

SHELL-SHOCKED AGAIN AND AGAIN

Regarding Harun Farocki's Immersion

Farocki's *Immersion* (2009) is a two-channel video of a psychologists' workshop centered on Virtual Iraq, a therapeutic computer simulation aimed at veterans suffering from PTSD. Using the concepts of immediacy and hypermediacy, Van der Poel analyzes the intertwining of scenes set in the real world and in a virtual reality. He finds however, that *Immersion* defies interpretation from this object-oriented perspective and instead, requires the roles of various subjects to be taken into account.

In a period when more and more people in our society seem to be in need of psychiatric counseling, and when time sharing of computers is widespread, I can imagine the development of a network of computer psychotherapeutic terminals, something like arrays of large telephone booths, in which, for a few dollars a session, we would be able to talk with an attentive, tested, and largely non-directive psychotherapist.¹

— Carl Sagan, 1975

Whatever despair our society's use of television induces, it must be doubled and redoubled by the vision of countless youngsters standing hypnotized before computer displays, their hands moving in the manner of those of a shell-shocked soldier.²

— Joseph Weizenbaum, 1984

The current generation of young military personnel, having grown up with digital gaming technology, may actually be more attracted to and comfortable with participation in a VR application approach as an alternative to what is viewed as traditional "talk therapy" [...].³

— Albert A. Rizzo et al., 2007

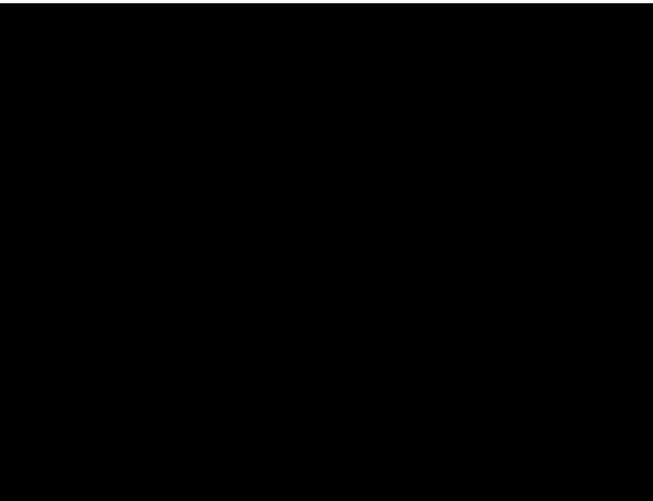
Some of the nausea was real

For a few seconds, the right screen shows a smudgy wall with bold Arabic calligraphy, a red crescent moon, and smaller scribbles in faded blues and blacks.⁴ At first sight, the shot of the frayed surface could be taken for being documentary, but there is something odd about the harsh lighting and the perfectly straight outlines of the architecture. The video continues with jerky first-person shots of the ascending of a stairway and a walk through a marketplace filled with puppet-like figures. It

then becomes clear that these scenes are set in a videogame environment of some sort. After forty seconds, just when we reach a junction at the market's border, there is an explosion that kills a handful of pedestrians, as if to complete the mimicry of a *first-person shooter* (fig. 1). The explosion fades out, and on the left screen the art work's title appears: 'Immersion'. Thus begins our viewing of this twenty-minute, two-channel video by filmmaker and visual artist Harun Farocki (1944).

After the succinct opening credits, a real-life scene presents us with a burly man in semi-formal attire in front of two computer monitors (fig. 2). The right monitor displays a videogame-like first-person shot of someone driving a Humvee down a long stretched-out road. The image on the left monitor corresponds with *Immersion's* right screen. It shows the same first-person Humvee shot, only framed within a complex Windows interface. The man explains to an off-screen audience how these controls enable one to simulate a number of wartime scenarios and events. He seems to be quite uninvolved in the demonstration, summoning virtual road ambushes and prolonged mortar shelling with a routine normally reserved for daily e-mail checking.

The burly man is clinical psychologist Albert A. Rizzo. In 2004, after seeing the combat simulation game *Full Spectrum Warrior*, he conceived how psychotherapy based on videogames could help soldiers traumatized during the Iraqi War.⁵ Rizzo's idea led to the development of *Virtual Iraq*, an advanced computer simulation of the Iraqi theatre of war. *Virtual Iraq* allows soldiers suffering from a post-traumatic stress disorder (PTSD) to relive wartime experiences in a safe virtual reality. This



1. Huran Farocki, *Immersion*, 2009, two-channel video (colour, sound), 20 min. (loop), explosion at the end of the marketplace scene. (photo: author)

form of treatment is known as immersion therapy, and *Virtual Iraq* is surely geared towards the patient's immersion. A near-perfect Gesamtkunstwerk, the complete *Virtual Iraq* set-up includes a stereoscopic head-mounted display (HMD), a set of headphones, a vibrating platform, an olfactory machine, and a mock M16 rifle with buttons similar to those of a videogame controller.⁶ This multi-sensory interface temporarily cuts off the patient from the real world and transports him back into Iraq, or more precisely, into an Iraq manipulated by the therapist. Using the computer controls (colloquially called the Wizard of Oz interface), the therapist actively construes scenarios modelled on the patient's troubling memories.⁷ The patient is repeatedly confronted with increasingly vivid re-enactments while the therapist provides him with verbal guidance via the headphones. In the course of several sessions, the patient may come to accept past events.

Treatment of PTSD is most certainly desirable, yet there is something peculiar about *Virtual Iraq*'s conflation of war, trauma, and virtual reality. In daily life we tend to separate the imagery of videogames from that of more serious matters. Therefore, we feel uncomfortable when contemporary warfare comes across as a videogame, or when videogames are related to actual violence. Such hybrids violate an intuitive (or rather, internalized) division of the real and the fictitious. Needless to



say, *Virtual Iraq* demonstrates a particular disregard for such divisions, which is supposedly why it caught Farocki's interest. Indeed, *Immersion* expands on this friction on many levels, and throughout this essay, several will be analysed in order to apprehend both its inner workings and its broader implications.

Let us return to the actual viewing. After a three-minute fragment of Rizzo's presentation, a brief shot on the left screen follows. We are in *Virtual Iraq* again, full screen, driving a polygonal Humvee down a polygonal desert road. On the horizon looms an incredibly large setting sun, perhaps a cinematic remnant from *Full Spectrum Warrior* days. There are only a few seconds to gaze at it before the screen goes black and a *Virtual Iraq* therapy session begins on the other screen. A man wearing a military uniform, an HMD and headphones is shown in medium close-up. Behind him, in the back of the office-like room, two monitors of a Wizard of Oz interface display the Humvee shot. A female therapist, who is largely off-screen, operates the interface. In order to check the equipment, the man starts moving his head around; on the monitors, the direction of the 'camera' changes correspondingly, disclosing to the therapist the man's actual view. 'Remind me of what your specific memory was', she asks him. In a detached manner, he recounts how he was driving in a convoy when an 'IED' detonated and shrapnel injured the soldier sitting next to him. At this point, the right screen goes black and on the other screen the initial full screen view from the Humvee reappears. But a few

things have changed. Smoke billows from two car wrecks in front of us and a text overlay reads 'IED – Improvised Explosive Device'. We hear someone screaming on the radio and then the sound of an impact. Slowly, we look to the right and see the wounded soldier in the passenger seat.

The switching between the real-world scenes and *Virtual Iraq* leaves us suspended in the middle of two diegeses. Although they are evidently linked, the two-channel montage thwarts univocal interpretation of their interconnection. When only one screen is active we do tend to be absorbed by the present diegesis. However, our absorption is frustrated by the many alternations between the two diegeses and by their frequent juxtaposition.

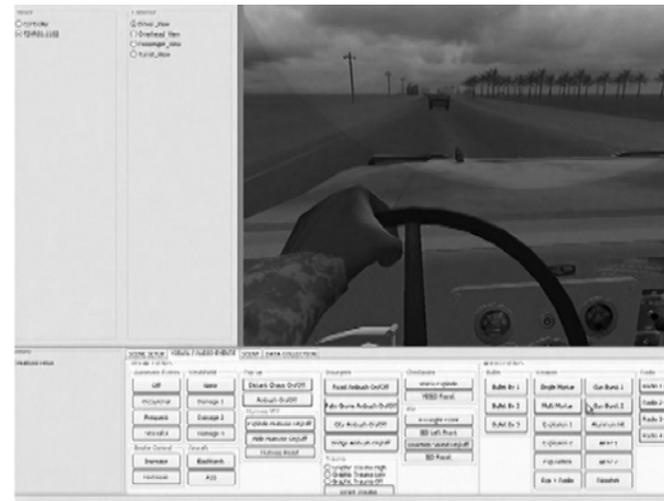


2. Huran Farocki, *Immersion*, 2009, two-channel video (colour, sound), 20 min. (loop), Rizzo explaining the Wizard of Oz interface. (photo: author)

In fact, throughout *Immersion*, an equal amount of time is allocated to *Virtual Iraq* and to real-world scenes, and about half of the time the two diegeses are shown next to each other. Furthermore, their interconnection is complicated by the notion that *Virtual Iraq* is 'framed' within the real world (i.e., it is constituted by the Wizard of Oz interface and its peripherals), while at the same time, the real-life patient is 'framed' (i.e., immersed) within *Virtual Iraq*. This leads to the impression of a frame story that lacks a master narrative, leaving us straying through a *mise en abîme*. There is little doubt that this confusion is intentional, for Farocki also carefully omitted many documentary conventions: scenes lack evident causality, personae are abruptly

introduced, and there is no commentary track and very little textual anchorage.⁸ All things considered, we can only speculate about the diegeses' interconnection and *Immersion's* meaning.

The next two scenes again present *Virtual Iraq* therapy sessions. First, there is a woman wearing a uniform and an HMD sitting in front of a wall mirror. While calmly chewing bubble gum, she recalls a moment when she wanted to shoot someone, anyone. Her confession is crosscut with a shot of another woman, also in uniform, sitting behind the Wizard of Oz interface. She asks someone off-screen for assistance with a poor audio connection. Apparently, *Virtual Iraq* is prone to technical issues like any other computer system. Second, we



see a man sitting in front of the same mirror. He is also wearing a uniform and an HDM, and seems strangely calm as well. During his recount of a roadside ambush, his view of *Virtual Iraq* is presented on *Immersion's* left screen. All the while, someone is speaking to a small group of people elsewhere in the room. The second, muffled voice and the out-of-focus reflections of figures in the mirror are easily missed, especially during a first viewing, but nevertheless amount to perceptual noise. Together with the interjection of the technical issue and the strange overall calmness, it creates an impression of distraction and gum-chewing indifference that goes against the intensity associated with therapy sessions.

Contrastingly, the subsequent, extended scene draws us into a man's agonizing recollection of his misadventures with a fellow soldier (fig. 3). Wearing an HMD and holding a mock M16, he

recounts how the two of them were tearing down insurgents' propaganda posters when a grenade hit his companion, blasting away most of his body. At this point, the man becomes very anxious and is reluctant to continue his story, but the female therapist sitting nearby – again, controlling a Wizard of Oz interface – urges Kevin (as she calls him) to press on (fig. 4). And so he does. He cowers and clutches his rifle, and then pours out his grieving memories of fear and self-loathing. Most of the time, the close-ups of Kevin on *Immersion's* right screen are juxtaposed with his view of *Virtual Iraq* on the left. Thus, as he seems to recede into his memories, he is also fully exposed, to the point of voyeurism or even intrusion. But then, who should



3. Huran Farocki, *Immersion*, 2009, two-channel video (colour, sound), 20 min. (loop), Kevin in the fourth therapy session. (photo: author)

be considered a voyeur, an intruder? The therapist, who effectively looks through Kevin's eyes and keeps probing him? Farocki, looking through the camera lens, capturing the scene and editing it afterwards? And are we not voyeurs ourselves, looking at the two screens that present a compound of all these layers? Fascinating as these questions may be, we still need to know more about the various situations and *Immersion* itself if we hope to formulate well-founded answers rather than come up with ad hoc readings. Indeed, Farocki mercilessly confronts us with the fallibility of such interpretations. For nine minutes we have watched Kevin suffer through the session when, in the middle of things, the therapist says: 'I think we probably cut now. Yeah, we cut. Yay, good job.' A small, off-

screen audience starts clapping and Kevin takes off the HMD. 'Some of the nausea was real', he jokingly tells the therapist. Two short fragments of the therapist and the 'patient' speaking to the audience about immersion therapy and high 'SUDS' further suggest that everything was make-believe.

The final shot takes us back to the beginning, as it is a repetition of the marketplace scene that ends with an explosion. This time, it is shown on the left screen and a superimposed text has been added: 'SUDS – Subjektiv [sic] Units of Disturbance Scale'.⁹ After the explosion at the junction, we linger to watch a man lying wounded on the asphalt. A policeman arrives at the scene, machine guns rattle in the distance, and then the screen fades to



black. On the other screen the end credits roll in, starting with a critical piece of information: 'Aufgenommen am 26. und 27. Januar 2009 / Workshop für Psychologen der U.S. Air Force, Fort Lewis, Madigan Army Medical Centre / Tacoma, Washington, USA / "Virtual Reality Exposure for PTSD (Post-Traumatic Stress Disorder)". In retrospect, the detachment, the background distractions, and Farocki's very presence at these seemingly intimate scenes start to make sense. We might feel tricked, but also relieved when we realize there was no real pain and therefore no real voyeurs regarding the pain of others. Yet precisely when we come to understand that *Immersion* is a montage of make-believe, the serious implications of the matter strike us. We cannot dismiss the issue of voyeurism and intrusion simply because what we witnessed were role-plays by therapists. War is real, PTSDs are real, and so is immersion therapy. The staged ses-



4. Huran Farocki, *Immersion*, 2009, two-channel video (colour, sound), 20 min. (loop), therapist in the fourth therapy session.

(photo: author)

sions replicate actual immersion therapy and the notable persuasiveness of the last role-play accordingly stems from the therapists' dealings with real trauma.¹⁰ Furthermore, at the core of this immersion therapy is *Virtual Iraq*, which replicates actual wartime events, albeit in a very personal manner. At the very last moment, the riddle of diegesis comes back to us, and now we must take reality – our reality – into account as well.

Anatomy of a visage

Part of the riddle is that, considering *Immersion's* resistance to straightforward consumption, we find ourselves surprisingly willing to keep paying attention and trying to construe a logical narrative out of the jumbled up scenes (fig. 5). This willingness can be reduced in part to *Immersion's* status as an artwork. Within the context of a gallery or museum, a cryptic media object can relatively easily induce contemplation.¹¹ But favorable circumstances alone cannot explain how *Immersion* often captivates us despite its confusing montage. Why do we so readily accept exploring the work's fleeting and slightly maddening inner realms on its terms?

The concepts of *immediacy* and *hypermediacy* formulated by Jay David Bolter and Richard Grusin can serve as a starting point for elucidating *Immersion's* opposing effects.¹² Both concepts depart from a semiotic model according to which a subject in-

teracts with an object consisting of a medium and its content. A plain reading along these lines leads to the following configuration: the viewer (subject) watches (interacts with) *Immersion* (object), which consists of a two-channel video (medium) representing the psychologists' workshop and *Virtual Iraq* (content). We can safely establish that *Immersion's* montage draws attention to the medium by alternating single screen shots and dual screen compositions, and by juxtaposing different diegeses. In this respect, *Immersion* follows the logic of hypermediacy. On the other hand, the scenes that draw us in, most notably Kevin's performance and the single screen episodes in *Virtual Iraq*, keep us in one place (and one place only) for a longer stretch of time, and therefore more closely align with the logic of immediacy.

Yet this reading fails to get to the crux of *Immersion's* complex layering of media and narratives which is buried deeper within its content. If we supplant the dual notion of medium and content with that of diegeses interconnected by media, we can delve further into *Immersion* and identify its nested frames as well as the relations between the actors. This is demonstrated by a diagrammatical account of the workshop scenes (fig. 6).¹³ Here, three diegeses have been distinguished: *Immersion*, which is enclosed by Reality (with a capital R), and the therapy sessions and *Virtual Iraq*, which are both enclosed by *Immersion*.¹⁴ Four actors are located within Reality and the diegeses: the viewer, Farocki, the therapist, and the patient (twice). The actors connect with each other and with diegeses outside their own through different media, as

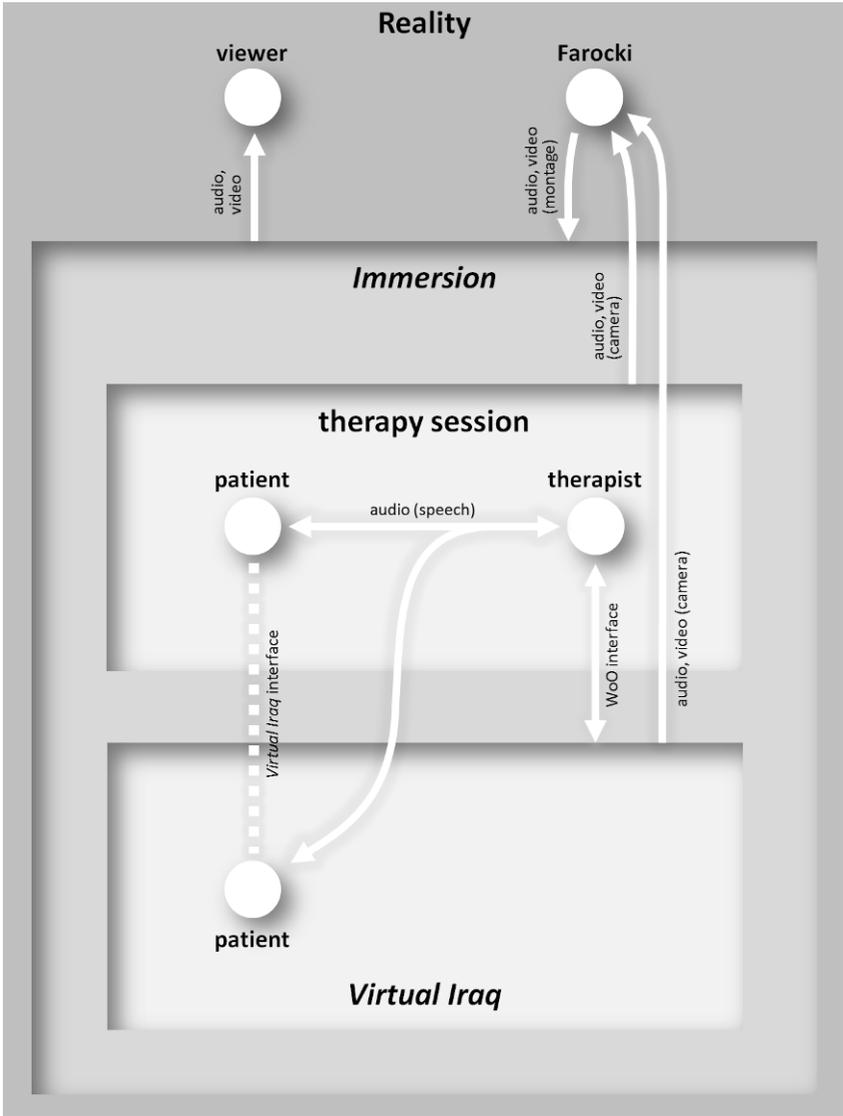
LEFT SCREEN					RIGHT SCREEN						
time	no.	type	duration	movement	mise-en-scène, sound	time	no.	type	duration	movement	mise-en-scène, sound
0:00		black				0:00	1	VR, POV	short	HMD, PAN	wall with scribbings, door, passageway
0:06		black				0:06	2	VR, POV	short	HMD	stairways next to a street
0:14		black				0:14	3	VR, POV	short	HMD	stroll through market, explosion
0:42		titles	short		opening titles	0:42		black			
0:51	1	medium shot	short	HH	Rizzo explains WoO	0:51		black			
1:42		black			(sound of Rizzo's talk)	1:42	4	VR, high angle	short	HMD, PAN	overview of market, helicopter fly-by
1:57	2	MS	long	HH	Rizzo controls WoO	1:57	4	black			
2:00	...	...	...	...	Rizzo discusses scenarios, sound effects	2:00	5	CU	long	none	WoO interface, windowed POV Humvee
3:41	3	VR, POV	short	HMD	POV driving Humvee	3:41		black			
4:00		black				4:00	6	MS	short	HH	male patient, WoO
4:33	4	VR, POV	short	HMD/PAN	POV driving Humvee	4:33		black			
4:44	...	...	...	...		4:44		black			(sound of female voice 'Uhm...')
4:46		black				4:46	7	MCU	short	HH	female patient recounts incident
5:26		black				5:26	8	MCU	short	HH	female therapist in front of WoO
5:40		black				5:40	9	MCU	short	HH	female patient recounts incident
5:56	5	VR, POV	long	HMD	POV manning turret on vehicle	5:56		black			
6:06	...	...	...	...		6:06					sound of room w. people, man talks
6:16	...	...	...	...		6:16	10	MCU	long		male patient continues talking
7:34		black			(diegetic sound continues)	7:34	...	...	...		male patient continues talking
7:49	6	VR, POV	long	HMD	town in bright sunlight, rubble	7:49		black			
8:01	...	...	...	...		8:01	11	CU	short	HH	Kevin recounts incidents
8:45	...	...	...	...		8:45	12	MCU	short	HH	female therapist in front of WoO
8:58	...	...	...	...		8:58	13	CU	long	HH/PAN	Kevin recounts incidents, pan to therapist
10:21	7	VR, POV	short	HMD	same spot, slight jump cut	10:21	...	...	...	...	...
10:25	8	VR, POV	short	HMD	same spot, slight jump cut	10:25	14	CU	short	HH	Kevin recounts incidents
10:32	9	VR, POV	short	HMD	same spot, slight jump cut	10:32	...	...	...	...	...
11:12	10	VR, POV	short	HMD	same spot, slight jump cut	11:12	15	MCU	long	HH	female therapist in front of WoO
11:16		fade to black	...	...		11:16	...	...	...	HH/PAN	Kevin recounts incidents, anxious, pan
12:49		black				12:49	16	MCU	short	HH/PAN	female therapist in front of WoO, pan
13:48		black				13:48	17	MCU	short	HH/PAN	female therapist in front of WoO, pan
14:19		black				14:19	18	MCU	long	HH/PAN	female therapist in front of WoO, pan
15:48		black				15:48	19	MCU	short	HH	female therapist in front of WoO
15:56		black				15:56	20	CU	long	HH/PAN	Kevin recounts incidents, flips goggles
16:39	11	VR, POV	short	HMD	same spot, slight jump cut	16:39	...	...	...	...	Kevin recounts incidents, again
17:01	12	VR, POV	short	HMD	same spot, slight jump cut	17:01	...	...	...	...	...
17:08	13	VR, POV	short	HMD	same spot, slight jump cut	17:08	...	...	...	...	...
17:10	14	VR, POV	short	HMD	same spot, slight jump cut	17:10	21	MCU	short	HH	female therapist in front of WoO
17:12	15	VR, POV	short	HMD	same spot, slight jump cut	17:12	22	CU	short	HH	Kevin recounts incidents, anxious
17:22	16	VR, POV	short	HMD	same spot, slight jump cut	17:22	...	...	...	...	off-screen therapist asks for SUDS
17:36		black				17:36	...	...	...	...	Kevin takes off HMD, (applause), talks
17:44		black				17:44	23	CU	short	HH	female therapist addresses audience
18:01		black				18:01	24	CU	short	HH	Kevin addresses audience, smiles
18:11	17	VR, POV	short	HMD	repetition of shot 3 from 0:34	18:11		fade to black	...	...	...
18:54		fade to black				18:54		titles	long		closing titles

5. Condensed shot list of *Immersion*. Legend: CU = close-up shot, MCU = medium close-up shot, POV = point of view shot, VR = shot set in *Virtual Iraq*, HH = hand-held, HMD = head-mounted display shot (camera movement corresponds with head movement), WoO = Wizard of Oz interface.

indicated by the arrowed lines. In addition, each actor is considered to have a natural, 'medium-less' connection with the diegesis or Reality that encloses him. A notable exception is the patient, whose perception of and interaction with his actual surroundings is for the most part substituted by *Virtual Iraq*, hence his double existence, which is constituted by *Virtual Iraq's* multisensory user interface.

Along with the shot list, this diagram helps us understand how *Immersion* creates and breaks moments of *identification*; that is, shots or scenes that tempt us into either projecting ourselves into an environment or identifying ourselves with an actor. Both types of identification more or less coincide with the logic of immediacy since we tend to forget about 'the big picture' itself when our thoughts are lost in it. In comparison to im-

mediacy, identification (especially identification with an actor) is an affect rather than an effect, and more closely related to content than to medium. For example, the appeal of Kevin's story must be attributed primarily to the actor's performance. Nevertheless, the configuration of the medium can interfere with the level of identification. When Rizzo is explaining the workings of the Wizard of Oz interface, the *Virtual Iraq* environment shown on the other screen does not absorb us, for not only is it surrounded by many distracting buttons, it is also hard to believe one is driving a Humvee on the right screen while paying attention to the presentation on the left screen. Concordantly, if Rizzo's presentation would be juxtaposed instead with Kevin's performance, neither of the scenes would be very captivating: the effect of hypermediacy would strongly diminish the affect of identification.



6. Diagram: diegeses, actors, media.

On the other hand, immediacy can facilitate and heighten identification by ‘erasing the medium’, allowing or persuading us to concentrate on the content such as Kevin’s story. In short, the fluctuating factors of immediacy/hypermediacy and identification together determine whether we are absorbed by *Immersion*, remain at a distance, or enter an intermediate state.

This notion pertains not only to the relation between *Immersion* and ourselves, but can be used to analyze other subject-object relations as well. We can therefore use it to examine the situation of actors within *Immersion* who interact with a media object. A notable case is the scene where Kevin role-plays a patient. Interestingly, his mode of

interaction with *Virtual Iraq* is somewhat indefinite, even before we come to understand that he is acting. At first, he seems to be absorbed in his memories and (we assume) in *Virtual Iraq*, since it matches his descriptions and he looks around as if he is there. But his actual surroundings start to vie for his attention. The therapist interrupts him by asking for his SUDS, and when he gets anxious, she tells him he should continue, likely distracting him. Later on, when Kevin gets even more distressed, he momentarily takes off the HMD’s goggles and looks at the therapist directly, telling her that he is feeling nauseous and wants to stop. Although this does not hamper our identification with Kevin (his behaviour seems natural), his

brief but deliberate disconnection from *Virtual Iraq* indicates that he is distancing himself. What we observe is a shift in Kevin's mode of interaction with *Virtual Iraq* caused by both extra-diegetic distractions and a change in his personal disposition (i.e., growing anxiety). Moreover, when we look back at this scene knowing it is a role-play, we realise that Kevin was probably never fully absorbed by *Virtual Iraq*. This indicates that although a medium or media object can be considered immediate or hypermediate on formal and stylistic grounds, these designations cannot be equated with a certain mode of interaction. Among the factors that determine the mode are personal disposition, a priori knowledge (a second viewing of *Immersion* will surely differ from a first), setting and surroundings, and cultural context. Therefore, when Bolter and Grusin state that '[v]irtual reality is immersive, which means that it is a medium whose purpose is to disappear', we must consider this a mere indication of what an individual may experience within a virtual reality environment.¹⁵ Some of Kevin's nausea might have been real, but most of it certainly was not.

Oliver Grau, for one, overstates the role of the medium when he writes that '[w]hen actually immersed in a high-resolution, 360° illusion space, it's only with great difficulty that an observer can maintain any distance from the work or objectify it.'¹⁶ Perhaps wary of his own overstatement, he adds: 'At best, the medium of virtual reality can be objectified through knowledge and critique of the image production methods and an understanding of their technical, physiological, and psychological mechanisms.' However, this Ardonian reservation still implies that virtual reality will subdue the subject unless it adequately resists, whereas *Immersion* demonstrates that virtual reality's power of absorption originates in the intersection of image, subject, and context, requiring subtle alignment of these constituents. This precariousness is evidenced in particular by the fake therapy sessions shown in *Immersion*, during which the subject (i.e., the therapist pretending to be a patient) is *not* absorbed, and by the critical role of patients' memories in actual immersion therapy, which serve as a basis for absorbing 'virtual' experiences – not the other way around.

But *Immersion* does not stop at showing how immersion therapy requires the patient's

cooperation, for what concerns Farocki is encrusted deeper in the matter of images. In order to reach it, he dissects before our very eyes a virtual reality – including its subjects, users, and context – and in a subdued yet bedazzling manner re-mediate, reshuffles, reframes and refashions it into a thoroughly ambivalent video construct.¹⁷ This results in a confrontation with the conditionality of absorbing imagery as well as with the complex interweaving of so-called virtual reality and Reality. Regarding immediacy and hypermediacy, it would be insufficient to say that *Immersion* simply 'makes visible' its act of representation and thereby draws our attention to its medium. Rather, the play of distancing and absorption is but a tactic contributing to *Immersion's* strategy of inducing conflicting impressions of reality and fantasy, of truthfulness and mendacity, and arguably, of right and wrong. Because *Immersion* thus defies straightforward analysis and unequivocal interpretation, we are left to consider its full complexity as a work of art, as an entity within Farocki's artistic practice, and, moreover, within a culture saturated with half-real images that reside in contexts as seemingly diverse as entertainment, industry, warfare, and psychotherapy.

Unholy alliances

Virtual Iraq was developed in Los Angeles by the Institute for Creative Technologies. With a fleck of irony, Rizzo describes it as 'the unholy alliance between Hollywood, the military and academia', referring to its US Army funding and its ties with both the University of Southern California and the entertainment industry.¹⁸ The history of *Virtual Iraq* bears witness to this alliance. It started out as a military combat simulator but was rejected and sold to Pandemic Studios. These videogame developers made it into *Full Spectrum Warrior*, the X-Box videogame that inspired Rizzo, whose team subsequently used it as a basis for the psychotherapeutic tool.¹⁹

'Unholy alliance' is also an apt description of the general subject of Farocki's filmmaking. It applies to his early films, such as *Nicht lösbares Feuer* (1969), a poignant, matter-of-fact take on the research, production, 'application', and effects of napalm, as well as to recent pieces, such as *Ich glaubte, Gefangene zu Sehen* (2000), *Erkennen und Verfolgen* (2003), and *Deep Play* (2007). The latter



7. RAF pilot controlling a Reaper drone, Creech AFB, Nevada.

Source: www.flightglobal.com/blogs/learnmount/2010/03/think-there-are-loads-of.html. (photo: UK Crown)

three works explore the vital roles of images in the surveillance of prisoners, the control and automation of machines (including missiles), and the real-time analysis and broadcast of football matches, respectively. What binds these recent productions, including *Immersion*, is the exposure of an expansive world of mechanical, often digital images that is significantly intertwined with reality.

On a superficial level, we seem to have grown quite aware of ever more sophisticated image technology and need to be quite willing to be absorbed by visual media.²⁰ Most of us can casually chew bubble gum in the midst of a high-resolution, 360° illusory war zone, so to speak. Indeed, this has become a past-time more popular than Weizenbaum could possibly have imagined. At the same time, a certain strand of visual mediation has gradually impregnated our culture to the point that it often

goes unnoticed. Its inconspicuousness does not result from an extended suspension of disbelief, which would imply a clear subject-object distinction, nor is it the *hyperreal*, which would mean there are no knowable, definitive objects at all.²¹ Rather, it is the internalisation of a type of image perhaps best described as *cybernetic*: an image, or rather, a perspective that represents people and things as interlinked information systems. For instance, *Ich glaubte, Gefangene zu Sehen* and *Deep Play* show how visual computer systems represent persons as vectors and statistics, and how these persons are consequently evaluated and treated as such, which in the case of the prisoners has very real consequences.

Immersion incorporates a more complex series of cybernetic transformations that departs from war-time memories and ends with (fake) re-

enactments of the traumatic events. One question that lingers after viewing it is how the memory of real events relates to the memory of re-enactments thereof in *Virtual Iraq*. Do new memories supplant the old, do they adjust them, or do new and old exist separately? How much of Iraq is left in the cured mind? Such questions are hard to put to rest, for war's graveness sits ill with truth-bending, even in the realm of art. Boris Groys articulates a collateral sentiment: 'After so many decades of modern and post-modern criticism of the image, of the mimesis, of the representation, we feel ourselves ashamed to say that the images of terror or torture are not true, not real. [...] After so many decades of the critique of representation directed against the naive belief in photographic and cinematic truth, we are now again ready to accept certain photographed and videotaped images as unquestionably true.'²² It follows that war 'deserves' authentic (i.e., photographed, videotaped) imagery instead of videogame graphics. Groys is correct to suggest that such genre conventions hold some merit in mainstream media (this corresponds with the above-mentioned, 'intuitive' division of the real and the fictitious), but through *Immersion* we learn that these conventions do not readily apply to real-world applications of visual media, nor to *Immersion* itself.

Needless to say, visual media are almost everywhere, even if they remain unnoticed or are processed exclusively by computers. Contemporary warfare incorporates image technology comparable to that of *Virtual Iraq* for instructing troops, controlling vehicles, conducting reconnaissance missions, et cetera.²³ Perhaps the most striking example is the deployment of tens of US and UK combat drones (i.e., unmanned combat air vehicles) in Iraq and Afghanistan. These drones are piloted safely from 'simulated' cockpits located far from the battlefield where they destroy actual targets (fig. 7).²⁴ Clearly, the technological (virtual) nature of images does not prove them chimerical, even if they defy familiar genres that instil confidence. But then again, Farocki does not aim to forcefully separate the real and the fictitious. Rather, he tries to unravel the structuring of our perception and our material conditions and in particular, how the cybernetic perspective changes them. His response is to capture on film or video significant by-products of these changes, to *cut* reality at those

historical and cultural seams that might otherwise be overlooked. As for *Immersion*, one lasting impression is that virtual reality can be understood as a powerful sensorial technology that manipulates *distance*, instead of as a diegesis separate from reality. Virtual reality can bring to the fore distant memories and places as well as push back the here and now, without necessarily introducing new elements. Overall, virtual reality operates gradually, amplifying or diminishing certain aspects of reality rather than creating or annihilating things at once. To recognize the implications of virtual reality therefore requires distance, if only to move away from the surrounding technocracy and technophilia. In *Immersion* and other recent works, Farocki develops a suitable vantage point by turning image technology on its side thus revealing an ongoing equalizing of man and technology, probably to the detriment of the former.

- 1 C. Sagan, 'In Praise of Robots', *Natural History* 84 (1975) 1, p. 10, cited in: J. Weizenbaum, *Computer Power and Human Reason. From Judgement to Calculation* (San Francisco, 1975), London etc. 1984, p. 5.
- 2 Weizenbaum, op.cit. (note 1), p. XV.
- 3 A.A. Rizzo, K. Graap, R.N. Mclay et al., 'Virtual Iraq: Initial Case Reports from a VR Exposure Therapy Application for Combat-Related Post Traumatic Stress Disorder', in: IEEE, *Virtual Rehabilitation 2007*, s.l. 2007, pp. 124-130 (129).
- 4 This essay draws from the author's current research for a master's thesis, the subject of which is the influence of computer spatiality (i.e., forms of spatial representation and spatial experience constituted directly or indirectly by computer technology) on contemporary visual art.
- 5 S. Halpern, 'Virtual Iraq. Using simulation to treat a new generation of traumatized veterans', *The New Yorker*, 19 May 2008, retrieved 1 June 2011 via www.newyorker.com/reporting/2008/05/19/080519fa_fact_halpern.

- 6 R. Black, "Virtual Iraq" videogame helps treat military veterans for post-traumatic stress disorder', *Daily News*, 30 September 2009, retrieved 23 May 2011 via http://articles.nydailynews.com/2009-09-30/entertainment/29436517_1_ptsd-post-traumatic-stress-disorder-virtual-reality.
- 7 Rizzo et al., op.cit. (note 3), p. 129.
- 8 'Anchorage' after R. Barthes, 'The Rhetoric of the Image' (Rhétorique de l'Image, 1964, trans. S. Heath), in: R. Barthes, *Image. Music. Text*, London 1977, pp. 32-51 (38-41). Despite the omission of many documentary conventions, *Immersion* does at times come across as an 'expository mode' documentary. See: B. Nichols, *Introduction to documentary*, Bloomington 2001, pp. 105-108.
- 9 The Subjective Units of Disturbance Scale is an emotional benchmark used for psychological treatment. In practice, the therapist asks the patient to (subjectively) indicate the level of distress he experiences using a 1-10 or 1-100 scale.
- 10 Kevin is Kevin M. Holloway, PhD, a research psychologist. Farocki writes about his performance: 'His acting was so convincing that friends of mine, to whom I had explained our film (*Immersion*, 2009) nevertheless believed that they were watching someone recounting a real experience. The press officer who had given us permission to shoot also thought that it was real.' H. Farocki, 'Written Trailers', in: A. Ehmann, K. Eshun (eds.), *Harun Farocki. Against What? Against Whom?*, London 2010, exh. cat. Raven Row, London, pp. 220-241 (241).
- 11 Consider Carol Duncan's concept of liminality: C. Duncan, 'The Art Museum as Ritual', in: G. Corsane (ed.), *Heritage, Museums and Galleries: An Introductory Reader*, London/New York 2005, pp. 11-12.
- 12 Immediacy is defined as a medium's transparency, that is, its ability to 'erase itself, so the user [the subject] is no longer aware of confronting a medium, but instead stands in an immediate relationship to the contents of that medium.' Hypermediacy is very much the opposite: 'If the logic of immediacy lead one to either erase or to render automa-
tic the act of representation, the logic of hypermediacy acknowledges multiple acts of representation and makes them visible. [...] [H]ypermediacy can operate even in a single and apparently unified medium, particularly when the illusion of realistic representation is somehow stretched or altogether ruptured.' J.D. Bolter, R. Grusin, *Remediation. Understanding New Media*, Cambridge, MA/London 2000, pp. 23-24, 33-34.
- 13 Note that the diagram by necessity synchronizes relations that are separated in time. Naturally, the therapy sessions and *Virtual Iraq* were filmed (as events in Reality) by Farocki before he edited *Immersion*, which only then enclosed the therapy sessions and *Virtual Iraq* as diegeses distinct from Reality. And of course, Farocki had to finish *Immersion* before the viewer could watch it.
- 14 For the sake of clarity, the ambiguity created by the role-plays has been disregarded at this point.
- 15 Bolter, Grusin, op.cit. (note 12), p. 21.
- 16 O. Grau, *Virtual Art. From Illusion To Immersion*, Cambridge, MA 2003, p. 202.
- 17 The concept of remediation is defined by Bolter and Grusin as 'the representation of one medium in another'. Interestingly, their book focuses on older media being remediated by newer media, and they find that media generally develop towards 'transparent immediacy', whereas Farocki reverses this 'trend' by recasting the holy grail of immediacy, namely virtual reality, in video. Bolter, Grusin, op.cit. (note 12), p. 45.
- 18 See Albert A. Rizzo's presentation at the TEDxUSC event held on 13 April 2010 at the University of Southern California: Anonymous, 'TEDxUSC- Marilyn Flynn & Skip Rizzo - Treating Post Traumatic Stress with Virtual Reality', retrieved 7 June 2011 via www.youtube.com/watch?v=V9EF8v-w5Xc.
ICT, 'Background', s.l. s.a., retrieved 7 June 2011 via <http://ict.usc.edu/background>.
- 19 ICT, 'Post-Traumatic Stress Disorder Assessment and Treatment', s.l. s.a., retrieved 7 June 2011 via http://ict.usc.edu/media/overviews/PTSD_Overview.pdf.
- 20 The absorptive or immersive power of videogames and virtual reality applications (at least those based on the 'principle' of photorealism) is liable to inflation. In 2004, *Full Spectrum Warrior* was considered to offer one of the most realistic videogame simulations of military combat but it looks antiquated by today's standards.
- 21 J. Baudrillard, *Simulacra and Simulation (Simulacra et Simulation*, 1981, trans. S.F. Glaser), Michigan 2008.
- 22 B. Groys, 'The Fate of Art in the Age of Terror', in: B. Latour, P. Weibel (eds.), *Making Things Public. Atmospheres of Democracy*, Karlsruhe/Cambridge, MA 2005, pp. 970-975 (972).
- 23 After completing *Immersion*, Farocki made three more works which together comprise the *Ernstes Spiele* series: *I: Watson ist hin* (2010), showing four marines operating a tank simulator, *II: Drei tot* (2010), an account of a large exercise in a fake town, *IV: Eine Sonne ohne Schatten* (2010), a comparison between the computer images of training simulators and those of therapeutic tools. *Immersion* is posited as the third part of the series.
- 24 AP, 'Military relying more on drones, mostly in Iraq', website *MSNBC*, 1 January 2008, retrieved 14 June 2011 via www.msnbc.msn.com/id/22463596/ns/world_news-mideast_n_africa/t/military-relying-more-drones-mostly-iraq.