

# Invisible Material: How Material Media Archaeology Illustrates Missing Voices

by Jaime Kirtz

*\* This post is in response to Hertz and Parikka's essay, "Zombie Media: Circuit Bending Media Archaeology into an Art Method" as well as a day spent desoldering, modding and working with vintage video game cartridges and chips.*

In their paper, "Zombie Media: Circuit Bending Media Archaeology into an Art Method," scholars Garnet Hertz and Jussi Parikka designate the term 'zombie media' to obsolete or 'dead' media that is "revitalized, brought back to use, reworked" (2012, p.425). Precedents for zombie media, such as projects like "The Edison Effect" by Paul DeMarinis, exemplify the intersections between engineering and art that remix, reuse and reappropriate purpose, context and use of various technologies/media (Hertz and Parikka, 2012, p.249). Hertz and Parikka articulate the conditions of zombie media as an act of creation through deconstruction and making; zombie media is media "resurrected to new uses, contexts and adaptations" (2012, p.429). Their argument is compelling as it advocates physical and mental participation of the researcher in ways that writing does not. Yet, as has been emphasized by various scholars from Vilem Flusser to Lisa Gitelman, writing is a way of 'making' or 'doing' as well. Thus questions arise about spaces of instability or blurred definitions. For example, does blackout poetry qualify as zombie media?

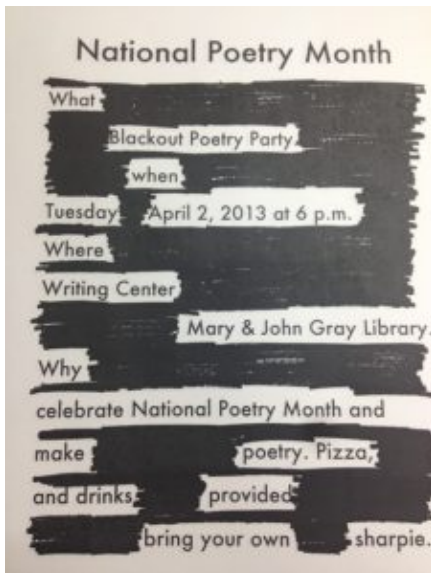


Figure 1. Blackout Poetry from Creative CommonsIt often uses obsolete media forms and formats, such as old newspapers, and through the creative practice of physically altering the page, makes something new that can be used to comment on larger socio-political-economic issues while relying on subversive aesthetics. Blackout poetry is visually jarring, as it emphasizes the remix/reuse of words through the symbolism of nothingness/blackness . It gives life to old print materials,

while reappropriating the meaning of the written page and its authorial presence. But is blackout poetry zombie media and what is its relationship to the productive and consumptive process?

Blackout poetry often uses obsolete media forms and formats, such as old newspapers, and through the creative practice of physically altering the page, makes something new that can be used to comment on larger socio-political-economic issues while relying on subversive aesthetics. Blackout poetry is visually jarring, as it emphasizes the remix/reuse of words through the symbolism of nothingness/blackness. It gives life to old print materials, while reappropriating the meaning of the written page and its authorial presence. But is blackout poetry zombie media and what is its relationship to the productive and consumptive process?

While blackout poetry counts as zombie media, due to its reuse of paper and visceral, subversive tactics, it is also not zombie media due to its standardization and reliance of established techniques in mainstream culture. Further zombie media, such as altered game cartridges and hacked games, contain traces of materials that do not die, i.e. will not naturally erode as opposed to paper. This difference highlights an element in Hertz's and Parikka's formulation of zombie media that deserves more attention: the complex relationship between assemblages and materials via mediation and remediation processes that foreground the blurring or uncertainty surrounding zombie media at the edges of

interpretation. Hertz and Parikka allude to the various material black boxes “that work in interaction, in various roles, in differing durations,” thus excluding or restricting the user from knowledge and visualization of processes within the media (Hertz and Parikka, 2012, p.428). Game cartridges are an example of this, as beyond the initial plastic casing there are circuit boards covered in memory chips, which are further material layers that contain wire connections and capacitors. Even the capacitors are constructed of multiple layers and designs of metal as contacts, as well as a layer of crystalline silicon and transistor gates from a variety of material, all of which is encased with seals and soldered contacts. Thus, blackboxing extends beyond the visible into the sphere of nanotechnology and the realm of mystification.

These parts have distinct material origins (see here for how silicon is processed and turned into wafers) that are produced by particular political moments. While silicon is processed at various mechanized sites around the world, much of the labor associated with ROM or microprocessing chips derives from assembly factories, which since the late 1970s have predominantly been located in South and East Asia (Lim, 1983, p.76). Various studies have asserted that much of this labor is performed by women, but how this labor effects and is shaped by political economic climate is still emerging. In the 1983 book, *Women, Men and the International Division of Labor*, scholars present a complex view of the emerging electronics assembly industry through the lens of globalization. This editors of this volume assert that “young women in developing countries are the labor force on this frontier” (Nash, 1983, p.x), and in doing so complicate our relationship with the material. No longer are we simply desoldering chips from circuit boards in order to create ‘art,’ but we are erasing the residual evidence of these women’s labor. Media archaeology that encourages creative destruction must

recognize the effacement of women's and worker's voice, narratives and labor that is remediated into corporate projections and financial reports, which are left to decay on floppy disks and paper in the basements of corporate America.



Figure 2. Screenshot of Intel factories. Note those in green are where assembly occurs.

While scholars in the early 1980s discovered that the employment offered to young women was often temporary and thus perpetuated representations of impoverished female workers in Western media, later scholars have modified this claim, such as Steven McKay's 2006 investigation into the politics and identity of female electronics workers in the Philippines, which saw both drastic changes and stasis in how women saw themselves and how they were represented in national and international venues (p.8). Ultimately, as globalization increased, new forms of identity and representation were produced by and created changing standards regarding pay as well as tasks and technological developments, while also perpetuating mythological images of women as poor, nimble workers in sweatshops that support neoliberalism by consistently validating the 'efforts' of corporate America through its influence in global and domestic policies (McKay, 2006, p.4).

This articulation of material assemblages is loaded with connotations and meanings, but what happens when we consider the other elements of zombies? Not just the reused or reanimated materials/body, but by actually considering the existing implications and socio-cultural-political associations and assemblages that the original layers of technology are embedded in and shaped by, which then enter new sets of cultural expectations and social moments through reappropriation. The most basic act, such as electrons stopped or flowing (0 or 1), is mediated through the various layers and technologies and remediated or hypermediated through game visualization on a television screen and on drawings displayed on Wikipedia pages. Ultimately when re-used or remixed through other forms of media, such as Chris Novello's Super Mario Spacetime Organ, video games as zombie media present a remediation of a hypermediation of mediation. While Hertz and Parikka focus on the "reminders of the non-human temporalities involved in technical media" through a focus on materiality, they also discuss that zombie media "assembled into new constructions, such materials and ideas become zombies that carry with them histories." (Hertz and Parikka, 2012, p.429), thus invoking or questioning cultural constructs and social issues such as gender identity and race hints at another use of the word 'zombie.'

From the 'walkers' in *The Walking Dead* to inferi in *Harry Potter and the Half-Blood Prince*, zombies are typically obstacles for the story's protagonist, and are often used to tonally evoke or unrest in narratives. While zombies are sometimes romanticized, they still occupy a role in which the uncanny and its unsettling properties affect interpretation and meaning of the evocation of reanimated corpses. When we uncouple the microprocessor from the circuit board, another type of uncoupling occurs: the imaginary and the Real. In that moment of creative destruction, in which we sacrifice the

labor and narratives of third world women workers, we insert our own agency as a response to the trauma of the Real. Forced to face the horror, we rely on confirmation of ourselves through being content to perform close readings on gender representations in female characters. While these and performative subversions on them are incredibly important, I propose examining areas before gender representation occurs that drives at the base levels of human life. Ultimately, I am left at a loss or rather a sea of secondary questions that circulate around the function of archives. What happens when we archive video games in spaces such as the Media Archaeology Lab or the Residual Media Depot? Are we perpetuating this practice of forgetting? If scholarship must be constructive, how do we address the historical narratives and the residual effects of those left behind?

## References

Hertz, G., & Parikka, J. (2012). Zombie media: Circuit bending media archaeology into an art method. *Leonardo*, 45(5), 424-430.

Lim, L. Y. (1983). Capitalism, imperialism, and patriarchy: the dilemma of third-world women workers in multinational factories. *Women, men and the international division of labor*, 70-91.

McKay, S. C. (2006). *Satanic mills or silicon islands?: The politics of high-tech production in the Philippines*. Cornell University Press.

Nash, J. C., & Fernandez-Kelly, M. P. (1983). *Women, men, and the international division of labor*. SUNY Press.

-Jaime Kirtz