

Corpo, Carne e Espírito: Musical Visuality of the Body

Johannes Birringer

1. Audio-Visions

If one were to look for critical studies of visual composition in contemporary multi-media performance, one is likely to be disappointed since the available literature on *mise en scène* and intrinsic relations between performance (acting, dancing, performing audio-visual interactive enactments) and acoustic/visual/kinetic projection, in the technologically driven media performances of the last two decades is sparse. Although practitioners in theatre, dance and performance art at times delve into their processes of composition to discuss collaborations with designers, interactional composers, and programmers, it is rare that we learn about the specific challenges encountered in the aesthetic creation of ‘performance systems’ that integrate performer and audio-visual/responsive environments, especially the various architectures of projective environments.

We also don’t hear enough about the specific challenges of delimitation in performer techniques applied to interactive *mise en scène* – a sensitive subject perhaps that is understandably undertheorized since the integration of digital technologies in live performance often requires extensive technical problem solving, delaying the compositional process or determining modifications of the performer techniques, for example asking dancers or actors to adapt their movement to help the computational system (and its movement tracking or sensing instruments) to properly “recognize” the performers’ gestures. Technologically driven performances almost always limit or modify performer virtuosity, and thus the software to some extent qualitatively constrains what bodies can do and what they like to do with the “machining architecture,” a term used by architect Lars Spuybroek to define the virtual organization, not the actual structure, of a machine or a system and its component audio-visual, tactile, procedural or dynamic properties.(1)

Critical studies are only now beginning to catch up slowly with the evolution of hybrid arts and digital performance, and consequently, with the assimilation of independent new media arts and collaborative networks into the spectre of research methodologies – conceptualized in academic institutions, arts organizations, specialized labs or cross-disciplinary research centres – that underpin the development (R&D) of new work.(2) Rather than addressing the outer frameworks that may (or may not) support experimentation and artistic production within (presumed) interdisciplinary university research contexts, I shall examine the intrinsic aesthetic and technical demands for systems integration in a particular compositional process which conjoined my London-based laboratory with Brazilian composer Paulo Chagas and an ensemble of Brazilian musicians and vocalists. The practice-based research process for the digital oratorio *Corpo, Carne e Espírito* culminated in three public concerts commissioned by the FIT Theatre Festival in Belo Horizonte (June 2008). It was encouraged by prior artistic projects on interactive audio-visual performance carried out since 2002.(3)

When I refer to “performance systems,” I specifically address stage works or open installations that are built with a combination of physical performance and computational feedback systems which allow the real-time manipulation of the digital stage and its various data flows. Such manipulation, in my experience, involves programming and design of the interactive architectures, and thus shifts the (older) roles of the scenographer or the artists who contribute design (stage scenery, costumes, lighting, video/film projections, and sound) into a kind of instrumental live performance context, namely real-time interactive audio-visual spaces where software computing or live coding has added a rich dimension of “cross-patching.”(4) Such cross-patching and connecting processes generally link aesthetic aims with technological innovation and issues (e.g. technical problems) of extending functionality introduced by electronic and engineering instruments. On the theatrical level, choreographing physical performance is also a digital process patching the coded “bodies” (the imaged figures or resultant abstractions) into the temporal medium of projective space. My role as a choreographer/stage director therefore is not easily distinguishable from that of a designer or programmer. The artistic research, which I present as a case study in the following pages, is predicated on complex

collaborative strategies of composition and temporal mediation/interactional performance.

Primarily, I want to examine the role of music/sound in relationship to physical imaging, and the role of visual real-time image manipulation in relationship to music, positing the conceptual and perceptual resonances between performance, image and sound as one of the key areas of research in contemporary audio-visual art. The proximity or distance, the complementarity or dissonance, between the “images” of a performance and the accompanying sound, or between music performance and accompanying images, is a complex, continuously fluid and changing phenomenon. In interactive performances we also cannot speak of visual and audio “tracks” since the tracks are not edited beforehand but generated in the performance. What is at stake are the connections and discrepancies that are being built and designed for the reception of a live concert or installation, for *audio-vision* and the multi-dimensionalities of hybrid acoustic-digital works which stretch from the physical action or gestures to the manifold projections of the virtual.

Visual sound, visual music, sound-images: how to address this complex combinatory phenomenon and compare how sound and image behave? How to imagine composing and performing images to music, and to examine how each element in musical performance and visual composition plays its part in figuration, narration, temporal rhythm or temporalization/vectorization (of static or dynamic scenes) to generate complementary effects, duplication, repetition, counterpoint and contradiction? Furthermore, rather than adopting interpretive models from studies of sound art or film sound (for example the intricate critical analyses in Michel Chion’s *L’Audio-Vision*), I suggest here that we look at the performance-making practices and constitutive stages of production, articulating the methods through which relationships between physical imaging (mediated through camera, editing and real-time manipulation) and musical performance, between mapping of images to sound or mapping of sound to bodily movements are created.(5)



Fig. 1. Paulo Chagas conducting *Corpo, Carne e Espírito* at Klauss Vianna Theatre, Oi Futuro, Belo Horizonte, Brasil, 2008. Yiorgos Bakalos on triptych screen, live processing by Johannes Birringer. Music ensemble: left to right standing: Eládio Pérez González, Sérgio Anders, Mônica Pedrosa, percussion (right): Sergio Aluotto ; string quartett (front): Frank Hammer, Eri Lou Nogueira, Cleusa Sana, Pedro Bielschowsky. Photo courtesy of Luca Forcucci.

Our pre-production for *Corpo, Carne e Espírito* begins with the paintings of Francis Bacon – those famously irritating portrayals of distorted flesh and writhing anatomies which inspired the composer to create a series of short compositions later combined into a full-length oratorio for chamber orchestra and vocalists (eighteen sections). The leap from painting to music is a stretch, but one of course recalls Bacon's amazing studies of Velázquez's portrait of Pope Innocent X, with the distorted screaming mouth wide open, amongst so many other denuded bodies he painted in seemingly arrested figural contortion, with silent openings or sockets from which the organisms might escape. Paulo Chagas approaches me with the proposition of creating visual images for his oratorio, the particular sequencing of which was open and not determined when I begin to work on the visual script. I had collaborated with Chagas before, on several dance/music productions, so there was a strong basis of trust between us allowing for continuous experimentation. After many months of online exchanges, and in-depth scrutiny of Bacon's painting technique, I start shooting film

in the studio, envisioning the visual material of the physical performance to be pre-edited for an open, live improvisation with interactive software patches programmed as a kind of choreographic scenario for triptych projection of digital images. I want to mix the projective image live in real-time during the music performance.

This approach harbors many intricate problems. First, I will examine the resonating capacity of the digital, asking whether the animated gestures of projected bodies can in fact complement or connect at all with the acoustic sensorium and the emotional intensities of “pure” listening. Secondly, I offer some production notes from working with kinaesonic gestures or real-time interaction with “image groups” or “libraries” inside the software patches used for the performance with the musicians. My observations derive from working with a form of live coding (real time composition or improvisation) that layers and manipulates the shot material into time images and “synchronous objects” that are projected alongside the music performance.

The first problem of course arises when translating painting into digital film, creating photographic studies of the actors’ bodies. The translation is also inspired by the music composed by Chagas for the various sequences of the oratorio, but the photographed bodies remain silent and do not respond to the music. The projected bodies’ sensation-levels or thresholds do not possess visualized sound; the projections do not materialize in sound and its source (of sound). My images are in fact soundless, while the performance of the oratorio creates a full musical world separate from the (visual) action on screen. The spectator/listener can watch the instrumentalists and the vocalists, but cannot locate the point of audition as that of the visual figures in the film scenes. The whole notion of a place of audition in our work is complicated, as visual bodies and music are disjunctive/autonomous even as they appear together (united); the visual gestural of the musicians might even be heightened by silence of the projected figures. Yet the oratorio is also distinct from opera (and its often stylized, exaggerated gestural and scenic vocabularies), from silent cinema which borrowed opera’s punctuative musical effects, and from film scores using orchestral music and leitmotif techniques for narrative synchronization or the expressive symbolization of action scenes. Chion rightly points out the “in opera the frequent synchronizing of music and action poses no problem, since it is an integral part of an overall gestural and decorative stylization. In the cinema such

synchronization must be handled more discreetly, so as not to be taken as exclusively imitative or slip over into the mode of cartoon gags.”(6)

Opting for non-synchronised, discreet visual sequences, I largely focus on the internal rhythms and cadences of the visual space and its sensorial impressions. A careful interpretation of Bacon’s melting flesh-bodies suggested the use of the specific kinetics of digital visibility, preparing short tracks for microtonal image manipulations and frame-by-frame corruptions, as a kind of counterpoint to the sustained integrity of the oratorio’s musical form, its precise score, internal structure, and virtuosic performance conducted by Chagas himself in the concert. How could I “conduct” the bodies-to-be-projected? The conducting happens on two levels, first in the shot selections, then in the real-time programming. In our laboratory, we have come to believe there is something in the connection between the gesture and the interference with the “image group” by the performer or programmer that might re-emerge as a signature with a distinct, poetic video quality. For the production process it is crucial to plan the filming for the signature of image manipulation. We don’t create a movie clip nor static images (stills), but asynchronous objects *designed to be interacted with*. The digital objects are incomplete without the interaction.

Much of the initial shot selection is done with actors performing in the nude. If music is, or has been considered, the most abstract art form of all the arts, its relationship to the erotic or pornographic imaginary is necessarily convoluted, since the nude body evokes a certain naturalistic or explicit dimension, a loaded dimension that can also be dangerously close to slapstick. Surely, serious classical composition and rigid experimentations of the 20th century avant-garde (after Mahler, Berg, Webern, and the younger generations of composers influenced by Stockhausen, Boulez, Berio and Ligeti) abstain from the burlesque and chaotic proliferation of subcultural genres exploiting the base slapstick materiality of sexual imagery or the corrupted low-fi trash aspects of video, especially hand-held video (in advertising, reality TV, celebrity and internet porn, S//M video, manga, gun erotica and other comedies of tremor). Avant-garde music is not without its own slapstick potentials, however, if you recall Kurt Schwitters’ *Ursonate* and the notorious beginning of this sound poem (“Fümms bö wö tää zää Uu, _pögiff, _kwii Ee, Oooooooooooooooooooooooooo ...”). The pornographic counterpoint to avant-garde music interests me precisely because of its

faltering, indeterminate nature, the uncertain anticipations that might be aroused by the digital “deformation” of the body and its diffusion beyond the single frame (single screen). The multiscreen configuration I designed creates a kind of orchestral spatialization of the images; and, secondly, the “unnatural” movement of the projected bodies also disrupts the rules of representation or diegetic logic. The emotional affect of the music cannot easily supply any logic to the multiple frames; it cannot explain the images.

Filmmaker Andrew Repasky McElhinney, admired for his provocative *George Bataille's Story of the Eye*, chose to shoot his underground porn film as a silent movie, letting the camera just capture ambient location sound and then editing the sound and mixing it with additional audio fragments. The fragmentation, McElhinney believes, is an advantage of what he prefers to call “filmed radio,” leaving the visual text open enough to allow the spectator to process it *after* seeing it.(7) There is a very strong dynamic of anticipation and thwarted gratification in *Story of the Eye*. Other filmmakers, such as Martin Arnold, use found footage from B-movies to de-animate and re-animate particular frame sequences – again as silent film – in order to “scratch” the filmic image and even delete figures within an image sequence, throwing narrative continuity out of kilter and generating a nervous fluttering, a hysterical twitching of image-as-motion. Most interestingly, in a collaboration with choreographer Willi Dorner, for a dance/film piece titled [...], Arnold decomposed graphic sexual scenes from found pornographic footage, using extensive computer technology to actually erase the filmed figures from the existing film material and leaving only the holes, their absent presence, in the projected digital performance space.

A certain dismantling of the visual, or the destruction of figuration, also lies at the bottom of my approach to *Corpo, Carne e Espírito*. It requires creating a space for the hearing of forms of not clearly discernible bodies, flesh or meat, following Bacon’s images/colors of meat that flow and seep, almost as if their visual direction could be felt as a touch of sound. Bacon’s pink and orange flesh often causes pain in the viewer, as we stare disbelievingly at swollen, elongated, hysterically deformed flesh and carcass, something human becoming something animal or abject in “diagrams of sensation,” as Deleuze called them.(8) These diagrams, like the open mouths of

Bacon's "Heads," scream at us, since they are highly graphic, sensational, and at the same time blurred, wiped and scrubbed. Their blurrings are (like) the scream of voice confounding the meaning of sound that escapes from a mouth, throat, diaphragm, lung or deeper inner cavity. This blur is the pornographic dimension which cannot be clearly described because we cannot see what escapes, what breaks down kinetically in the organization of the bodily organism. The visual blur also does not have any clear points of convergence in the music, or the musical instruments (cello, violin, percussion, etc), unless one interprets dissonances as anxiety-producing or ominous, and most of such semantics of listening cannot but be highly subjective. Nevertheless, I now want to explore how music, in this sense of the gestural, kinaesonic blur, might complicate the partition of the perceptible and build/sustain the non-linear, non-dramatic procession of visual decompositions of the body.

2. Phantasmic Silent Dance



Fig.2. Entr'acte 4, with Eládio Pérez González, Sérgio Anders , *Corpo, Carne e Espírito*. Video still: Johannes Birringer

The *Corpo, Carne e Espírito* oratorio has five parts, with the first two parts comprising three sections each, and the last three parts comprising four sections each;

the parts are interlinked by four silent entr'actes. During the short entr'actes, each of the vocalists steps forward to the edge of the stage and sings silently into a microphone. The image of mouth and face is captured by a camera and transmitted to the triptych screens. What the audience sees are the heads of the baritone, the counter-tenor, and the soprano, and finally the coupled heads of the two male vocalists, engaged in a teasing duet, a lovers' discourse that is silent but doubled (on screen) in real time, distanced from the front to the back, enlarged. Mouths wide open, eyes wide shut – what the live camera feed captures are slightly blurred (the feed is processed in the interactive software patch) orifices, muscle tissues, skin, jawbones, the large cavities at the back of throats where voice would break through if we could hear it. Yet the microphone here amplifies only silence. For these scenes I decide to use a live feed; all other prerecorded scenes are mixed and layered through computer programming.

“In the sensory zone of audibility which the microphone transmits to us,” Rudolf Arnheim suggests, “there is probably no direction at all but only distance.”(9) Silence, with voice only implicitly present, creates a particularly intimate distance or proximity, a circular contrapuntal scenario in which unrequited love and desire overlap as if in a fade-out. But a silent scream resonates in our imagination, and is not Arnheim's Gestalt psychology examining why we see or hear things as we do, and whether there is a partition between what can and cannot be seen or heard, a partition between what can and cannot be coupled together? In the visual design I develop for *Corpo, Carne e Espírito*, I seek for such partitions rather than attempting to illustrate the music composed for the five parts of the oratorio, allowing the sound and the instruments to stretch their full expressive potential, according to Chagas's structure:

1. Directionality from slow to fast – electronic sounds; opening of space
2. Opposition between live-performance / electronic and large ensemble / solo; alternation of spaces
3. Alternation between solo / ensemble; different characters and atmospheres
4. Alternation between solo / ensemble and consonance / dissonance; dissonant mood
5. Directionality from voice to ensemble; sense of development; consonant mood.(10)

Silence creates much more expectation than music, Chagas agreed, and in the oratorio's main musical sections he initially used very reduced harmonic material – based on a system of intervals (a lot of major 7ths) and a repertoire of extended techniques for string instruments, for example, the technique of pressing the bow against the string for producing scratching sounds. In the music for voices, he used a contrast between modal melodies and harmonies that recalls medieval and early renaissance polyphony, and unusual sounds produced through or in combination with breath, whispering, speaking. There are directionality as well as recursive and fractal structures developing contrasts inside contrasts, and musical gestures that pulsate simultaneously with symmetry and regularity, asymmetry and irregularity.(11) Such compositional elements might also be used for the digital images and animations, but I try to create a separate dynamic in the visual projection of colors and bodily forms, aiming at quietly fragmenting spaces of something quiveringly present, breathing, unstable, contracting and expanding. These spaces do not visualize sound, not are they diegetic or adhere to any linear or chronological notion of time. Rather, they affect optical consciousness through a indirect, underhanded mode of visual volubility which I call *granular digitality*, in analogy to granular synthesis (e.g. varying the waveform, envelope, duration, spatial position or density of the sound grains, amplitude modulation, random reordering, scattering and morphing). On three screens, the projected images undergo various glitch infestations and granular depressions which continuously both articulate and dearticulate the frames of the body.

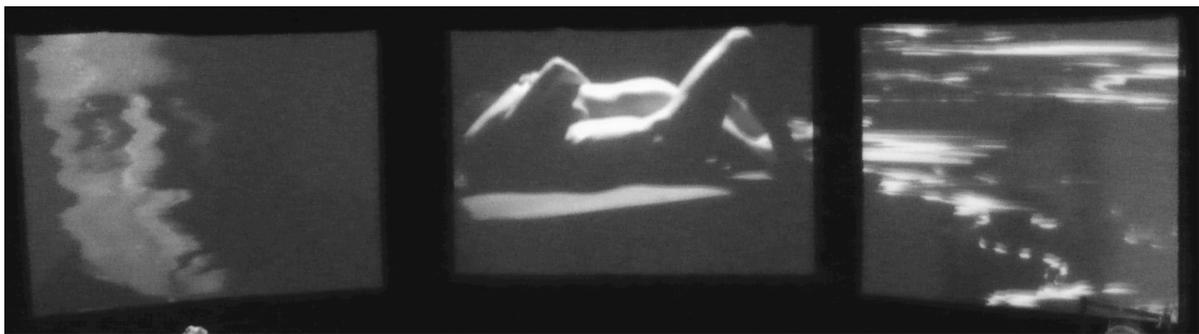


Fig.3. Part 5, Scene 17 (Handicapped), *Corpo, Carne e Espírito*. Photo courtesy of Luca Forcucci.

In a sense, this technique of digital granularity means translating Bacon's paintings into luminescent and ghostly video surfaces/skins created through the projection, a graphing of motion that often appears as if still, animated yet deanimated, nervously hovering over an unconscious sensation of the videographic objects (male bodies,

female bodies, heads, part objects, contours, armatures, pools of color, pellicles, silk cloth, striations, shutterings). Just as Chagas's music attempts to capture the poetic of Bacon's universe and invisible forces behind the surface of bodies, not necessarily related to anything realistic, concrete and objective, the video and the digital software transpose "obscene" images into virtual abstractions. None of them speaks "to" the music or expresses anything that one might think one is hearing. Contrary to Chion's notion of the audiovisual scene, the music does not anchor the images. The graphics, then, cannot function as visual track or diegesis, and the music does not constitute a film sound track or underscore driving the action image or setting/propelling atmospheres. Independent from one another yet intertwined, the quasi-cinema of a visual dance of objects and the music imprint different sense experiences on the listener, sensations wrestling with sensations.

While preparing *Corpo, Carne e Espírito* for the premiere, I was reminded of Hélio Oiticia's ideas for the "suprasensorial" aspects of color extending into space and creating sensory stimuli in the environment through enactment, through the wearing of the Parangolés as habitable color or garment that incite the wearer to move/play with its luminous qualities, rhythms, and intensities. In his late work of the "Quasi-Cinema" installations, Oiticia arranged whole rooms as inhabitable tactile-corporeal spaces provoking a delirious sense of materiality (colors, fabrics, projections) as *penetrable*, an experience he called *vivência* and considered an intermixture, a concretion, of the real and the virtual.(12)

While it is true that the listener can find a way to allocate time-space or emotional or narrative meaning even if heterogeneous acoustic spaces are immersed into each other, complex musical compositions stretch beyond the probable to peculiar, invisible spaces and conflicting dimensions that intermingle without ever unifying within a larger whole. Regarding the acoustic realm of the radio as a new technological artform, Arnheim proposed that the constant permutations and migrations of polyphonic sound create an ambivalence ("appropriate for the future") and virtuality of unresolvable probabilities and inexplicable differences. You will "make countries tumble over each other by a twist of your hand, and listen to events that sound as earthly as if you had them in your own room, and yet as impossible and far-away as if they had never been."(13) The layerings of electronic, instrumental and

vocal music in *Corpo, Carne e Espírito* generate this sense of delirious ambivalence, stretching out, and as in the case of most operatic arias, we cannot quite understand the words sung by the vocalists. They remain blurred. But at the same time Chagas's music contains a very high degree of "graphic" resonance, of a gestural physicality that is of course "performed" live, visible right there to the audience. At times I reduce this visibility by having very low light on the musicians, while the triptych screens (hung upstage above the musical instruments that fill the stage) glow with the color fields of projection, a deep crimson red, followed by turquoise, cold white, soft orange, wrinkled and folded textures of fabrics, pleats of skin.

It is the uncanny contradiction within the projected images themselves which complicates the sensuous and erotic temptation, the desire to reach by the twist of your hand as if you could touch the far-away object. You sense the fabric but your tactile sensation is deceived, the cloth does not hide or adorn the unusual body shape, two twisted arms grow from a yellow torso, reaching up, elongated, as if a butoh dancer's hands were now plucking an imaginary feather from the glittering plumage of a rare bird. The disjunction between the musical and the visual can impact our senses in powerful ways, illuminating the deficits of visual hard-core graphics and allowing for a larger elasticity of the mental spatialization.

Invoking the material aspects of sound, Arnheim emphasizes its multifaceted and abundant nature, as this is how he understands *materiality*, "the affective capacity of sound: sound as movement, as metamorphosis, as a material repetition of ephemeral differences that generates intricate lapses—convoluted lapses with many velocities, all viscous, elastic, capable of sequences, but certainly also capable of simultaneity, of retention, of anticipation, of slowing down and speeding up, of multiple intervals, a thousand times folded and refolded—that, finally, breach all confines and burst forth into boundless musicality." The manner in which Arnheim describes sound is thoroughly sexual and erotic; Serge Cardinal is more modest and comments that musicality here is not a "plain and comfortable metaphor: it proclaims a liberation provoked by manifold affinities, through forces that appropriate perception."⁽¹⁴⁾ This musicality, I suggest, runs through Chagas's music for the oratorio; it is gripping and sometimes teeming with dissonant intensities that transport the listener to a state where perceptions are conveyed into the darker, phantasmatic realms of fetishized

glamour or pain.

3. Filters of decomposition

Most of the video footage for *Corpo, Carne e Espírito* was shot in the studio, with five actors and dancers; some of it was shot outdoors. Then hundreds of small QT movies and animations were created to be manipulated in real-time interactive processing. The projected images circulated on the curved triptych, displayed in various configurations: all three images are the same (but not played at same tempo); all are different; or combinations of one different plus two the same, with side by side or left/right/center juxtapositions, one image alone or two images alone, etc. Slowed down to crawl almost indiscernibly, most of the time-images are non-linear and looped, evoking an intensified sense of movement in place. Others are manipulated frame by frame, the microfilms becoming inconclusive image-spasms.



Fig.4. Part 2, Scene 4 (Knife/Violation), *Corpo, Carne e Espírito*. Photo courtesy of Luca Forcucci.

In the concluding pages, I shall discuss the visuality of some of these microfilms, without claiming that I could define how you might perceive, interpret and remember

body shapes or parts of a body or spatial forms or colors in the particular context of a music concert. Rather, I am claiming a certain power of exhilarating affective sensation which arises from *Corpo, Carne e Espírito*'s projection of unusually warped or dissolving figures/figural objects. Chagas wanted me to envision a connective tissue between flesh and the spirit; it is hard for me to fathom where the latter comes into play, its possibility must rest with the audiences.

The disjunction between the musical and the visual, I argued, impacts our senses in unexpected ways, illuminating the dearth of visual pornography associated with abject or hard-core transgressive sexual images. The naked flesh, the knife gently cutting through meat, the running dog, the fetishistic costume of power (in the Pope scenes), the vegetal green and the orange color fields – none of these microfilms presumes a sense of transgression, titillation, excessive splendor (Lingis) or the Batailleian erotics of profanation and defilement.(15) But they evoke possibilities of seeing how we would not have imagined seeing a body (human, animal, male, female) or an eroticized curve, a tremor, a spasm, the difference between taut muscles and sagging flesh, a young female body balancing on a chair, an older man lying exhausted on the floor, an eye stroked by a violin bow, a mouth wide open, incongruously distorted.

Part 1, Scene 1 (*Birth*) opens with three fields of red colored cloth which reveal subtle creases but nothing else on all three screens of the triptych. In the center screen, very slowly a bent over naked body becomes visible underneath the red, with hands and fists opening and closing in slow motion, extending the uncomfortable posture for the duration of the scene without relief.

In Part 1, Scene 2 (*Prison*), the color changes to a clinical white. Abstract “shuttering” becomes visible in the center. On the left, a person is becoming slowly visible under the white. An interrogation scene: the prisoner-body squirms on a chair. On the right side, slowly a cage appears, a still figure stands inside the prison. This is a "real" documentary photo, taken in Guantánamo. The figure is barely visible, but the sensation of cold, whitewashed walls prevails and provokes a colder air.

Bacon was drawn to pathological, forensic as well as X-ray images and incorporated them in early paintings; he had collected scientific photographs showing how the skin

was folded back to reveal raw flesh, and curiously, he was also attracted to “spiritist” manifestations. He seemed particularly fascinated by the traces of light on photographs exposed for a long time, and manifestations of ectoplasm for him were consonant with the chronophotographs of Etienne-Jules Marey. The striations he painted over his figures have been associated with the “shuttering” technique in photography; the curtains, veils, cubes and cages that “hold” the figures (e.g. the Pope portraits) also served simply as a device for “seeing the image more clearly.”(16) At the same time, these stripes generate a kinetic effect; they are lines that appear to move as in a flickering 16mm film projection. I tried to create this shuttering effect in the interactive video animations for this scene, using special filters that provoke the still images to flicker.



Fig.5. Part 1, Scene 3 (Men’s Love)), *Corpo, Carne e Espírito*. Video still: Johannes Birringer.

In Part 1, Scene 3 (*Men’s Love*), the color changes to dark white and grey, with a blue tint. _ Two male figures are seen left and right, and later also in middle, intimating a scene of two men after coitus; they are exhausted, they lie separate, then squat together. _The quiet scenes are interrupted by a more convulsive, harsh erotic sense of love making between men, wrestling with each other. They are full of anticipation for the sport of love.

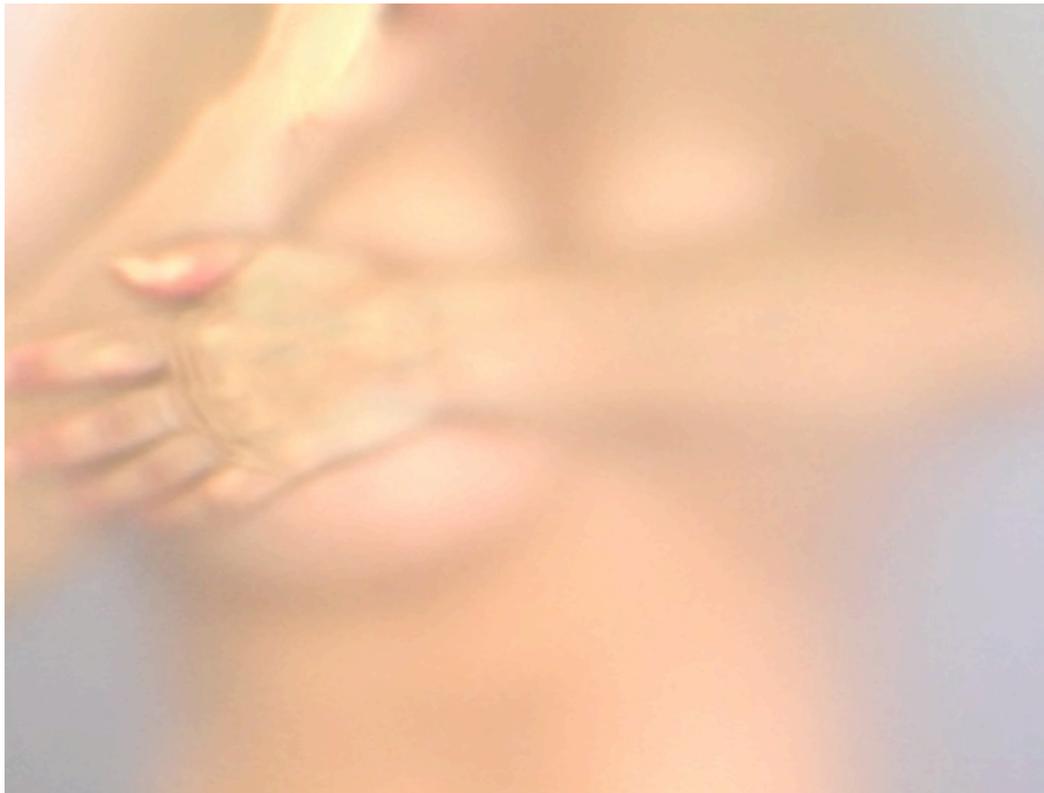


Fig.6. Part 3, Scene 8 (Shaving), *Corpo, Carne e Espírito*. Video still: Johannes Birringer.

Later, in Part 3, Scene 8 (*Shaving*), a voluptuous female body is seen pressing her flesh against a milky glass pane; we see her turn her back against the glass and press against it, her spine distorted in many wrinkles of white flesh, then her arms move her body around and we see her full breasts in a slow motion, with hands held forward as if to show us the lines on the palms, skin meshing with plexiglass to immerse us into a sexual (mirror) space. The televisual screen becomes the very skin of touch, the woman's hand fondling our eyes looking at her naked body which cannot be fully seen.



Fig.7. Part 4, Scene 11 (Love), *Corpo, Carne e Espírito*. Video still: Johannes Birringer.

After the third silent entr'acte, featuring soprano Mônica Pedrosa, Part 4, Scene 11 (*Love*) reverts to the thematic evocation of love in the aria sung by Pedrosa downstage right, a haunting melancholic threnody hovering in empty space, only a faint image appears on the left screen, slowly growing more distinct, as if emerging from the singer's open mouth. The doubled image of a man's torso turned upside down, slowly moving (together as if one), a man auto-erotically entwined with himself, becoming animal-like.

In Part 4, Scene 13 (*George Dyer*), during an exquisite violin solo performed by Frank Hammer, we see another "portrait," this time of a formally dressed man in profile, looking to his left, then looking to his right (on left and right screens), while in the center there is a full facial close-up of a young woman. "Dyer" looks at the face in the center which is stroked by the bow arm of the violonist, the strings cutting across the face causing the woman a kind of ecstatic pain. She responds as if in the throes of *jouissance*, her face, eyes, mouth, teeth and cheeks twisting in arabesques filtered with changing tones of color.



Fig.8. Part 4, Scene 12 (George Dyer), *Corpo, Carne e Espírito*. Photo courtesy of Luca Forcucci

Earlier, in Part 4 Scene 12 (*Pope*), the voices of soprano, countertenor, and baritone, along with the string quartet and percussion, had intoned a rapturous, powerful cacophony of sounds, while the microfilms project a seated authority figure (a woman dressed in majestic purple and golden silk coat) who gestures with her outstretched arms as if ordering us, commanding our attention. All three popes on the screen are depicted with a slow zoom into their faces and their wide open mouths, and the sequence-images then freeze in the final instance, holding the scream. The hands are now invisible, but they are remembered as claws, birdlike extremities that clutched at something invisible.



Fig.9. Part 4, Scene 12 (Pope), *Corpo, Carne e Espírito*. Photo courtesy of Luca Forucchi

Part 5, Scene 18 (*Handicapped*) features a short text (sung) from Francis Bacon_ – “I think about death every day” – accompanied by shifting musical sonorities that are by turns strikingly beautiful and abrasive, and conjoined with abstract and figural images that are heavily filtered in the interactive software processing. On one side we see a woman’s face covered with soft honey; the contours of the face gradually melt away. On the opposite side, another fleshly body is digitally anamorphosed, slowly decomposing into fragmented trunk, limbs, belly, thighs, filtered out into yellow, ocher, and orange color scratches and stains. In the middle, a sequence of still animations is seen of a couple appearing to make love on a bed. The color red returns, as abstract moving squares begins to flicker, suggesting boxes or framings that enclose the disappearing bodies.



Fig. 10. Part 5, Scene 17 (Handicapped), *Corpo, Carne e Espírito*. Video still: Johannes Birringer

The graphic momentum of the visual scenes is achieved through heavy filtering in the software. The Isadora software refers to these filter objects in the patch as “actors,” and I act with these actors in real-time to affect the color tones and saturations, the contours, the figure, and the vibrations of pixelation in the field. I rarely use the real speed of the filmed images or their unfiltered RGB color values; rather, I continuously vary the frame-by-frame motion, and the light intensity and transparency values. The broken tones of the figure make the bodies appear layered, shadowed, and emergent, just like the “accidents” Bacon mentioned as mounting on top of each other. The particular aesthetics of real-time video synthesis, with its permutations of resolution, zooming and graphic morphing effects, can thus intimate the quasi-cubist technique in Bacon’s painting, when he combines various limb positions (in his 1967 *Study for a Portrait* based on photographs of Henrietta Moraes or his mysterious 1953 *Sphinx I*) or depicts anxious, disjointed bodies in flux (*Study for a Pope*, 1955; the crucifixions, George Dyer portraits, or the late *Triptych* of 1991) and places their curvilinear, mutating forms against greenish grounds or black voids. The graphic image choreography implies a kind of kinaesonic metabolism: motion and

decontouring shadows glide slowly as if animated by the ripples of sound (waves) created by the orchestra, and yet the music – and the musicians’ gestural performance – remains mostly outside the visual space. At the same time, the music cannot but infuse (project) perceptual mechanisms and emotional tones onto the images. The quivering voice of the baritone creates a “personality” for the image of falling or enmeshed bodies: it inevitably manipulates sensory perceptions of the morphology of the image.

Yet unlike some of my previous interactive performance works, in which dancers control the image manipulation through their kinetic behavior and technique (movement/gesture), in *Corpo, Carne e Espírito* I use the computer keyboard and touchpad to “conduct” the real-time processing of media parameters directly and intuitively, auto-scopically: as I hear the music performed live, I enact the image transformations in the software. This is not an external, merely operational (functional) action, but needs to be considered expressive, since I make instinctive, immediate decisions which have no safety net; I can certainly hit the wrong note and get the “pitch” or “glissando” of the frame manipulation wrong, and this will instantly show up on the screens, even if the audience may not recognize a visual mistake. Interacting with a software technology, while my sensations and perceptions of the live music are in a heightened state of anticipation for the live coding, thus requires rehearsal and a technique which becomes embodied and articulate over time. This software performance technique, driving image processing algorithms that are mathematical but result in visual output, involves making split-second judgements similar to the rapid thinking of musical performance improvisation. Real-time control of an interactive computer system, therefore, demands a particular sensitivity for the tempo and granularity of visual time. Musicalizing the images, the projective visual world, is a technique of unfolding the frames, bit by bit in time, just as music is an unwinding of experience of time.

The music for *Corpo, Carne e Espírito* is essentially dialectical, with unresolved tensions of complementary worlds of modal melody in conflict with the “noise” of strange phonemes (consonants), extended techniques on the string instruments, effects on the strings and percussion. “Everything is fragmented,” the composer suggests,

“and pushed to the limit of the possible. Nothing stays; there is a constant transformation of the material trying to develop something but it doesn’t go anywhere.” This suspension crystallizes, in my mind, the indeterminability of the graphic organisms in the visuals. Attracting darker and more warped recesses of the mind/imagination, some of the images might compel different chambers of the erotic imagination, produce haptic sensations that are as coagulated as the dissolving, superimposed figurations. We can create various scenarios to explain a body’s mannered postures, twisted shapes and isolated, disintegrating wholeness, or we can accept them as real. The intensities here are evolving, incomplete, there is no brutality of fact and no allegory of futile erotic vandalism. The dilation of the clothed or nude form quietly intimates a surreal flow, a leakage that makes it hard for the eye to discern a consistent presence. The effects of this flow, however, can be felt on a deeper affective level where the listener might realize, after processing the experience, that no identification (with flesh or spirit) was readily available to the sensual imagination. Rather, the “visual” counterpart to the music suggests a particular fluidity between (perceiving) body and projected informational objects (images, colors, space, events) which imbricates a range of different sensations and tactile responses to the digital devolution of the body.

Acknowledgements:

Special thanks to Paulo Chagas, the musicians, and to all my collaborators of the DAP-Lab, especially Paul Verity Smith whose photographic work and conceptual explorations of the interactive image were instrumental for our practice

References

- (1) Cf. Lars Spuybroek, *NOX: Machining Architecture*, London: Thames and Hudson, 2004, pp. 6-13.
- (2) Steve Dixon’s *Digital Performance: A History of New Media in Theater, Dance, Performance Art and Installation*, Cambridge, MA.: MIT Press, 2007, is perhaps the most comprehensive study to date of the use of new technologies in the performing arts. It is part of the MIT Press “Leonardo” series of books, edited by Roger Malina, focussing on new media arts, and the series includes important studies by Susan Kozel (*Closer: Performance, Technologies, Phenomenology*, 2007), Frank Popper (*From Technological to Virtual Art*, 2007), Oliver Grau (*Virtual Art: From Illusion to Immersion*, 2003), Lev Manovich (*The Language of New Media*, 2001), all the way

back to Mary Ann Moser and Douglas McLeod's *Immersed in Technology: Art and Virtual Environments* (1996), which offered case studies of several large scale research projects conducted at the BANFF Center in Canada. Gabriela Giannachi, *Virtual Theatres: an Introduction*, London: Routledge, 2004, is a theoretical account of hypertextuality and the theatricality of interactive technologies but rarely engages with performance practices. Christiane Paul's *Digital Art*, London: Thames and Hudson, 2003, is an illustrated guide of artists and artworks since the 1980s, distinguishing between work that uses digital technology as a tool to produce traditional forms and work that uses it as a medium to create new types of art (net art, software art, digital installation, virtual reality, etc). I present a critical and aesthetic engagement with these practices in my book *Performance, Technology, and Science* (New York: PAJ Publications, 2008), and make reference to a few other studies that resulted from workshops, e.g. Martina Leeker, ed., *Maschinen, Medien, Performances: Theater an der Schnittstelle zu digitalen Medien* (Berlin: Alexander Verlag, 2001) and Söke Dinkla and Martina Leeker, eds., *Dance and Technology/Tanz und Technologie: Moving towards Media Productions - Auf dem Weg zu medialen Inszenierungen* (Berlin: Alexander Verlag, 2002), or from theoretical approaches to new media-performance, such as Susan Broadhurst and Josephine Machon, eds., *Performance and Technology: Practices of Virtual Embodiment and Interactivity* (Houndmills, Basingstoke: Palgrave Macmillan, 2006), and Freda Chapple and Chiel Kattenbelt, eds., *Intermediality in Theatre and Performance* (Amsterdam: Rodopi, 2006). Gavin Carver and Colin Beardon, eds., *New Visions in Performance: The Impact of Digital Technologies* (Lisse: Svets & Zeitlinger, 2004) collect essays from both critics and practitioners, and their focus on design stands out amongst most of the other books. An overview of new media art movements and their gradual institutionalizations can be found in Mark Tribe and Reena Jana, *New Media Art*, Cologne: Taschen, 2007. One of the most provocative book of case studies, investigating interdisciplinary arts and science research, is Joke Brouwer, Arjen Mulder, Anne Nigten, Laura Martz, eds., *aRt&D: Artistic Research and Development* (Rotterdam: V2_Publishing/NAi Publishers, 2005).

(3) My interest in interactive performance evolved gradually from numerous multi-media dance and theatre productions I choreographed in the 1990s, and from my involvement in dance and technology workshops (introducing software use and development) I attended or conducted since 1994. I began to work with interactive installations since participating in "Real-Time and Presence: Composing Virtual Environments," a 2002 workshop organized by Trans-Media-Akademie Hellerau e.V. and CYNETart Dresden. In the following year, 2003, I founded an independent media lab in Germany (<http://interaktionslabor.de>) which is open source collaborative and driven by the changing participant communities that meet there every summer. At Brunel University (where I teach and direct the DAP-Lab), sustained research has been enacted since 2006 (<http://www.brunel.ac.uk/dap>).

(4) Cf. Anne Nigten, *Processpatching: Defining New Methods in aRt&D*, PhD Thesis, Central Saint Martins College of Art & Design, University of the Arts, London, 2006.

(5) Michel Chion's trilogy, *La Voix au cinéma* (1982), *Le Son au cinéma* (1985), and *La Toile trouvée* (1988), remains available only in French. His book *L'Audio-Vision* (1990) has been translated into English (by Claudia Gorbman) as *Audio-Vision*, New York: Columbia University Press, 1994. For an excellent study of sound art, see

Brandon LaBelle, *Background Noise: Perspectives on Sound Art*, London: Continuum Press, 2007. For a rare and very illuminating essay on the practice of interactive sonic performance, see Julie Wilson-Bokowiec and Mark Alexander Bokowiec, "Kinaesonics: The Intertwining Relationship of Body and Sound," *Contemporary Music Review*, 25:1 (2006), 47-57.

(6) Chion, *Audio-Vision*, p. 54.

(7) Rick Curnutte, "Genre-Bender: An Interview With Andrew Repasky McElhinney," *The Film Journal*, 11 (January 2005), <<http://www.thefilmjournal.com/issue11/mcelhinney.html>> [accessed October 31, 2008]

(8) Gilles Deleuze, *The Logic of Sensation*, trans. Daniel W. Smith, Minneapolis: University of Minnesota Press, 2004, pp. 81-90.

(9) Quoted from Serge Cardinal, "Radiophonic Performance and Abstract Machines: Recasting Arnheim's Art of Sound," *Liminalities: A Journal of Performance Studies*, 3:3 (November 2007), <http://liminalities.net/3-3/cardinal.htm>

(10) Quoted from the composer's notes, sent to me in February 2008.

(11) For the composer's notes on the production, see his "Corpo, Carne e Espirito: a digital oratorio," published online in the theory pages of Interaktionslabor, the media lab where the initial collaboration between Chagas and myself began. <<http://interaktionslabor.de/lab08/theory.htm>>

(12) Cf. Johannes Birringer, "Bodies of Color," *Performing Arts Journal* 87 (2007), 35-46.

(13) Rudolf von Arnheim, *Radio: An Art of Sound*, Salem: Ayer Company Publishers, 1986, p. 20.

(14) Cardinal, p. 21.

(15) For Lingis's provocative readings of "splendor," see *Body Transformations*, pp. 21-43.

(16) Quoted from Martin Harrison, *In Camera: Francis Bacon. Photography, Film and the Practice of Painting*, New York: Thames & Hudson, 2005, pp. 204; 216.