the social reality that is the product of media's representation.

Cathedrals of Consumption
Manuel Castells focuses in particular on the role of information technology in production and distribution in the last decades of the twentieth century, but a similar and related development has taken place in consumption as well. George Ritzer (1999) has drawn attention to the fact that the means of consumption have been revolutionized. In particular in highly developed industrial countries, the consumption of goods has accelerated and the way in which goods are consumed has been industrialized, rationalized, and informatized. A highly visible result of this development is the advent of 'cathedrals of consumption', as Ritzer labels them. Such places of pilgrimage for excessive consumption come in many different forms: theme parks like Disneyland and LEGOLAND; enormous shopping centres or malls that house everything from special shops, restaurants, supermarkets, to entertainment centres (Tivoli, cinemas, casinos etc.), 'megastores' for specific product lines (e.g. music, electronics, books) and global chains for specific products or services (Burger King, Planet Hollywood, Seven Eleven).

The revolution in consumption has paved the way for a 'hyper consumption', in which a steady growing amount of consumer goods has to be sold and consumed within an ever-shorter time cycle. The industrialization and technologization of consumption have spread to many social areas, including social institutions that previously were located outside the consumer market. Museums and sport stadiums, for instance, have gradually become more and more involved in the sale and consumption of consumer goods. The advance of electronic - mediated - methods of credit and payment, in particular the credit card, has worked as a lever for the spread and intensification of consumption (Ritzer, 1995).
In continuation of Max Weber's analysis of the industrial revolution, George Ritzer draws attention to the fact that industrialization of consumption implies an extreme rationalization of work processes related to consumption and the appearance and characteristic of products (taste, functionality etc.). In order to make hyper consumption possible, all aspects related to consumption must be thoroughly rationalized. Rationalization implies a constant tension between enchantment and disenchantment. The cathedrals of consumption are an attempt to create an enchantment through consumption. In highly developed industrialized societies, competition in the market place cannot longer be based on the simple utility value, instead, commodities must be furnished with symbolic qualities that endow purchase and usage with an extra quality. A commodity must display a visible difference compared to others in order to prompt a purchase, and the social environment of consumption should be pleasant, entertaining, and, at best, an 'event'.

The cathedrals of consumption are created to endow purchase and consumption with these qualities; as Ritzer describes it: 'Although at one time enchantment stemmed from human wizards or magicians, it now stems from the wizardry of modern robotics and computerized technology. Ultimately, it is the technology of the modern cruise, the Las Vegas casino, and Disney World that astounds us, not the humans who happens to work in these settings or the things they do' (Ritzer, 1999: p. 102).

The drawback of rationalization is that it can just as well provoke disenchantment. For children, Disneyland and LEGOLAND may from a distance appear as magic kingdoms, but the actual experience may just as well be the opposite: endless lines, standardized and calculated experiences, uniform products, personnel that repeat meaningless sentences and behaviour etc. The result is disenchantment, a disappointment of not meeting the unique characteristic of magic; the magnificent, the exceptional, the unforeseen. In order to avoid such consumer dissatisfaction, the consumption industry continuously develops larger and more spectacular symbolic environments for consumption, not least with the use of information technology and media culture.

**Media in the Entertainment Economy**

From an economic point of view Michael Wolf (1999) has - not unlike Ritzer - drawn attention to the increased role of entertainment in the globalized economy. The entertainment industry itself continues to grow and entertainment components are added to products and services from other sectors of the economy. Service sectors like the bank business, that, until few years ago were considered the antithesis of entertainment, have now added a certain amount of entertainment. Not only should it be easier to make a banking transaction through credit cards and new media, it should also be a pleasure. Young customers get personalized credit cards with motifs from youth culture; advertising emphasizes the ease and joy of netbanking, loyal customers get bonus offers with luxury items, certain bank services, like the 'millionaire account', resemble a lottery. The use of media stars and brand names from the entertainment industry provides ordinary consumer goods and services with a higher attention value. The result is a growing symbiosis between the entertainment industry and industry in general, in which industrial brands and entertainment stars merge into each other: 'Brands and stars have become the same thing. [...] In the emerging world economy, where entertainment and the laws of the entertainment business infuse more and more of the rest of the world of commerce and culture, successful business needs star brands to bring consumers through the door' (Wolf, 1999, p. 28).

Not least, companies that want to penetrate new markets quickly as part of a global marketing strategy, often make use of media symbols to enable a level of recognition among customers that would otherwise be extremely expensive and difficult to achieve. However, such a strategy does also entail dangers. Once a company has attached itself to the entertainment industry, it is difficult to turn back. The company must continuously renew the entertainment component and not only the product, otherwise, the consumer will get disappointed and choose another product. As a consequence, still more companies become dependent on the ups and downs of the entertainment sector: 'Businesses that were traditionally less volatile are now subject to the entertainment business cycle. They are dealing with the same audience realities that every producer has sweated over and prayed since the creation of the chorus line' (Wolf, 1999, p. 56).

In a globalized economy both production and consumption has increasingly become dependent upon information and media technology, and the symbolic content and entertainment function of the media gain a foothold in more and more types of ordinary consumer products. Whether this is described as the arrival of an informational economy (Castells), a break-through for an entertainment economy (Wolf), or a revolution of consumption through enchantment (Ritzer), a common thread runs through all of these analyses: the growing importance of media and communication technologies. These diverse, but related tendencies can be described as a mediatization of economy and culture. It is my hypothesis that globalisation and commercialization entail an increased mediatization, both at a material, economic level and at a symbolic, cultural level.

**Mediatization**

Mediatization as a concept denotes that the media influence social institutions in ways that exceed the simple fact that all institutions rely increasingly on mediated information and communication. The concept has so far not been properly
defined, but it has been used frequently (together with similar meanings) in studies of political communication (Arnau, 1999; Altheide and Snow, 1988). Mazzoleni and Schulz (2002) suggest that the core meaning of mediatization is the 'problematic concomitants or consequences of the development of the mass media'. In the case of politics, this implies that 'Mediatized politics is considered to have lost its autonomy, to have become dependent, in its central functions, on mass media and continuously shaped by interactions with mass media' (Mazzoleni and Schulz, 2002, p. 2).

The notion, that mediatization makes institutions dependent on media in their core functions is an obvious element of the mediatization process. However, it is misleading a priori, i.e. as a defining characteristic, to suggest that this dependency is problematic in itself. At worst such a definition would entail a normative perspective of permanent decline, interpreting all new dependencies on media as one further step down the road of political and social deterioration. Habermas’ normative account of the decline of the public sphere and the rise of a mediated publicity culture serves as a paradigmatic example of such deep-rooted skepticism towards (mass) media (Habermas, 1989).

As Schudson (1978, 1997), among others, has rightly demonstrated, much social analysis of mediated politics and mediated social interaction in general is based on the assumption that non-mediated, e.g. face-to-face communication, is inherently better and more democratic, and tends to ignore the fact that democratic ideals, both historically and presently, are heavily influenced by the communication practices that media have made possible. Furthermore, criticism of mediatization often fails to acknowledge the fact that it is very hard to imagine a democratic polity and culture in highly advanced and complex societies without the intervention of media. Instead of considering mediated communication as a less valuable substitute for non-mediated forms of communication, it is heuristically more productive to suggest that mediatization implies both a partial substitution of existing forms of social interaction, and an expansion of the existing repertoire of communication that also changes the condition of face-to-face communication (Hjarvard, 2002). Following this, I will suggest a non-normative definition of mediatization that leaves the question of social improvement or deterioration to empirical research, rather than an inherent theoretical premise.

**My working definition** of mediatization is as follows: Mediatization implies a process through which core elements of a social or cultural activity (like work, leisure, play etc.) assume media form. By media is understood a technology that allows transfer or interaction with a symbolic content across time or space. A social or cultural activity can assume media form in two different ways, of which the first is the strongest form of mediatization; the second is a weaker form of mediatization:

1. The social or cultural activity itself assumes media form, after which it must be performed through interaction with a medium. A rather simple example of this is the development of chess computer programmes that transfer the chess playing activity between two people to a mediated environment. A more complex example is home banking that allows all types of financial activities (payments, loans, currency exchanges, market information and analysis etc.) to be carried out through mediated interaction with computers via the Internet.

2. The symbolic content and structure of the social and cultural activity is influenced by media environments that they gradually become more dependent upon and interconnected with. A simple example is the use of well-known media figures in the marketing of non-media products like burgers from McDonald's. A visit to McDonald's becomes not only a particular dining experience but also a meeting with and a way of collecting media figures from media created symbolic environments (films, cartoons etc.). A more complex example is the development of intertextual discourses through which media discourses gain access to, and intertwine with, discourses in society in general. For instance, the Danes' knowledge about the USA is to a large degree influenced by media discourses (fictional as well as factual), and as a result, both political and non-political discussions among Danes about the USA are interwoven with mediated images of the USA.

Mediatization will often involve both of these aspects. For instance, the mediatization of political communication in society involves both the transfer of political communication from non-mediated settings (meetings, rallies etc.) to media environments (press meetings, TV talk shows) and the influence of media logics, symbols etc. on non-mediated forms of political communications (e.g. TV transmission of political speeches (Jamieson, 1988)).

Mediatization is a social phenomenon that originates from the interplay between many social processes, including globalization and commercialization. The argument put forward here is not that globalization and commercialization are the only factors that stimulate mediatization, but that they play key roles as levers of mediatization. The reasons why globalization furthers mediatization are manifold: the media are the key technology for the extension and spread of social activities across the globe; media stars and brands are well-known across the globe and thus valuable symbols for companies that want to expand globally etc. Mediatization as a concept and a social process is not synonymous with commercialization, but in actual social practice they are often experienced as two sides of the same coin. Mediatization is an important way in which social and cultural activities can be subsumed to a commodity form and through this, be exploited for commercial purposes. The development and spread of digital media technologies is very much
A result of the commercial potential of these technologies. They allow a much more advanced control of both sales and consumption (which in the media are very often one simultaneous process, like movie viewing) as with, for instance, video-on-demand, pay-per-view etc. The synergy thus created between media industries and industries in general favour not only the non-media industry. As non-media industries assimilate media components, the media environment as a whole gains even further momentum.

Co-operation Between Media and Toy Industry

In an American context, mediatization of toys is not a new phenomenon. Running the risk of oversimplifying the history, it began in the 1950s with the increased popularity of television for children, not least cartoons. From the 1960s onwards (Cross, 1997; Englehardt, 1986; Kline, 1993) children’s programmes were a regular and growing part of American television and subsequently, advertising began to address the target group, the children. This paved the way for the cooperation between advertising agencies, television programmers and toy manufacturers. Together they developed an economic circuit that proved economically beneficial for all. Toys were marketed not only in advertising, but in television programming as well. Half-hour cartoon series provided the toys with characterization and narratives, and thus stimulated sales, and the purchase and subsequent play with toys worked similarly as an incentive to watch the television programmes.

From the late 1960s this economic circuit between advertisers, television and toy manufacturers had acquired such momentum in the USA that it provoked reactions. American Public Services broadcasting (PBS) launched Sesame Street as a quality and educational alternative to the commercial supply and different civic groups tried to lobby for restrictions on commercial exploitation of children’s television. However, the Reaganism of the 1980s meant a victory for the commercial actors that worked for a synergy between broadcasting and the toy industry. During the Reagan era television deregulation meant commercialization of children’s television and it became the most important channel of communication between the toy industry and its consumers, the children. Concurrently with the deregulation of broadcasting in most other parts of the world during the 1980s and 1990s (in Europe, Asia, Russia etc.), this cooperation between television and toy industry has spread to many other countries.

The combination of television and the toy industry created a boom in toy sales, but at the same time it influenced the symbolic content and structure of the toy. Television advertising and cartoons are particularly well suited to promote toys that contain (or simply are) fictional characters. In particular, it was television’s ability to characterize and narrativize fictional figures that made these toys attractive. The synergy between toy and television industry fostered an endless stream of toy figures and personalities, each with their own fictional universe and accessories: Barbie and Ken, He-Man, My Little Pony, Ninja Turtles, Pokemon etc.

Television has been crucial for this initial development but other media have played a role in the evolving synergy between media and the toy industry: cartoon magazines, film, music etc. During the last decade it is primarily the computer and the Internet that have come to play an increasingly prominent role. With the computer and the Internet there has been a decisive transformation in the relation between media and toy. The toy increasingly becomes computer based (like computer games and similar software) or intelligent, as for instance dolls with microchips that allow them to talk and move and respond to certain stimuli. As such, it is no longer the case that the media only work as advertisements for the toys. The media have become toys, and toys have become media, making the synergy between toy and media industries not only more complex but also more intensive.

During the last decade, the toy industry has put a lot of marbles into the media business. Media based or media related products are, apart from being a potentially lucrative market in its own right, also a way of ensuring a higher and speedier rate of product renewal by the consumer. When a consumer buys a piece of media entertainment hardware, the ground is prepared for a regular renewal of the software. In order to legitimize the initial expenditure, the consumer will be willing to expand and renew his or her repertoire of software entertainment products.

The move of the toy industry into the media sector must, however, also be considered in relation to a new trend (indeed, an alarming trend from the point of view of the toy industry) in the consumer behaviour of children and young people. It is the so-called ‘KGOY’ phenomenon: Kids Getting Older Younger. Today, children become youngsters at an earlier age, and subsequently the age range in which children ask for children’s toys is shrinking. Instead, both children and young people demand traditional consumer goods at an earlier age, in particular clothes and media products (mobile phones, computers, television, CD-players etc.). As a consequence, the customer base for the traditional toy manufacturers is diminishing and they have to sell more within a shorter time frame to keep businesses running. The move into the media sector is a way to compensate for this change in youngsters’ behaviour. By moving from toys to media they not only respond to a change in consumer behaviour in their target group, but they also gradually get prepared for a general move into the media entertainment business as such.

LEGO as a Global Media Industry

Compared to the general international trend in the toy industry LEGO was rather
late in adjusting itself to the increased competition in the toy and entertainment industry, and its move into the media industry came even later. This was due to several factors. Although it has been an important international company for many years now, the LEGO Company has a rather conservative and centralized management structure. It is a family owned company that all through the post-war period has emphasized that growth should be financed by its own earnings and development should be based on its own ideas and values. Its origin in a provincial part of Denmark (Billund, Jutland) with a Christian culture has left its imprint on both company and work force and still accounts for the high degree of control exercised through the headquarters in Billund (Byskov, 1997; Cortzen, 1996; Hansen, 1997).

Another reason for the late adjustment to changes in the global toy market has to do with the outlook and self-conception of the LEGO Company. Through the years LEGO has - contrary to competitors like Hasbro and Mattel - not understood itself as an all-round toy manufacturer. Instead, LEGO considered itself as a manufacturer of construction toys and not anything else. Within its own niche, construction toys, LEGO had managed - due to a planned and robust growth strategy - to become the market leader in the 1970's and, because of this, did not consider the other major toy companies as direct competitors. It was not until the 1990's that a change in LEGO's self-conception occurred, and subsequently a different interpretation of the market and competition took shape. The crucial change occurred when the company abandoned the idea that the product, the LEGO brick, was the core activity and key to LEGO's image. Instead, the core of the LEGO-image was reinterpreted as a value inherent in the LEGO bricks, but applicable to other kinds of toys and types of play: quality of play. By virtue of this conceptual change, the way was paved for the production of many other, and quite different, types of toys and products.

Due to this development, the competition scenario changed: Earlier on, LEGO would primarily defend its position as market leader against piracy products and newcomers to the construction toy market. Now, LEGO was in fierce competition with, in principle, all other major toy manufacturers, among which there were several actors much bigger than LEGO. In concordance with this transition, LEGO put forward an ambitious aim for the coming years: LEGO should become the most well known brand in the world among families with children. It should not necessarily become the greatest selling or biggest in an economic sense, but its symbolic power, the brand name, should be the strongest among its target group. In order to achieve this goal LEGO had to expand rapidly on a global scale and its brand name is now marketed in relation to many different kinds of products. Thus, the company now consists of several divisions that are in principle equal: LEGO play materials (bricks etc.), LEGO Media (computer games, magazines etc.), LEGOLAND Parks (amusement parks in Denmark, USA, England, Germany), LEGO Dacta (educational material) and LEGO Lifestyle (clothes, watches etc.).

This global strategy has been accompanied by a mediatization of the LEGO products. This mediatization has not, however, been part of a unified strategy, at least not from the outset. Several divisions in LEGO have at different moments been involved in the development of media related products and at times there has been competition and disagreement between divisions, so that development has taken different and not necessarily mutually supportive directions. As such, the actual historical and empirical process of mediatization has not been a linear one. However, in order to provide an overview, it is possible to distinguish between four different steps in the recent mediatization of the LEGO product. It must be emphasized, though, that these steps represent a logical-analytical construction rather than a strict historical-temporal development. Each step reflects a certain interpretation of media and what they can be used for in the LEGO products:

1. Media as information channels. Apart from advertising, which has almost always been used by LEGO, media initially gained a foothold as an alternative way of providing building instructions and product information. Instead of paper, manuals are provided on CD-Rom or in Magazines. This begins in 1997.

2. Media as an additional and supportive activity. Media products become a minor part of the product line. The first real PC game is introduced in 1997 and more follows, but they are not well integrated into the overall product line and they primarily serve as an additional and subordinated activity. This conception of media reflects a simple imitative strategy: new media companies have great success in selling computer games to LEGO's core consumers: boys. Consequently, LEGO must also have such items in its product line.

3. Media as an integrated activity. Media based products move into the centre of the company's activity and they are treated on an equal footing with non-media products. Computer games and media characters become part of almost every product line. Intelligent bricks are developed that allow for information based play, e.g. the LEGO Mindstorms products.

4. Media as spearhead and image promoter. Even though media products quantitatively (in numbers and earnings) are still a minor part of the company's activity, they play a prominent role in the marketing of both products and brand name. In particular the computer and the Internet are important for the renewal of LEGO's image. The traditional image of being a company producing rather old-fashioned toys like construction bricks, i.e. toys of the parents' generation rather than the toys of today's children, is being
Recast through the use of media. By associating the bricks with digital media, the LEGO bricks can be projected as a toy of the future - and not as a toy of the past.

These logical steps describe the progressive mediatization of LEGO's product line and the accompanying re-branding of LEGO. They do not, however, provide an understanding of the impact of mediatization on the actual toys, the LEGO bricks. In order to develop a deeper understanding of what mediatization implies for the structure and content of the toys themselves and what kind of play mediatized toys subsequently promote, it is necessary to develop analytical concepts that can guide a more thorough examination of the changes in toys. In the following analysis I will distinguish between three different - although interconnected - aspects of mediatization: imaginization, narrativization, and virtualization. I will define these three aspects as follows:

- **Imaginization.** A process through which the symbolic content of the toy, instead of referring to the existing reality, comes to refer to an imagined world.

- **Narrativization.** A process through which the bricks, due to their physical design, marketing, or accompanying text, motivate a play with narrative qualities.

- **Virtualization.** A process through which the bricks lose their physical and tactile sensuous form and become represented in virtual universes.

**Imaginization**

LEGO's core product, the LEGO brick, was introduced in 1955 with the name 'LEGO system of play'. Earlier on, the LEGO Company had produced many different types of toys in both wood and plastic, but at the beginning of the 1950s it was decided to concentrate development efforts on one singular product, the LEGO brick. During the first two decades, LEGO bricks were first and foremost considered to stimulate construction play, in which models of the physical inventory of the modern world were built: houses, trains, roads, cars, airplanes etc. Gradually, the system became more differentiated, with still more specialized bricks that allowed for a more detailed representation of the real world. In the same process, the bricks became differentiated in relation to age, with bigger Duplo bricks for small children and Technic bricks for young people, providing better opportunities for technical refinements. The LEGO bricks boxes were gradually organized according to different thematic universes like city, railroad, space etc.

Similar to other toy products, the LEGO bricks gradually changed during the 1970s and 1980s. The thematic universes assumed a still more imaginary character, and bricks were less to be used for building models of the real world and more to be used to create fantasy worlds inhabited by pirates, Indians, knights, space explorers etc., inspired by already existing fictional worlds circulating not least through popular mass media. These imaginary universes did not replace the traditional real world universes, but they became ever more prominent. At the same time, the real world universes went through a process by which the dramatic and high-tech inventory of the modern world came to the fore; advanced police and rescue material, spaceships etc. As this imaginization gradually advances, the supply of LEGO brick boxes become organized according to the same genres and sub-genres that are known from media fiction, and in particular the genres that are preferred by LEGO's primary target group, boys aged five to sixteen years: adventure genre (knights, pirates, Indians, explorers) and action genre (racer, police, fire brigade, space etc). LEGO series specially aimed at girls gradually emerge, and here we find the typical fictional genres for girls: doll's house universes that thematize family life and emotional relations between parents and children for the youngest girls and a Barbie/Youth soap-universe for older girls, in which exclusive leisure activities make up the dominant play activity (horse riding, surfing, skiing, fashion etc.). In accordance with LEGO's educational and responsible image, some fictional genres and narrative components are missing: violence is strongly downscaled and sexual themes are completely absent.

At the end of the 1980s media genres have already become important principles for the differentiation of the thematic universes of LEGO bricks. The development in the 1990s is characterized by a further evolution in this direction (variation and differentiation of genre elements) and an approximation to specific fantasy worlds that circulate in the media. Some of LEGO's thematic universes are very similar to well-known fictional films. The LEGO adventurer Johnny Thunder who in the interwar period explores pyramids, flies in a balloon etc. has strong allusions to the Steven Spielberg's *Indiana Jones* movies. The Duplo brick series 'Little forest friends' has many similarities to the fictional universe of the Smurfs. This tendency was perhaps most evident in the Johnny Thunder series that featured dinosaur hunting on a tropical island; the similarity to the *Jurassic Park* narratives are rather obvious. However, these universes are not licensed and they do also display differences in terms of names and details.

LEGO's much more expansive global strategy from the late 1990s caused LEGO to buy media characters on a licensing basis. In 1998 LEGO reached an agreement with Disney that allowed LEGO to use characters from the Mickey Mouse and Winnie the Pooh universes. In the same year, an agreement was signed with Lucas Entertainment on the *Star Wars* series. Licensing continues to be an important feature and in 2000 LEGO made a deal with Warner Brothers about the *Harry Potter* movie, allowing LEGO to make *Harry Potter* brick universes. In the same year a contract was signed with HIT Entertainment PLC to make Duplo bricks in connection with the popular English television series for children *Bob the Builder*.
As a result, the LEGO brick packages are not only organized thematically according to different fictional genres and imaginary universes, but they are increasingly imitations of specific fictional universes already promoted - and owned - by the media industry: the world of Star Wars, Disney, Harry Potter, Spider Man etc. The licensing agreements are, from one point of view, a traditional example of cross-branding, in which two brands (e.g. Star Wars and LEGO) join forces in order to get a wider reach than each of them could get by themselves. However, as should be obvious from the abovementioned, this kind of licensing agreement has a stronger impact on the product than the mere association of the product with yet another brand. The brands (Bob the Builder, Harry Potter etc.) become the important content of the toys, transforming both the imagery of the bricks and the character of the play.

In 2000 an agreement was made with Steven Spielberg about the development of a complete LEGO film production play set; 'LEGO MovieMaker'. This includes a small film camera, video-editing software and bricks to build a complete film studio and different scenes. In the accompanying advertising material are examples of productions that children can make with this product. The examples are different imitations and partly parodies of scenes from the Jurassic Park movies. LEGO has also produced a whole range of additional packages in this MovieMaker series in order to produce many different movie scenes. With this product LEGO has 'not just created one more product that thrives on fictional stories from the media, the rationale of the play has become imaginarized; the very purpose of the play with the toy is to produce fictional universes in which narratives unfold. As such, it represents a second order mediatization: the media are used as play and the purpose of the play is to produce media stories.

Narrativization

In the 1970s and 1980s the different LEGO brick boxes were organized in thematic universes, but they were not provided with narratives. In this sense the thematic universes were completely open-ended; it was left to the children to develop stories in relation to the play with the bricks. The construction work itself was in a very simple sense narrativized, because the instruction manuals provided a detailed scripting of the building process. As such, there was a clear difference as regards degree of liberties in the construction work on one side, and in the subsequent play with the models on the other. The instruction manual prescribed in detail how each brick was to be used, and in which order, to reach the final result. But when the model was ready to use, there were practically no suggestions or instructions for the subsequent play.

One of the difficulties in creating play narratives has been the LEGO figures' small size, rigid movements and general lack of personal character traits. In order to create a narrative it is necessary to have actors with specified narrative roles (the protagonist, the antagonist, the good, the evil, the assistant etc.) that designate a series of conflicts that are to be solved, and through a set of personal or social character traits (strength, wisdom, boldness, specific skills etc.), some possible narrative developments and solutions are suggested. However, some important developments in the characterization of LEGO figures have taken place during the 1990s: the figures have become more differentiated and certain figures have been given names and act as protagonists in the different thematic universes.

The small size of the LEGO figures has made it particularly important to circulate narratives (characters, storylines etc.) through other media. LEGO has not only relied on the licensing aspect, but has tried to develop a whole environment for distribution of narratives about the LEGO characters: e.g. in the sales catalogues, magazines, computer games, television programmes, and theme parks. The LEGO catalogues increasingly show very short cartoons with LEGO figures in dramatic narrative situations. In 1998 LEGO began to cooperate with the English division of the Egmont Group in order to create a LEGO Magazine for children. The result, 'LEGO Adventures', was first launched in Britain and Germany in 1999. The magazine was a failure in Germany, but subsequently has been introduced in Poland, the Czech Republic, Russia and Spain. The Magazine contains cartoon-like stories (a combination of drawings and photos) in which the LEGO figures and characters are developed in relation to the different thematic universes.

The launch of computer and video games from the late 1990s has also helped to develop characterization and these media furthermore contain developed story lines that can be used as inspiration for the play with physical LEGO figures. In 2000 LEGO created a special unit for TV production that will produce children's programmes for television, Internet and film. This audiovisual production will most likely encourage a further narrativization of the LEGO environment. LEGO's most ambitious project in terms of developing its own narratives has been the Bionicle series. The Bionicle universe consists of a number of figures bigger than the usual LEGO men and women. Each figure has its own story and specified character traits and the Bionicle universe has its own story as well. The genesis of the Bionicle world and the stories about the individual figures are distributed through several media platforms; as computer games, as music CD's, as collecting cards, on Internet sites, and of course as LEGO bricks. As a temporary culmination of this multimedia engagement, LEGO signed an agreement in 2002 with Miramax Films in order to produce a blockbuster movie about the Bionicle story, to be released in 2004. As LEGO gains experience in the media industry, it tries to narrativize it products in two ways; by buying other media narratives to support a rapid expansion in sales and new markets and by developing its own narratives to be branded as unique LEGO stories.
Virtualization

By virtue of imaginization and narrativization, LEGO bricks are increasingly to be used to build and enact fantasy worlds taken more or less directly from the media's symbolic universes. In addition, mediatization also implies a virtualization, in which the bricks and the construction work lose their physical-sensory qualities in favour of a symbolic representation and interaction. This is most obviously the case with LEGO's computer and video games in which physical bricks are replaced by a symbolic representation, and the play with the bricks (to the extent that it is the bricks that are played with in these games) is performed by manipulation of joystick, mouse and keyboard.

The relationship between the computer and video games and the physical brick universes are rather complicated. On the one hand, there is a clear iconographic connection between bricks and games because the fictional world of the games appears as brick-made universes. Furthermore, there is also a thematic and narrative connection between some of the games and the brick universes, so these games can be considered game versions of the brick universe as for instance the games relating to the LEGO Rock Raiders or LEGO Knights' Kingdom series. On the other hand, the different LEGO games are to some extent built upon existing computer games genres (racing, adventure, chess, simulation/strategy etc.) and make use of these genres' design of game play, conflicts, solutions etc., thus, some of the games are to a large extent a LEGO version of a computer chess or simulation game. The special LEGO brick iconography is used in both physical and virtual worlds but the actual play and interaction in the computer and video games are in some respects disconnected from the LEGO bricks and are in some cases (apart from the iconography) hardly distinguishable from other games.

The connection between computer and bricks is much closer and more developed in the LEGO CyberMaster and LEGO MindStorms products that allow computer manipulation of physical bricks. To some extent the key play component of these toy products is the construction of models with 'Technic LEGO bricks, but this traditional activity has been extended with the possibility of operating the models by remote control and programming the models to act in specific ways and to respond to different stimuli (pressure, temperature, light etc.). They are a sort of intelligent toy in which the interplay between physical modelling and intelligent control provides a new kind of environment for play. In this case there is no virtualization of the physical bricks - they continue to play a very important role. Instead, another kind of virtualization takes place, in the sense that the actions performed during the play undergo a process of abstraction and formalization. Instead of just moving LEGO models around with the hand and pretending that these movements are part of a narrative (fight, pursuit etc.), the course of events is pre-programmed on a computer as an abstract and logical sequence. As a consequence, the play is to some extent de-narrativized in favour of an experimental playing with causes and effects in an abstract-symbolic environment via the programming language of the LEGO software. Whereas the computer games seem to provide a successful integration of the narrative and virtual components, LEGO has not, so far at least, managed to create a successful integration of narrative qualities with intelligent bricks.

Finally, the Internet has opened up the possibility for another kind of virtualization, the creation of virtual LEGO communities. LEGO has recently made a strong commitment to the Internet part of its activities in order to develop the LEGO Club. As a member of the club you not only acquire information but can also discuss and exchange construction ideas with other LEGO enthusiasts and participate in competitions, both virtually and in the real world. Similar to other toy and entertainment products providers, LEGO has developed its Internet medium into both a virtual shop where you can order and buy LEGO products and an entertainment platform in itself; among other things, you can play LEGO games directly on the Internet.

From Engineering to Adventure

As has been demonstrated, LEGO has undergone a profound change during the last decade. The bricks have been subject to a process of imaginization, through which most of the products are organized according to the general genres and thematic universes of the media, in some cases even imitate specific imaginary universes from the media. A second order imaginization has developed: to play is to use media to produce new fictional stories. LEGO toys increasingly invite play in which storytelling is the crucial activity and narratives about the play are promoted through a whole range of media platforms. Through digital media, bricks have not only become virtualized by moving 'into' the media as in the case of LEGO computer games, media have also become 'materialized', when computer technology gets implanted in bricks and physical objects become intelligent.

In terms of production, sales, image making and iconography, the bricks have not lost their importance. On the contrary, without them LEGO would experience both rapid financial disaster and a severe blow to its image. However, the fact that the physical bricks are still around does not make the process of mediatization less consequential or important. The bricks may still be around, but they are profoundly different from the bricks of earlier days. The physical bricks have been circumscribed by the imaginary world of the media industry and the physical bricks of today's LEGO are only one manifestation of the brick icon that circulates on all sorts of media platforms in all kinds of imaginary worlds and narratives.

One important consequence of mediatization of the toy industry is that it brings the children into closer contact with the consumer culture of the adult world. Toys
have always been part of the consumer culture in the sense that toys are products to be bought and consumed and the possession of toys has been used by children to display a certain life style and identity. Mediatization pushes the toys - and the children - even further into a consumer culture, because the content of the play becomes invested with consumer values. In the early years, LEGO was dedicated to construction toys and the inherent values of the play were taken from the world of engineering. The hero of the early LEGO bricks was the engineer who constructed the buildings and machines of the modern world. Through play with the LEGO bricks, the child itself could become a small engineer who created replicas of the material wonders of the industrial society. As mediatization progressed, heroes and values stemming from the media industry's repertoire of adventurous heroes gradually replaced the engineer. LEGO's new heroes are seldom occupied with the slow, laborious work of construction, but are much more devoted to fast action in exotic places far from civilization and increasingly engaged in different kinds of violent - yet morally legitimate! - destruction.

This development resembles in many ways the changes Leo Lowenthal reported in his study of biographies of famous people in popular magazines in the first part of the twentieth century (Lowenthal, 1961). In the early years of the twentieth century, magazines portrayed prominent people in industry, political leaders and famous scientists and the biographies were preoccupied with their achievements in the social sphere of work. Half a century later, these 'idols of production', as Lowenthal labels them, have been supplanted by a new class of heroes; the 'idols of consumption'. The new idols have not earned their fame through hard work, intelligence or political leadership, but have reached their fame through exposure in the media. What interests the media is not the Hollywood stars' education, knowledge or working life, but their leisure activities and private affairs. They are heroes due to their experiences in the sphere of consumption. This change is also useful as a general conceptual distinction between different historical phases in the cultural values of toys.

The LEGO Company and its products have been at the centre of this study, but the trend towards mediatization applies to the toy industry in general. The major toy manufacturers like Hasbro and Mattel have also moved closer to the media business in similar ways. As a consequence, today's toy store is filled, not only with teddy bears, bricks and dolls, but increasingly computer games, media merchandising and intelligent toys (James, 2000). The old animal pets and dolls are similarly changing; increasingly they are battery driven with built-in computer chips that allow them not only to move, but also to talk and respond to different kinds of stimuli; touch, sound etc. Today, even the soft toy is programmed by software.

The changes do not only take place in the toy industry and toy stores. Media companies market their products to ever-younger age groups. In particular the market for 'tweens', i.e. those who are between the age of children and 'real' teenagers, has become an important media market. The 'tweens' play with mobile phones, CD-players, television, Internet, computer games etc. just as much as they used to play with the old Wild West fort or the doll's house. For these youngsters, media companies like Nokia, Microsoft, Sony, Electronic Arts etc. are as much toy manufacturers as Mattel, LEGO and Hasbro used to be - although this age group doesn't like the connotations of the word 'toy'. It has become childish to play with toys - and attractive to play with media. If the toy industry wants to play along, it must adapt to these changes in lifestyles and behaviour. Toys have been mediatized, and the development of LEGO is in many ways emblematic of this process and its associated changes: the synergy between the toy manufacturers, the media industry, and the high-tech industrial economy as a whole, the globalization of production and consumption, the dematerialization of cultural artifacts. In short, the history of LEGO reflects the social and cultural transformation of bricks to bytes.

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