

Glassroots surveillance. Google Glass as dispositive and apparatus¹

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1. One day ...

On April 4, 2012, a group of Google developers spread virally the video "One day ..."². On the notes of a guitar music played softly³, we see images of a guy who does breakfast, leaves home, gets a manual in a bookshop to learn how to play ukulele in one day, meets a friend, and after an aimless walk climbs on the roof of a building and serenades his girlfriend with a ukulele, playing the same music heard in the first part. The entire sequence of actions is shown through a "first person shot", that is from the point of view of the protagonist (therefore, we never see his face); moreover, a variety of visual information overlap the images of the "real" world: we can see, together with the guy, news about the weather, video messages to friends, maps and directions; at the same time the protagonist perform by voice commands many actions: he makes an appointment with a friend, takes snapshots and sends them to the web, and so on. Even the final serenade to his girlfriend is done remotely via a video call, while the protagonist looks (and shows to the girl) a striking skyline at sunset.

Actually, "One Day..." was aimed to launch a new product: Google Glass, a pair of glasses that allow users both (a) to interact with an "augmented reality" in which physical and virtual layer overlap and interact, and (b) to share live ongoing experiences with other people. As stated by the developers in a post of the group Google + dedicated to the project on June 29, 2012, "Glass helps you share your life *as you're living it*, from life's big moments to everyday experiences"⁴.

¹ A Prezi presentation of this paper can be watched at My Prezi Page <http://prezi.com/user/ruggeroeugeni>. The title "Glassroots surveillance" was suggested by Rosanna Maule: thanks, Rosanna!

² <http://www.youtube.com/watch?v=9c6W4CCU9M4>

³ The jingle is a snippet of the song *Lover's Carving* British artist Bibio from the album *Ambivalence Avenue* (2009)

⁴ <https://plus.google.com/+projectglass/posts>, emphasis added. The posted video displays the interaction between a young mother and her baby a few months: "She smiles at faces, not at devices," says the woman in front of the

In this paper, I intend to analyse Google Glass (from this point onwards simply GG) on the basis of the video "One Day...", as an example of contemporary "dispositif". I can not summarize the complex history of the French term and concept of "dispositif". I will only say that it involves two components or levels. On the one hand, a "dispositif" is a network of pieces of knowledge, practices and strategies of power, which is culturally and historically determined (definition borrowed from Foucault's conception⁵): I will use in this case the term "apparatus". On the other hand, a "dispositif" is a network of relationships and interactions between one or more subjects and one or more technological devices - usually media devices, that is machines delivering perceptual materials (definition owed to Baudry's conception⁶); I'll call this second component "dispositive". The two components are strictly connected: indeed, I assume that *a dispositive transforms apparatus strategies into first person, living and lived experiences.*

natural expressions of the small in photos and video products with GG. Further presentations have insisted on two aspects: the interest of the fashion world for the product (the fashion designer Diane von Furstenberg is a testimonial for producing a first-person narrative of his shows New York in September 2012), and applications in extreme sporting events (the new product was officially launched June 29, 2012 during the Convention Google I / O in San Francisco with the live performance of a launch stunt from a plane and landing on the building in which took place the ' event itself, all taken live from the athletes themselves each with a pair of GG). In May 2013, Google developers created the new channel "Glass Project" in which they recently posted video presentation of the product more and more detailed and realistic: <http://www.youtube.com/user/googleglass>, usually linked to everyday life and to educational activities (remote university lessons).

⁵ Michel Foucault, « Le jeu de Michel Foucault », entretien avec Colas, D. Grosrichard, A. Le Gaufey, G. Livi, J. Miller, G. Miller, J. Miller J.-A. Millot, C. Wajeman, in *Ornicar, Bulletin périodique du champ freudien*, n° 10, juillet 1977, p. 62-93. Poi in Id., *Dits et Ecrits II. 1976-1979*, Paris, Gallimard, 1994, texte n° 206, pp. 299-329. (trad. ingl. "The Confession of the Flash", in Id., *Power/Knowledge. Selected Interviews and Other Writings 1972-1977*, a cura di Colin Gordon, New York, Pantheon Books, 1980, pp. 194-228). On Foucault's conception of dispositive see also Gilles Deleuze, « Qu'est-ce qu'un dispositif? », in Aa.Vv., *Michel Foucault. Rencontre internationale*, (Paris, 9, 10, 11 janvier 1988), Paris, Seuil, 1989, poi in Id., *Deux régimes de fous et autres textes (1975-1995)*, Paris, Minuit, 2003, pp. 316-325 (trad. ingl. "What is a Dispositif?", in Id. *Two regimes of madness. Texts and Interviews 1975-1995*, Los Angeles (CA), Semiotext(e) – Cambridge (Mass.), MIT Press, 2006, pp. 338-348), Cfr. anche Id., « Un nouveau cartographe », in Id. *Foucault*, (1986) Paris, Minuit, 2006, p. 31-51 (trad. ingl. "A New cartographer (Discipline and Punish)", in Id., *Foucault*, Minneapolis – London, University of Minnesota Press, 1988, pp. 23-46); Giorgio Agamben, *Che cos'è un dispositivo?*, Roma, Nottetempo, 2006 (trad. inglese "What is an Apparatus" in Id., *What is an Apparatus and Other Essays*, Stanford (Cal.), Stanford University Press, 2009, pp. 1-24).

⁶ Jean-Louis Baudry, "Effect ideologiques de l'appareil cinématographique de base", in *Cinéthique*, nn. 7-8, 1970, pp. 1-8, then in Id., *L'effet cinéma*, Paris, Albatros, 1978 (trad. ingl. "Ideological effects of the Basic Cinematographic Apparatus", in *Film Quarterly*, Winter 1974-1975, vol. 28, n. 2, pp. 39-47, then in Philip Rosen (ed.), *Narrative, Apparatus, Ideology. A Film Theory Reader*, New York, Columbia University Press, 1986, pp. 286-298); Jean-Louis Baudry, "Le dispositive: approches métapsychologiques de l'impression de réalité", in *Communications*, n. 23, 1975, pp. 56-72, poi in Id., *L'effet cinéma*, Paris, Albatros, 1978 (trad. inglese "The Apparatus: Metapsychological Approaches to the Impression of reality in the Cinema", in *Camera Obscura*, n. 1, 1976, pp. 104-128, then in Philip Rosen (ed.), *Narrative, Apparatus, Ideology. A Film Theory Reader*, New York, Columbia University Press, 1986, pp. 299-318). Per un inquadramento delle teorie di Baudry cfr. Francesco Casetti, *Theories of Cinema, 1945 – 1995*. Revised and updated by the Author, Austin (TX), University of Texas Press, 1999, pp. 184-203. Cfr. anche esposizione e critiche (su cui torneremo) di Michele Aaron, *Spectatorship. The Power of Looking On*, London – New York, Wallflower Press, 2007, pp. 9-15; e Omar Achemi, "Le moment du dispositif", in François Albera e Maria Tortajada (a cura di), *Ciné-dispositifs. Spectacles, cinéma, télévision, littérature*, Lausanne, L'Age d'Homme, 2011, pp. 189-204.

A wider illustration of these theories can be watched in my Presentation "Dispositif, Apparatus, Dispositive" at <http://prezi.com/user/ruggeroeugeni>

Starting from these premises, I will ask two questions. First, I'll try to understand what kind of *dispositive* GG is. Then, I'll try to figure out which type of *apparatus* it refers to.

2. The GG dispositive: circuits of the visible

"One day" never shows GG, but only images that are assumed to be produced by it. As a consequence, if we try to follow the clues provided by the video, we are faced with not one but at least three possible configurations of GG as dispositive. On the one hand, not all of these configurations will prove to be really implemented when the final version of the product will be showed; on the other hand, however, the "imaginary" features introduced in the video will prove to persist within GG communication and social perception (see below).

All three configurations depart from the basic components of the dispositive: (1) a human body with motor, phonation and perceptual organs (2) a transparent screen on which are deposited images produced by (3) a micro computer equipped with (3a) an interface (in the video it appears of the acoustic type, in reality there is also a touch device located on the earpiece of the glass), (4) a micro camera provided with (4a) a memory, and finally (5) a system of data transmission and reception. These different components are correlated on the basis of two narrative programs. A first program consists of the delivering of perceptive materials to the subject using GG: the subject draws material from the computer (and from remote locations through the system of data transmission) to the screen before his eyes. I will call this program "reality". A second narrative program consists of the delivering of perceptive materials by the subject to other subjects through the use of the camera and, again, of the data transmission component. I'll call it the "sharing" program. Actually, these two programs (and consequently the components of the dispositive) can relate in different way, depending on the three configurations we introduced.

In a *first configuration*, the perceptual experience of the subject provided by GG ("reality" program) is independent from the recovery of visual and aural data by the camera ("sharing" program): the subject experiences the reality through the transparent screen of the GG, with the insertion of the data of "augmented reality" transmitted by the computer, while the camera takes up, stores and transmits images from a point of view slightly different. Notice that in this case the images of the "One day..." video are "impossible" shots, not produced or producible by GG .

A *second configuration* implies that the flow of perception of the subject ("reality") and the flow filmed by the camera and transmitted by the computer ("sharing") are the same – since the

computer works to cancel the parallax gap between the biological eye and the mechanical one, and possibly to add visual information of augmented reality. In this case not only the perceptual experience of the subject and the external observer are entirely the same, but also the video "One Day ..." appears as the product of a shooting taken by GG.

Finally, according to a *third configuration*, the subject is not directly playing perceptual experience of the world, but he does so through the "prosthetic" eye of the camera - with the supplementary information given by the "augmented reality" - . In this case⁷, "reality" program is replaced by the "sharing" one, in a sort of self-sharing experience of reality – which in turns is once again perfectly reflected in "One day.." video shooting -.

As I mentioned, the solution adopted by "real" GG is close to the second configuration⁸: the chance to enjoy an augmented reality (narrative program "reality") is independent from but similar to the recording and transmission of photographs or audio-visual flows by the camera (narrative program "sharing"). However an idea of the overlap of the two programs, or even of a replacing similar to that of the third configuration still remains, for example in the idea that the signal produced by the computer communicate "directly" with the retina of the subject (see info graphic). As a consequence, we can say that the "imaginary" side of the dispositive is not marginal, but rather an integral part of it⁹.

3. The GG apparatus: relational subjects and grassroots surveillance

Let's turn to the second question I asked: what type of background "apparatus" is translated into experiential terms by GG dispositive? We can seize this point if we start from a comparison between the GG dispositive and "classical" dispositives traditionally analysed by film and media theory (cinema, television, etc.). In all these cases, the dispositive is characterized by two features regarding the eye – subject located at its centre: his / her fixed position, and his / her isolation. On the contrary, within the GG dispositive the subject is an embodied and dynamical one;

⁷ Obviously, following this hypothesis, the screen of the glasses must be imagined not as transparent but opaque (as is the case when we use augmented reality applications of our smartphone, looking in fact a portion of reality through the camera of the device).

⁸ Actually, GG (which will come on the market in 2013 or 2014 at a cost of \$ 1500 or so) proved to consist of a stylish aluminum frame that supports a microcomputer on the right side, a tab for the Wi-Fi connection or 4 G network, a microphone, a miniature camera and a screen half-inch (about 1.3 cm) LCD transparent which is positioned in the upper right of the visual field of the subject. The Android operating system gives many functions to voice commands in order to disengage his hands http://en.wikipedia.org/wiki/Project_Glass, although in recent video is exhibited the touch interface of the right stem.

⁹ See for instance the video "How it feels", still present at the official GG site <http://www.google.com/glass/start/>

moreover, he /she is an entity in close and continuous relation with a network of objects and other subjects. It is worth noting that this feature links GG dispositive to a series of other contemporary media experience (from use of helmet cams, lipstick cams, telephone cams, to first person videogame) characterized by the use of “first person shots”¹⁰.

Therefore, we can say that a strong feature of the apparatus expressed by classical viewing and listening dispositives (Albera & Tortajada) is a “line of [constitution of subjectivity]” (Deleuze) grounded on the idea of a “positional”, static and isolated subject. On the contrary, the apparatus expressed by GG dispositive expresses a model of constitution of subjectivity based on the idea of a dynamical and relational subject.

This first feature entails a second point. As Deleuze point out in his comment of Foucault’s idea “apparatuses are [...] composed of lines of visibility, utterance, lines of force, lines of subjectivation, lines of cracking, breaking and ruptures that all intertwine and mix together and where some augment the others or elicit others through variations and even mutations of the assemblage” [342]. Any line of subjectivation is thus linked to and crossed with lines of force and strategies of power. As a consequence, we can ask what strategies of power are operating within the two apparatuses. I argue that the “classical” apparatus and its “positional” line of subjectification is crossed by a principle of *control as discipline* of the individual. On the contrary, the contemporary apparatus and its “relational” line of subjectification, is guided by a strategy of *control as surveillance* of the individual subject (see again Deleuze on Foucault)¹¹.

The key point of my argument is that the strategy of surveillance expressed and realised by GG dispositive, is distinguished from the strategy of discipline of traditional media dispositives for two reasons. First, GG dispositive makes surveillance a friendly process perfectly embedded and disguised in everyday life. Second, GG dispositive makes surveillance a shared, cooperative and “grassroots” activity: anyone can watch anyone else and, even more, anyone can watch him or herself – through and by the continuous and shared storytelling of his/her own living and lived experience -.

¹⁰ Ruggero Eugeni, “First person shot. Technology and New Forms of Subjectivity in Post-cinema Landscape”, in André Gaudreault et Martin Lefebvre (directeurs) *Techniques et technologies. Modalités, usages et pratiques des dispositifs cinématographiques à travers l’histoire*. Rennes, Presses Universitaires de Rennes, forthcoming

¹¹ Deleuze, «Qu’est-ce qu’un dispositif?», cit., pp. 345-346. It is impossible to summarize the extensive bibliography on surveillance (either referring to Foucault framework or not); I refer just to Kirstie ball, Kevin Haggerty and David Lyon (eds.), *Routledge Handbook of Surveillance Studies*, London – New York, Routledge, 2012.