# Journal of Visual Culture

http://vcu.sagepub.com

## **Theoretical Consoles: Concepts for Gadget Analysis**

Nanna Verhoeff Journal of Visual Culture 2009; 8; 279 DOI: 10.1177/1470412909105693

The online version of this article can be found at: http://vcu.sagepub.com/cgi/content/abstract/8/3/279

#### Published by:

**\$**SAGE

http://www.sagepublications.com

Additional services and information for Journal of Visual Culture can be found at:

Email Alerts: http://vcu.sagepub.com/cgi/alerts

Subscriptions: http://vcu.sagepub.com/subscriptions

Reprints: http://www.sagepub.com/journalsReprints.nav

Permissions: http://www.sagepub.co.uk/journalsPermissions.nav

Citations http://vcu.sagepub.com/cgi/content/refs/8/3/279

## journal of visual culture



#### Theoretical Consoles: Concepts for Gadget Analysis

#### Nanna Verhoeff

#### Abstract

Theoretical objects are things that compel us to propose, interrogate, and theorize. They counter the influence of approaches that try to define, position, and fix. The mobile, handheld game console offers us a specific kind of theoretical object. A hybrid screen device that encompasses multiple interfaces, it raises questions about the specificity of the screen gadget as object, and about the entanglement of technologies, applications, and practices. Through an analysis of the Nintendo DS game console I argue that such gadgets are best understood as *theoretical consoles*: objects that raises theoretical questions, precisely, about their hybrid status.

#### Keywords

- gadgets game console mobile device mobility theoretical object
- touch screen

## The Status of the Gadget: The Case of Nintendo DS

In 2004 a new handheld computer game console, the Nintendo DS was released. This mobile device is a pocket-size, portable electronic machine for playing games from interchangeable game cartridges; it is a single unit with controls, screen and speakers, all in one.

With the DS, Nintendo updated and expanded their successful earlier mobile consoles, the Game Boy and the latest generation, the Game Boy Advance with which since 1989 Nintendo has dominated the market of mobile consoles. Like any new console, Nintendo's latest version is faster than its predecessors, allows for more detailed game graphics, and has an updated design. The DS, however, is marketed as a revolutionary console because it allegedly offers radically new possibilities for game play. The new 'specs' or technological features of the

DS are, indeed, various: voice-control options, WiFi connectivity, touch-screen technology, and last but not least, a double screen.



Figure 1 The
Nintendo DS Lite
(black edition) with
screenshots of the
game *Pokémon: Mystery Dungeon.*Courtesy of Nintendo,
Benelux

I did not choose this object because the range of these characteristics is particularly 'impressive' – a term used so often in the descriptions and evaluations of newly-launched technological devices and gadgets – in comparison with the whole array of other handheld, hybrid electronic devices such as mobile phones, PDA's, media players, and navigation systems, or competing handheld game systems such as the PlayStation Portable (PSP). It is not. In fact, as a piece of technology, it does not even represent the forefront of technological innovation.

Instead, I chose this object for historical as well as theoretical reasons. It helps me articulate the intertwinement of historical and theoretical thought, allowing us to turn from the one to the other. This turns the DS into a 'theoretical object'. This term has been brought into currency by French thinker Hubert Damisch. First casually used by Damisch and his circle at the EHESS in Paris, when interpellated on its precise meaning, the philosopher and art historian replied with an insistence on such objects' agency. He contended that a theoretical object

... obliges you to *do* theory but also furnishes you with the means of doing it. Thus, if you agree to accept it on theoretical terms, it will *produce* effects around itself... [and] *forces* us to ask ourselves what theory is. It is posed in theoretical terms; it produces theory; and it necessitates a reflection on theory. (Bois et al., 1998, 8; emphasis added)

Such objects do not form an empirical class of things by themselves. They emerge in the convergence of people discussing through and around them.

But once they acquire the status of theoretical objects, they become things that appear to attract debate.

In particular, the 2004 Nintendo DS as theoretical object helps me break open the still rather rigid distinction between historical and theoretical approaches to media studies, and specifically, to propose a methodology for analyzing contemporary gadgets. Since my proposal is modelled on the 'console-like' structure of the two approaches' interconnections, I submit the term 'theoretical console' for such a specific a theoretical object.

#### A Theoretical Console to Turn On

Like any technological gadget, the Nintendo DS flaunts its historical position. First, as an instance of commercial gadgetry, the object represents the state of the art of applied technology available for the average consumer. Its commercial value lies in the discourse of an ever-changing horizon of technological development. Moreover, as Baudrillard has put it in his critical analysis of the system of fashionable objects, this discourse is even embedded in the technological make-up of the object itself. (1996, esp. 115-138) In the 'permanent state of revolution' of technology, it is the object that 'speaks' its 'time' (9). In the midst of a continuous push for innovation and development, accompanied by ubiquitous marketing, the Nintendo DS speaks of its historical status, its moment within the longer history of the screen.

It speaks to us about the ongoing quest for innovation of the ubiquitous and polymorphous screen. If the flux of technological change is a moving image, the gadget is a still of it. More clearly than the snapshot, the metaphor of the still - a single frame out of the series of 18 or 24 frames per second that compose the illusion of movement - intimates that immediately before, and immediately after its appearance, other, related image frames scroll by. The still is a fugitive moment in a longer, constantly changing moving environment. However, the moment of the gadget is as relevant as any moment in the longer history of media development and media change. It is significant, precisely, because of its temporal state.

The DS console offers a distinctive interface and enables quite specific possibilities for engaging, interacting with its screens and with their on-screen content. This makes the DS suitable to explore the complex issues that emerge from a 'theoretical-object' approach to the Nintendo DS as a time-bound piece of material screen technology - a time-boundedness that compels a historical consideration. This includes applications that explore the new possibilities and limitations offered by the interface for the use of the object in screen practice.

But then the console flips over to its theoretical side, or screen. The second, theoretical reason for my choice of the DS is that it is a screen-based console - a significant term, literally as well as metaphorically. As a console, it is a platform or interface for the games and other software that can be played on it.1 Like any screen-based apparatus its technology and the ensuing possibilities for its users both prescribe and need content. This is the case with any screen-based interface, be it the classical movie screen, TV screen, or desktop computer screen, or any other hybrid or derivative screen. It requires, that is, an on-screen image or application, on the one hand, and the actual viewing or handling of the screen on the other. This dual need makes it necessary to consider the DS as more than an apparatus; it must be seen as a *practice*. Screening, thus, involves screen technology, screen content or application, and screen use. And when we take the gadget not simply as a material object but as a time-bound object-in-practice, it becomes productive to consider a handheld console like the DS a theoretical console. As a true console it raises questions of the articulation between theoretical and historical concerns.

The concept-metaphor of the theoretical console raises theoretical questions about the object's status and gives access to various strands of media research. Through the console thus conceived run approaches of media archaeology, of theoretical and even cultural-philosophical considerations, as well as those setups best termed with the untranslatable concept of *dispositifs*. The DS can be taken as an instance of issues that emerge from the integrated examination of screen, application, and use – all three both historical and theoretical. Mobile consoles raise related questions about the mobility *of* media (media mobility) and the mobility *by means of* media (mediated, or virtual mobility). This focus on mobility also pertains to a historical approach attentive to transformations over time – hence, the notion that this gadget can be seen as a still, a moment within the narrative flow of media development. Therefore, in the end, the two foci that turn on the theoretical console – the DS as historical and as theoretical console – are really only one.

The temporal status of a commercial product of the media industry is what makes it relevant for such a console approach that examines crossroads of history, theory, and, in relation to both, practice. When new media are launched, the focus of the advertising prose is understandably on innovation. But paradoxically, presenters of products offered as new foreground features that hark back to older products. This connection between older and newly-launched products is an acknowledgment of the inevitable historicity of even the most ephemeral gadgets. The very concept of newness, of innovation, is fundamentally historical.

It is this historical nature of any new product that offers the starting point for my reflection. From the perspective of media archaeology, then, I consider how this application of screen technologies and their material practices relates to older screening arrangements and practices, or dispositifs. The DS is an example of a *mobile* dispositif: a screening arrangement that encompasses both the perceptual positioning of the screen's beholder, and the physical set-up for interactive interfacing by the screen's use. The 'theoretical-console' motivation of this focus lays in the idea that a mobile console prompts comparison with other (older) screen technologies and dispositifs – specifically the televisual and the cinematic – and at the same time raises questions about how to regard, study, and analyze the new ones.<sup>2</sup>

What I consider to be different, hence new, is the fact that the mobility of this mobile dispositif is multifaceted; it is a mobility of screen, user, and image. In

consequence, as a mobile medium it raises questions about the screen as related to movement, touch, and the process of spatial transformation. I also consider it 'old', that is, in line with older visions of the cinematic and the televisual screen. This intersection of new and old can tell us something about change over time - which is the most succinct definition of the historical. Thus, it is here, at the moment the historicity emerges when innovation and continuity converge, that the historical entwines with the theoretical. To demonstrate this, hence, the usefulness of attributing to a somewhat banal object such as the Nintendo DS the status of a theoretical object and specifically, console, I now zoom in on three of its features that make up the particular mobile dispositif of the DS - the touch control of the screen, the mobility of the screen, and the doubling of the screen - to explore the range of issues and questions that emanate from that mobility. The result is the notion that even such an ephemeral object as a gadget can further our understanding of media culture in its inextricable knot of historical and theoretical, as well as practical complexities. The next section develops this argument concretely.

#### Portrait of a Gadget as Theoretical Console

This gadget is, then, both new and not new at all. Even though the screen features of the DS are central in the console's marketing campaign - if only because the name DS (Dual Screens) underscores these features - the use of a multi-screen format is not new for Nintendo's mobile gaming devices. Dual screens in a 'Clam Shell' case were already used in the company's Game & Watch series (1980-1991). There are, however, some important differences between these earlier portable video games and the DS console. The first obvious difference is the fact that the Game & Watch series offered single games - of which Donkey Kong is perhaps the best known - rather than operating as a platform for multiple games on interchangeable game cartridges, as does the DS.<sup>3</sup>

A second difference is that the screens of older games were partly pre-printed with both a fore- and background setting - much like in theatrical set design. These preprints situated the versatile game characters moving on the screen behind and in front of the print within a specific spatial environment. Moreover, the double screens offered one possibility only. The player was able to move the game characters from one screen to the other, a move that resulted in a linear spatial continuity between the two screens. The DS, in contrast, allows for a wide variety of game applications of the possibilities a double interface offers. The two screen spaces can be related to each other in very different ways in each game.

A third difference concerns users control of the lower screen by touch.<sup>4</sup> Hence, the lower screen is operated by a different kind of screen handling than the more traditional button controls serving the upper screen. Thus, this one thing comprises two different screen interfaces. This is what makes it a true console. Moreover, as a game console, the DS is a platform of an array of games that each provides different applications of the dual screens and the touch screen capabilities.

This dual-screen element gives the company's advertisers an argument to enhance novelty. On the Nintendo DS consumer service FAQ website, the producers stress that the letters DS, in addition to being an abbreviation for *Dual Screens*, have another meaning: '[t]o our developers, it stands for 'Developers' System,' since we believe it gives game creators *brand new* tools which will lead to more innovative games for the world's players.' In spite of the hyperbolic rhetoric deployed to accentuate innovation and global scale, the producers do have a point. The two-screen features that distinguish this console from other portable, hybrid or convergent game systems such as Sony's PSP or Nokia's N-Gage, invite specific types of games – newly designed, or versions or modifications of existing games. Conversely, these games explore the particular possibilities of the DS screens.

Moreover – a fourth difference from the older *Game & Watch* games – as Nintendo announced, with the double screens, different screen functions converge. Read the combination of the following statements, for example:

With Nintendo DS, dual screens and touch-screen technology allow you to interact with games like never before. Wireless communication allows you to experience real-time multiplayer game play, while built-in PictoChat software gives you the power to draw, write and send messages wirelessly. Nintendo DS revolutionizes the way games are played.

Two LCD screens offer one of the most groundbreaking gameplay advances ever developed. Imagine the possibilities. In a racing game, you might see your own vehicle's perspective on one screen and an overall track view on the other. Soon, games could be created allowing you to play games on one screen while sending text messages on the other.

Each 3-inch screen can reproduce a true 3D view, with impressive 3D renderings that can surpass images displayed on the Nintendo 64.The lower screen offers something never before provided by any dedicated game device: touch-screen capabilities. You no longer have to rely on just buttons to move your character or shift perspectives. Navigate menus or access inventory items simply by touching the screen with a stylus or fingertip. The possibilities are limited only by developers' imaginations.<sup>6</sup>

These instances of commercial rhetoric that stresses innovation ('like never before') nevertheless foreground the different aspects of what I intend to put my finger on, not just as newness (the historical aspect) but as a vision of what the screen is, what we can do with screens, and what makes a particular screen-based device stand out as singular (the theoretical aspect). Along with their claim to newness, the writers emphasize time, space, and practice at once. Their concept of time is not just historical but theoretically elaborated. They address the real-time aspect of communication through wireless connectivity and touch-screen interaction. They position the gadget's spatial properties, the spatial multiplication it allows, when they speak of multiple perspectives enabled and

visualized by the double screens. The writers also foreground practice, with the suggestion of more intuitive interaction with the screen by direct touch.

In addition to that theoretical-historical analysis of newness, the passages intimate a triple theoretical point the DS makes concerning the status of the gadget as object - the thing I am portraying in this section. First, the gadget as object is material. Second, a screen-based gadget is temporal as well as temporary, ephemeral. This engages the status of the gadget in the bistory of media. This status is both comparative and historical, concerning synchronic differentiations and confluence, as well as transformation over time. Here lies its historical status. Third, the gadget's functionality is determined by the way any screen-based object embodies possibilities of multiple interfaces. This is another reason why such multifaceted objects should be considered theoretical consoles rather than (singular) theoretical objects. The issues the gadget raises offer a constellation of concepts for use in media history and theory together - not conflated or merged but articulated together, flipping from the one to the other and back according to the 'thought-console' of our two disciplinary approaches. In other words, these concepts draw lines that cross at the intersection between those two approaches and thus suggest ways we can shift from the one to the other at the hub that the console is.

The first issue this gadget raises, then, concerns method: how to study it from a media-archaeological perspective. Within media history, a gadget is a commercial and vernacular technological object that is designed as interface and platform for multimedia applications. Its innovative character primarily determines its market value. Paradoxically, however, its innovation is recognizable through its similarity to other, previously marketed gadgets. The fact that we speak of generations of mobile phones, mobile game consoles, or media players indicates this assumption of a family resemblance and a lineage among gadgets.<sup>7</sup> Specifically, a gadget is a pocket-sized, handheld object designed for individual, everyday use. Its status lies somewhere between practical tool, fun object, and shiny piece of technology. As Lev Manovich stresses, it is also an aesthetic object in which such different functions and meanings converge as 'friendly, playful, pleasurable, aesthetically pleasing, expressive, and fashionable; signifying cultural identity, and designed for emotional satisfaction.' (2006: 1)

Its historical character lies in that newness. For, as a product of rapidly changing and passing technology, the gadget is a fugitive object. Therefore, we study the gadgets/objects in their newness, without merely considering them as new. Its media-historical questioning can now no longer be disentangled from its theoretical one: the gadget as theoretical console asks how we can deal with passing technologies, passing newness, within a media-archaeological comparison? Moreover, it suggests we consider the range of meanings these apparatuses have, e.g. as tool, aesthetic object, commodity, and as both selfeffacing and self-affirming piece of technology.

As a technological object, a gadget is an apparatus, a device, and an appliance, all in one. First, a gadget is an apparatus, a piece of machinery. Second, as a device it is a technological object designed to produce a particular effect. Third, as appliance it is geared towards application. This means we use it as a tool in order to perform tasks. The outcome of the device's operation is mediality, understood as the integration of these three aspects. Hence, mediality is the process of an apparatus producing effects that emerge in application. This convergence of three aspects in mediality distinguishes the DS from, say, the vacuum cleaner, which results in dust-free cleanliness, or a pen resulting in shopping lists, lecture notes or poetry. In the case of this (hardware) appliance, several (software) applications can run on the apparatus. The products of this performance of both appliance and application are various and versatile and have different types of use-value.<sup>8</sup>

As a technological moment the gadget provides a historical anchoring of technology. In this status of the gadget between apparatus, device and appliance, a convergence becomes visible. Convergence is a useful notion to account for the other side of history, namely the momentary synthesis of a moment, a synchronic slice of time where different issues, possibilities and desires converge. Here, media technologies and (therefore) of media uses convergence. However, the issue is not that different technologies join in one appliance, but that a singular constellation of technologies emerges in one console. This mixture offers a platform – console – for a whole array of possibilities for the gadget's applications. It is not a singular medium; it is, rather, a composite convergence of screen paradigms within a single dispositif. Therefore, the features of the screen that both *converge* and *transform* in this apparatus bind synchrony to diachrony and thus embody its status as theoretical console. This warrants a closer look at the many-sided screen of the DS: the touch screen, the mobile screen, and the double screen.

## Touch Screen: Dirty Windows

The first element in this convergence of screen paradigms is touch; the aspect that distinguishes the touch screen from the cinematic or televisual screen is the fact that the screen can be, indeed, must be touched. This tactile form of viewing bears consequences for the way the screen enables the viewer/user to virtually travel through the screen. This feature is, again, both new and old. Traversing has a long-standing status as metaphor for screen-based viewing. The idea of moving *through* has been dominant in our perception of how visual screen media work. It is as if touch screens were needed to understand this about the past. If novelty there is, then, this novelty is at least partly of a cognitive kind, as a new way of understanding what had already been with us for a long time.

As has been insightfully traced by Anne Friedberg, seeing has a longstanding cultural meaning metaphorically expressed in the window (2006). Not coincidentally, the Nintendo DS might be seen to promote itself in the terms of 'thing theorist' Bill Brown: as a dirty window (2004). The lack of transparency of its "windows" thus underscore the double function as both a screen or window on or through which to see things, and an object or tool, to do things with.



Figure 2 Still from Nintendo DS commercial 'Dust'. Courtesey of Nintendo Benelux.

A boy approaches the dirty rear windows of a van and writes 'GO' with his fingers, upon which the van drives away. This short evocative clip speaks of the main feature of the touch screen technology: like on a dirty window, on the touch screen (resembling Freud's mystic writing pad) we can write commands. The analogy between a dirty window and touch screen, here a visual comparison, suggests two directions in which to think the two elements. From window to touch screen, it says both simplicity and availability. A certain informality suggests that everyone can do this, hence, should own this. Conversely, from touch screen to window the clip suggests magic conferred upon the everyday; as if the world becomes more wonderful when we own such a gadget. Things will happen when we touch the opaque glass shield. Far from being transparent, the screen becomes a thing.

The commonplace comparison between the screen and the window demonstrates what is at stake. When a window is dirty, is it the window we actually see, or is it the impossibility of seeing through the window, its opacity, that marks its presence as a thing? This is how Bill Brown explains what he calls thing-ness. He refers to a novel by A.S. Byatt: 'the interruption of the habit of looking through windows as transparencies enables [Byatt's] protagonist to look at a window in itself in its opacity'. (4)

When the screen functions as transparent window, it is invisible as object. When it is opaque its materiality, its thing-ness, surfaces. This paradox of non-functionality that correlates visibility to thing-ness is particularly intriguing in the case of the screen. Unlike the window, the operation of this screen necessitates opaqueness for virtual transparency: it needs the surface to reflect the images *on* screen.

In a similar context of opacity and transparency, Heidi Rae Cooley defines what she calls tactile vision, a vision 'activated by the hand' and 'a material and dynamic seeing involving eyes as well as hands and a MSD [mobile screenic device].' (2004: 137) With this term she does not refer to touch-screen technology but to the more general manual 'handling' of mobile screens – the 'touched-screen' as we may call this broader category. Tactile vision, according to Cooley, is based on the principle of the fit: 'the particular relationship between a hand and a MSD, which opens onto a relation of interface through which vision becomes and remains tactile.' (137)

While Cooley rightly argues for a tactile notion of interfacing, I would derive a stronger point from this tactility. The invitation of touch-screen technology transforms the practice of screening as tactile activity in a haptic experience of this practice. The activity as such foregrounds the temporal collapse of making and viewing images, and merges the experience of these activities when the screen becomes interactive and viewing, at least partly, a haptic experience of productivity. Using the screen of the DS is a physical and performative activity. Viewing is no longer a matter of looking alone, nor of perceptually receiving images; it entails movements with the hand that holds the stylus. This simultaneity of touching, making, and viewing connects the viewing experience of the cinematic, to the television viewing as live, to the installation-art experience of performativity, and to the physical experience of drawing. 9 There are no images prior to the moment the user conjures them up by touch. This temporal aspect is clear in the ad, where looking and doing occur at the same moment - are, in fact, one act. This is performative looking, then. Temporally, this breaks with the cinematic dispositif; the touch screen implies live image-making. The activity of making shifts the focus from cinematic as well as televisual receptivity, to production. This feature of the screen-as-window metaphor demonstrates the gadget's enhanced newness in relation to its equally enhanced oldness.

As part of a body that can move around, the hand that touches the screen can also take the gadget to different places. I now turn to the mobility resulting from this as a second fundamentally new, yet also continuous aspect of the gadget. The manual engagement with the screen, not only in the case of touch screens but in the wider category of touched screens, also makes the screen mobile. As I argue below, multiple takes on mobility - of device, screen, and user - can be brought to bear on the particular touch screen interface.

## Mobile Screen: Carrying, Sharing, and Transporting

One form of mobility results in the possibility of touch screens for 'sharing'. Sharing, however, is a problematic characterization of the touch screen. True, as

a handheld device the DS can be taken anywhere. The portability of the device makes it a mobile medium but, because of its pocket size also an individual one. Yet, as *per* the marketing of the DS, sharing is part of the fun - of its social ecology. Even though the console is designed for individual use (the small screens allow for one user only), thanks to that same small-size mobility it is easy to pass around. Unlike the paradoxical public-yet-private viewing experience of the movies, you cannot share the moment of watching and playing but you can still share the object. Sharing concerns the way the mobile screen as a handheld object can be passed around, a mobility not of space only, but also of use and even property. Although mobile gadgets are often also called 'personal electronic devices', the DS campaign explicitly targets connectivity, communal play, and media use.

In addition to the possibility of passing around the whole gadget, the feature of connectivity enables another way of sharing. Through wireless connection the user/player can share screen space, simultaneously in multiple-player games or by sending messages and drawings (with Nintendo's DS application PictoChat). Screen space is not literally, the space of the hand that holds the screen. Instead, the experience of space can be considered in terms of a spatial continuity of eyes, hand, screen, and screened space. In response to earlier screen technologies, the mobility of the gadget is therefore best understood as the spatial extension not beyond the screen (into the screened space) but before the screen (between eye and screen). More intimate than a distant screen, more individual than a large screen, more intuitive than a separated screen, the handheld aspect of mobile screen emphasizes the continuity between spaces, allowing for what can be called space-binding - a particular characteristic of televisual connections between spaces that fundamentally alters the experience of time within a place (McCarthy 2001: 74).

This brings me to another aspect of spatial continuity, namely the impact of time on space. Continuity is spatial but inevitably also temporal. Simultaneity and the sharing of screen space is a way of temporalizing space. Continuity, and in its wake, sharing are, however, not only clarifying but also mystifying terms. They suggest a social advantage, an overcoming of individualism and loneliness. When speaking of the 'bi-located psyche' of the player, Parikka and Suominen (2006) argue that this discourse of connectivity does not disrupt the traditional separation between public and private domains. Instead, this discourse expands on another trope, of virtual mobility. Sharing and connectivity concern transport. Space itself is transported: the expansion of space through the media device, whether or not with clean windows, allows the player to do something else, somewhere else. Thus, the mobility of the device comes to stand for the mobility of the medium.

It follows that mobility operates on different levels: the mobility of the device, the mobility of the player/user, and the mobility between places and users. What is most significant for the mobile game console, then, is the way the mobility of the screen and its user meets the mobility on the screen; the mobility of the screen relates to the virtual mobility that the screen 'images'. Drawing attention to that double-edged mobility turns the console as gadget once more into a theoretical console.



Figure 3 Sharing and binding screen space with *PictoChat*. Courtesy of Nintendo Benelux

There is however a paradox at the heart of this mobility: that of the immobile spectator. Anne Friedberg has pointed out this paradox of the cinematic viewing arrangement. (2006) The virtual mobility of the medium is made possible, precisely, in the space between the immobile (cinema) viewer, the static screen or frame, and the mobility of the images on screen. This is yet another way in which our console is both new and old; it derives its newness from its compliance with desires provoked by older screen media.

In the case of the DS the spectator is a player, a user, and is physically engaged when using the console. The touch screen is screen and controller in one, requires physical action, and such action entails movement. But movement is not mobility; moving one's hand is not the same as moving around. This brings me, once more, to the 'old' aspect of this gadget. The immobility of the spectator is required for the classical screen, of which the film screen is the paradigmatic

example. The newness resides in the fact that mobile screens not only allow mobility of both body and screen, but position the mobility of the body within a number of relationships.

The DS embodies a newness it shares with many other contemporary gadgets. This further develops its status as theoretical console. As Ingrid Richardson argues, they set up a distinctive relationship between body, screen/technology, and environment/space:

The idea that embodiment is possible relies largely on the supposition that our engagement with screen media requires a stationary body, such that one's awareness of the corporeal recedes. Yet, as I have suggested mobile media complicate this relation, and facilitates a physical mobility of the body, whether pedestrian or vehicular, partially returning one's attention to physical location and the navigation within and around material environments. (2005: np)

This hybrid mobility with mobile screens is most emphatically demonstrated in the case of navigation screens. There, our literal being in the world, our physical occupation of space and the inhering coordinates, make on-screen navigation possible. Therefore, we are becoming familiar with the principle that not only the body can become mobile, but that it has to move in order for the screen to function.

This mobility is similar to the movement of the avatar as representation of the player on the screen of racing games. There, the cars even represent the vehicle, which virtually transports the player through the virtual space of the racing track. There is, however, a difference. The navigation of the screen itself - in the hands of the user or in the car/vehicle that transports both user/viewer and device/screen - 'pulls' the avatar through the represented space on the screen of the navigation device. In contrast, the movement of buttons, finger or stylus 'pushes' the avatar across the screen space in the case of racing games.

All these aspects of mobility over-determine the simple fact that the gadget itself, as a thing, can be transported wherever the user wishes to go. It is pocketsize, handheld, and lightweight. This mobility of the thing qua thing is only the outer shell of something of which the mobility is multiple and constantly shifting. As providing us a freedom within space-time that no longer holds us, but that we, as owner of this gadget, can hold, it is new in relation to the old. Rather than a screen-window through which we can look outside, the gadget is like a remote control for the subject itself. It transports us while being on the move.

## Double Screen: Split, Insert, Map

In combination with the mobility and tactility of the screen, the DS raises the stakes of screen technology by a doubling of the screen. It does so not only literally, by offering two related screens that split up screen space, but also conceptually,

thus thickening its potential as theoretical console. As a material site for interfacing, the screen can be multiplied by combining different interfaces. The clamshell case not only makes closing the screens possible, but also divides them, splitting up single screen space into two separate screens.

Obviously, screens within screens, or perhaps more appropriately, frames within frames have a longer history than Nintendo's invention. Split screens, inserts, *mise-en-abymes*: we have seen it all in cinema – and before that in painting. Yet, the primary difference, here, is the aspect of navigation. In her section on multiple frames and screens, Friedberg explains how the digital, multiple screen allows for multitasking. This implies simultaneity of different activities in parallel spaces. (Friedberg, 2006: 233) Following the historical metamorphoses of the screen, a temporal and spatial doubling of multiple screens is perhaps the most significant newness of the digital screen. Therefore, I focus here on the fracture, yet connected, spatial arrangement of screen-based activity; the exploration of or navigation within one screen space, for example, which results in a representation of that process in another space.<sup>10</sup>

Through its multiple screens the DS makes connections between multiple (virtual) spaces, but also to multiple interfaces possible; and it makes that possibility visible. The games developed for the DS explore these possibilities for double vision. One of the clearest cases is that of racing games. Since the early days of racing games we have known the screen insert with a little map of the racing track in the upper or lower corner of the frame. These maps show little arrows, or avatars that resemble the cars that are driven in the game. On the larger screen we see a first-person perspective from a car on the racetrack.

These representations exemplify what Michel De Certeau calls map and tour paradigms. Through this theoretical view the gadget becomes a true interlocutor; hence, the technological console, at the same time, a theoretical one.

In their article 'Nintendo® and New World Travel Writing: A Dialogue,' Henri Jenkins and Mary Fuller compare exploration games to old travel narratives with the help of De Certeau's writing on 'Spatial Stories' in *The Practice of Everyday Life*. De Certeau claims that 'every story is a travel story – a spatial practice.' (1988: 115) I propose that every space contains potential travel narratives – and so do the tactile, mobile, and dual screens of the Nintendo DS.

For his logic De Certeau makes a distinction between *place* and *space*: 'space is a practiced place.' (116) Hence, every place can be turned into space by the practice of narrative. This practice is infused with 'ambitions.' Fuller and Jenkins' see in these ambitions a certain colonizing violence:

Places exist only in the abstract, as potential sites for narrative action, as locations that have not yet been *colonized*. [...] Places constitute a 'stability' which must be *disrupted* in order for stories to unfold. Places are there but do not yet matter, much as the New World existed, was geographically present, and culturally functioning well before it became the center of European *ambitions* or the site of New World narratives. (1995: np)



Figures 4 and 5 Simultaneous screens in Mario Kart and The Legend of Zelda: Phantom Hour Glass. Courtesy of Nintendo Benelux

The comparison between narrative and the conquest of the New World demonstrate the socio-historical, indeed political relevance of this view. Both are ways of turning place into space, or insignificant into significant space. As the authors continue:

Places become meaningful only as they come into contact with narrative agents [...]. Spaces, on the other hand, are places that have been acted upon, explored, colonized. Spaces become the location of narrative events. (emphasis added)

If the latter is the model of the former, then narrative is a form of conquest.

For De Certeau, maps are formalized, abstracted accounts of spatial relations, whereas tours are spatial movements, described from the point of view of the traveller/narrator. Fuller and Jenkins compare the rhetoric of the tour and the way this rhetoric produces attention to the effects of the tour, including its ethics expressed in terms of obligation, the other side of gaining control over narrative spaces. They signal the narrative aspect of touring which involves 'a constant transformation of unfamiliar places into familiar spaces.' Spatial control needs

to be reaffirmed as the tour/narrative continues. As a consequence, moving through space is a narrative appropriation of place, which involves an inherent struggle for control. In double screens this can be represented simultaneously as narrative and as spatial abstraction.

If tours are visual narratives, in the case of screen-based spatial representation, maps are visual abstractions of space. These two forms of space-making announce what double screens make possible. De Certeau was talking about traditional, analogue cartography when he used these terms as metaphors for spatial relations (the old to which the new relates). With interactive digital maps, shifting perspectives and navigation on screen are at issue. This is where the doubling of the screen becomes relevant - both practically, for the gadget, and theoretically, for its deployment as theoretical console. The virtual movements of the avatar on digital maps allow baptic navigation - an experience of navigation that results from the transfer of physical movement to another spatial realm. When the navigator moves, the avatar on the screen moves along. The continuity between spaces makes navigation between the converged mapping paradigms possible. This the DS demonstrates, proposing for our reflection the implications of mapping according to De Certeau, the way these implications respond to the old cartographies, and to what extent the newness, with all its rhetoric of sharing, truly innovates the ecology of screen technology.

### Gadgetivity

Gadgets, then, are defined by activity - 'gadgetivity'. As argued above, the Nintendo DS prompts a reflection on the gadget as a hub where many different preoccupations of contemporary visual culture and its study cross - the historical approach to media, in two directions; the theoretical understanding of how gadgets work, how they are practiced; and, superposed on both, the ethical implications de Certeau added to this crossing. As a theoretical console, the DS offers insight in the mobile screen as both a technological gadget and the cultural practices it allows- an intersection where history and theory cross. With its historical status it suggests the interrogation of the gadget as 'speaking its time' (Baudrillard) through its combination of recognizable, 'old' and exciting 'new' features. Theoretically, it encourages the exploration of its possibilities as console, a polymorphous 'screenic' platform for a variety of applications and practices. When we separate the thing - the DS in its material form - from the object - the thing that asks us what it is - we create what in science is denoted by the term 'theoretical object': a temporary construction. The object - here a particular screenic device - is imagined, constructed, in order to interrogate the meaning of the object that is theorized 'about.'

I have proposed that the DS can thus be considered, first, as a theoretical object, and more specifically, as a theoretical console. The difference between what is called a theoretical object and what I term a theoretical console is that between a thing, used and considered as object – that is, reflected upon – and a variety of practices performed through that thing – its 'consoleness.' As an *object* the DS



Nintendo already raises questions and suggests ideas about the status, the limits and the possibilities of the screen. This turns the object into a theoretical object. As a *console*, it works as a dispositif that compels particular practices, and thus it complicates these questions.

The resulting complications comprise historical and theoretical issues, which cannot be disentangled, so that the methodology of visual culture study is affected by it. Thus, it becomes a theoretical console. In this guise, we must consider the screen as the surface on which more fundamental issues about media and mediality are sketched. Many of these issues have barely been hinted at here. For example, how can we reflect on medium specificity, even when looking at one aspect, such as the screen, when the notion of a medium does not even seem to apply in any simple sense anymore?

For this reason, I contend that the console-ness of the theoretical object can be extended to the notion of theoretical object more in general. This becomes clear, for example, when art historian Rosalind E. Krauss points to this tension between theoretical object and medium specificity. She, too, declares a practice rather than a single thing - in her case, photography - to be a theoretical object. In her article 'Reinventing the Medium' she has this to say about photography in its theoretical function:

In becoming a theoretical object, photography loses its specificity as a medium. Thus in 'The Work of Art in the Age of Mechanical Reproduction,' Benjamin charts a historical path from the shock effects courted by futurism and dada collage, to the shocks delivered by the unconscious optics revealed by photography, to the shock specific to the montage procedures of film editing, a path that is now indifferent to the givens of a particular medium. As a theoretical object, photography assumes the revelatory power to set forth the reasons for a wholesale transformation of art that will include itself in that same transformation. (Krauss 1999: 292)

The last sentence makes more sense, I suggest, when we replace the word 'object' by the word 'console' and we see the transformation, including its own, as a transformation less of art but of the *practice* of photography, including art. This transformation is simultaneously a decisive extension of the cultural domain affected by it. This extension is, thus, a double one - in Krauss' case, of photography and of art, the one re-envisioning the other, so that the two are differently articulated together. Visual culture is seen not as homogeneous but as a platform - a term that is central to the Nintendo DS. As such it returns debate, contestation, and differences of opinion to both, in this case, art and photography. Something like this, by analogy, happens to history and theory through the Nintendo DS.

In addition to the many faces of the console, the specific characteristic of the portable system as a piece of technology, as hardware, the materiality, its thingness raises questions about the gadget status of the apparatus. As such it is also a gateway for gadget-ivity, the property of a tool for the user/player to do (other) things with it. In this respect, the console is best understood as a thing, instrument and interface at the same time. It is in this multiplicity that it is perhaps less a medium than a carrier of mediality. Moreover, unlike other (mobile) media players, a console is, in part, an empty interface. The software application determines part of the interface, in dialogue with the hardware elements. The complex of characteristics of the portable console as a versatile object, a thing/medium, demands a theoretical grasp on the phenomenon. We wonder what the status of its thing-ness, object-ness, or medium-ness really is. The answer to this question theorizes what a console is. As a console it hovers between three things. It is a material object – the device we hold in our hands. It is also a screen we look at as well as through, and it is a screen we touch. And thirdly, it is an interface utility, at once an invisible and visible platform – a machine for haptic output of the applications one can play on it. The DS as versatile object thus puts forward the theoretically complex *consoleness* of screen gadgets as material interfaces. It is up to the analyst, then, to approach the console-object with theoretical flexibilty.

#### Notes

- 1. Digitally animated games are not the only applications that can be played on the DS. An Internet browser, and movie and music players have been developed both by Nintendo, software developers, and as 'home brew' by the user community with which it is possible browse the web, watch movie files, listen to audio files, read maps, or e-books on the DS
- 2. On the media technologies as dispositifs of perception, see Paech (1997). For Paech the perceptual positions brought forth by modern means of transportations such as the train, the airplane and the automobile, by optical media such as the panorama or the cinematographer, and by new forms of public space such as the department store, can all be considered as different dispositifs, with the modern metropolis as a 'hyper-dispositif.' This approach takes the concept of dispositif into the field of the specific visual culture of modernity. About the project and perspective of media archeology, see Erkki Huhtamo (1997).
- 3. While I do not wish to suggest that the DS is explicitly targeted by Nintendo as retro-console, as Melanie Swalwell has pointed out in this journal (2007), the nostalgic recuperation of 'early' videogames and consoles is a remarkable recent trend.
- 4. At this point in time, common knowledge on touch screens is quite adequate. The entry on touch screens, for example, explains the significance of the technology as changing possibilities of interface, as well as in commercial terms. Wikipedia contributors. (2007) 'Touchscreen' URL (consulted October, 2008): http://en.wikipedia.org/w/index.php?title=Touchscreen&oldid=135987133
- 5. URL (consulted October 2008): http://www.nintendo.com/consumer/systems/ds/faq.jsp. Emphasis added.
- 6. URL (consulted June, 2007): http://www.nintendo.com/overviewds
- 7. Parikka and Suominen (2006) point out this rhetoric of generation in the presentation of the DS gaming platform by Satoru Iwata, Nintendo president: 'We have developed Nintendo DS based upon a completely different concept from existing game devices in order to provide players with a unique entertainment experience for the 21st century.' Quoted from Kristian Reed (2004). For the term family resemblance in the context of media history, see Verhoeff (2006: G)
- 8. This view of mediality should not be aligned with McLuhan's understanding of mediality as virtually synonymous with the mechanical. (1964) The artificial

- isolation here of mediality as result of the operation of a device of the 'use' of the gadget by a viewer/user of the device, as well ad from discursive operations that play a part in the process of mediation, is meant to clarify the multiple understandings of the materiality of the gadget as instrument only.
- 9. I understand performativity in the sense of effect-producing action. For the transformation of the concept, see Culler (2006) and, in relations to performance, Bal (2002).
- 10. This may remind us of the separate, yet connected spaces of navigation devices. Elsewhere (2008), I have argued that in those cases the on-screen of navigation is, in fact, the means for navigating off-screen space. This simultaneous on- and offscreen navigation can be conceptualized as the construction of : a hybrid space between on- and offscreen space.

#### References

Bal, Mieke (2002) 'Performance and Performativty', in Travelling Concepts in the Humanities: a Rough Guide, pp. 147-212 Toronto: The University of Toronto Press

Baudrillard, Jean (1996) The System of Objects. Translated by James Benedict. London, New York: Verso.

Bois, Yve-Alain et al. 1998. 'A Conversation with Hubert Damisch.' October 85 (Summer):

Bolter, Jay and Grusin, Richard (1999) Remediation: Understanding New Media. Cambridge, MA: MIT Press.

Brown, Bill (2004) 'Thing Theory,' in Bill Brown (ed.) Things. Chicago: The University Of Chicago Press.

Cooley, Heidi Rae (2004) 'It's All About the Fit: The Hand, the Mobile Screenic Device and Tactile Vision.' Journal of Visual Culture 3 (2): 133-155.

Culler, Jonathan 2006 'The Performative' in *The Literary in Theory*, pp. 137-165. Stanford, CA: Stanford University Press

De Certeau, Michel (1984) The Practice of Everyday Life. Berkeley, CA: University of California Press.

Friedberg, Anne (2006) The Virtual Window: From Alberti to Microsoft. Cambridge, MA: MIT Press.

Fuller, Mary and Henry Jenkins (1995) 'Nintendo® and New World Travel Writing: A Dialogue' in Steven G. Jones (ed.) Cybersociety: Computer-Mediated Communication and Community, pp. 57-72. Thousand Oaks: Sage Publications.

Huhtamo, Erkki (1997) 'From Kaleidoscomaniac to Cybernerd: Notes Toward an Archeology of Media' in Timothy Druckrey (ed.) Electronic Culture: Technology and Visual Representation, pp. 297-303 New York: Aperture.

Krauss, Rosalind E. (1999) 'Reinventing the Medium', Critical Inquiry 25 (2): 289-305.

Manovich, Lev (2006) 'Interaction as an Aesthetic Event', Receiver (17): URL (consulted October, 2008): http://www.receiver.vodafone.com/17/articles/pdf/17\_09.pdf

McCarthy, Anna (2001) Ambient Television: Visual Culture and Public Space. Durham and London: Duke University

McLuhan, Marsall (1964) Understanding Media: The Extensions of Man. New York: McGraw Hill

Paech, Joachim (1997) 'Überlegungen zum Dispositiv als Theorie medialer Topik.' Medienwissenschaft (14): 400-420.

Parikka, Jussi and Jaakko Suominen (2006) 'Victorian Snakes? Towards a Cultural History of Mobile Games and the Experience of Movement.' Game Studies 6 (1), December. URL (consulted October, 2008): http://gamestudies.org/0601/articles/parikka\_suominen

- Reed, Kristian (2004) 'Nintendo Unveils Dual Screen Handheld.' *Gamesindustry.biz* 21 January: URL (consulted June, 2007): http://www.gamesindustry.biz/content\_page.php?section\_name=pub&aid=2847
- Richardson, Ingrid (2005) 'Mobile Technosoma: some phenomenological reflections on itinerant media devices', *Fibreculture* (6). URL (consulted October 2008): http://journal.fibreculture.org/issue6/issue6\_richardson.html
- Swalwell, Melanie (2007) 'The Remembering and the Forgetting of Early Digital Games: From Novelty to Detritus and Back Again. *Journal of Visual Culture* 6 (2): 255-273.
- Verhoeff, Nanna (2008) 'Screens of Navigation: From Taking a Ride to Making the Ride.' Refractory: A Journal of Entertainment Media 11. URL: http://blogs.arts.unimelb.edu. au/refractory/2008/03/06/screens-of-navigation-from-taking-a-ride-to-making-the-ride/
- Verhoeff, Nanna (2006) *The West in Early Cinema: After the Beginning*. Amsterdam: Amsterdam University Press.

Nanna Verhoeff is Associate Professor of Comparative Media Studies at the Department of Media and Culture Studies at Utrecht University, The Netherlands. She is the author of *The West in Early Cinema: After the Beginning* (Amsterdam University Press, 2006). She is currently writing a book about screen technologies and spatial practices, ranging from interactive panoramas and urban media facades to mobile game consoles, and navigation devices.

Address: Department of Media and Culture Studies, Utrecht University, Muntstraat 2A, 3512 EV Utrecht, The Netherlands. http://nannaverhoeff.net [email: N.Verhoeff @uu.nl]