



## **“Animation in London/Matchmove in Bangalore”: Territorial Profiles of Visual Effects (VFX) Workforces in the Global Media Industries**

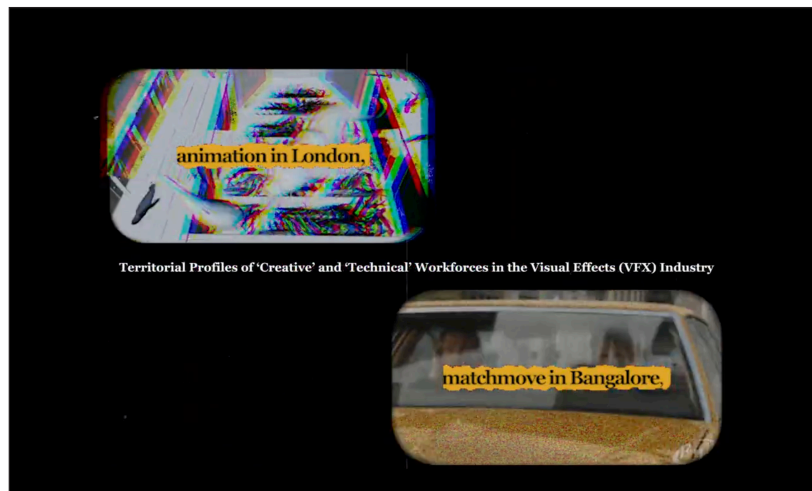
Suryansu Guha, Cinema and Media Studies, UCLA, [suryansuguha@gmail.com](mailto:suryansuguha@gmail.com)

---

“Animation in London/Matchmove in Bangalore” focuses on the industry of outsourced VFX work in India that enables vertically integrated global studios to routinely churn out effects-heavy yet cost-effective blockbuster films.

---





### Creator's Statement

The research presented in this video essay is part of my larger book project titled *One-Stop-(Sweat)shops* that builds on Hye Jean Chung's (2018) work on the emergence of a vast transnational network of emergent media practices and outsourced film labor. It primarily addresses the causes behind the deplorable work conditions in the visual effects (VFX) industry in the world. The labor-intensive nature of creating digitally rendered graphics in live-action films, ever since its advent in the 90s, has compelled Hollywood studios to seek out solutions to cut costs by outsourcing it to countries with low wages and a skilled workforce. This has led to the creation of a skilled industry of VFX outsourcing in India where artists labor in VFX 'sweatshops' to produce supposedly 'low-value' and 'technical' work that are nevertheless necessary for Hollywood studios to routinely churn out effects-heavy tentpoles.

My video essay looks at the industry of outsourced VFX work in India that enables vertically integrated global studios to routinely churn out effects-heavy yet cost-effective blockbuster films. The prevailing notion within the industry is that outsourced VFX work is non-artistic and creatively insignificant – a supposition premised on a naive rhetoric of globalization that assumes that only the labor-intensive and non-artistic parts of VFX labor is outsourced to "low-cost locations" (Miller et al. 2005). I demonstrate that such racialized and reductive notions of outsourced labor as only 'technical' work is fundamental to not only the systematic effacing and disavowal of Global South-based VFX artists but also the co-optation of their labor. My work lays bare this cultural belief that positions the Indian VFX worker to only be capable of undertaking 'back-end' work that is not creative in itself but is nonetheless always

in 'service' of the Global North based creative worker; it lays bare the status quo that allows the devalued worker to perpetually produce devalued work.

By exposing the geopolitical profiling of workers and the racialized notions of creative and service work, the video essay demonstrates how offshore VFX 'sweatshops' help its Global North clients create a precarious standing reserve of competing labor forces completely at the mercy of global capital. This forces artistic labor and aesthetic values of VFX artists to be congealed in intellectual property that ultimately do not belong to them. Visual Effects is a line of work where overworking, exhaustion, anxiety attacks, bankruptcy, disintegration of marriage and other personal relationships, and deleterious long-term psychological effects have become the norm rather than exception. My work identifies the economic and political reasons behind such built-in forms of exploitation. It makes a case for the recognition of the creative contributions of Indian media and tech labor to the global successes of commercial films and in doing so upsets the cultural understanding that helps maintain hierarchies of work such as creative, service or repair.

I study the VFX industry mainly through oral histories, interviews of practitioners and close textual analysis of media, trade papers, paratexts and other worker artifacts. My most reliable mode of enquiry are interviews and oral history of artists, workers and studio executives involved with VFX studios and tech labs. I have conducted these interviews for three years in key sites of their work in India like Mumbai, Hyderabad, Calcutta, and Chennai. The in-person interviews were supplemented with protracted participant observations that I conducted in their spaces of employment and other employment related performative spaces like trade conventions. My interlocutors in India and the United States comprise artists who have worked in different tiers of VFX work like rotomotion, matchmove, compositing, texturing, modeling, look development (lookdev) and character animators. I also undertake close textual analysis of textual and media ephemera like 'Before and After' show-reels, industry literature, studio brochures, old photographs of workers and various other archival documents. Trade papers, often non-English ones, also serve as data registers against which certain facts obtained in oral histories were cross-checked.

## References

- Chung, Hye Jean. 2018. *Media Heterotopias: Digital Effects and Material Labor in Global Film Production*. Duke University Press.
- Miller, Toby, et al. 2005. *Global Hollywood 2*. BFI.

## Biography

Suryansu Guha's research lies at the intersections between technology, design and labor. His current book project focuses on the global dispersion of visual effects work. More broadly he is interested in histories of film technologies and the specific ways it impacts below-the-line film work. His research often involves close observation of post-production workers (such as VFX workers, color graders, sound designers, Foley artists, recordists, subtitlers, etc.) and studios for the purposes of documenting their creative contributions, modes of compensation and continued precarity. In addition to presenting at numerous conferences including BAFTSS and SCMS, Suryansu's work has been published in prestigious academic journals such as *Television and New Media*. He was recently awarded the British Academy International Grant for his post-doctoral project on film technological design histories. He is currently based out of the University of Glasgow as a BA postdoctoral fellow after completing his PhD from UCLA's Cinema and Media Studies program.

## Review by Nick Jones, University of York

Across 2023, VFX artist Jonas Ussing posted a series of videos on his YouTube account, The Movie Rabbit Hole, entitled "'No CGI' is Really Just Invisible CGI" in which he showed how a range of films claiming to use no or minimal computer-generated imagery actually featured vast swathes of VFX, much of it employed for sequences and stunts which were framed in paratextual promotional material as being entirely free from digital "fakery." Yes, Tom Cruise and his co-stars actually sat in flying planes to film *Top Gun: Maverick* (2023), but the stunts, landscapes, close formation choreography, and even the fighter jets themselves in these shots were all dependent on computer-generated object creation and extensive processes of compositing and tweaking. The real value of Ussing's videos, I think, is less in their extensive debunking of specifics than in their unpacking of the rhetorical assertions made by studios, creative workers, and audiences about the value and place of VFX in many parts of the contemporary image economy.

With a far more scholarly tone, but with no less polish, knowledge, and practical insight, Suryansu Guha's excellent video essay "Animation in London/Matchmove in Bangalore: Territorial Profiles of Visual Effects (VFX) Workforces in the Global Media Industries" illuminates the way in which conversations about how VFX labor is organized and about which forms of VFX labor are and are not valuable all works to generate deeply concerning racial hierarchies. Like Ussing, Guha is interested in dismantling myths about VFX work, myths that confuse and undermine our proper understanding of the networks, companies, and activities that make up contemporary VFX production,

and which do so in order to serve corporate interests of power. His video essay fluidly collects together promotional material, interviews, press releases, and more to reveal how and why popular (mis)understandings of VFX work get created and maintained. Bringing together literature and theory from production and labor studies alongside extensive understanding of VFX themselves, this piece complements the work of Hye Jean Chung (2017), Leon Gurevitch (2016), Kartik Nair (2022, 2024), myself (2023), and others which digs into the production realities of digitally-produced imagery and tries to reveal how these do—and do not—match up to wider popular discourses about the application and value of VFX. I therefore also keenly look forward to the other work Guha aims to complete in his ongoing urgent project around global sweatshop labor in the contemporary film industry.

## References

Chung, Hye Jean. 2017. *Media Heterotopias: Digital Effects and Material Labor in Global Film Production*. Duke University Press.

Gurevitch, Leon. 2016. “The Straw that Broke the Tiger’s Back? Skilled Labor, Social Networks, and Protest in the Digital Workshops of the World.” In: Maxwell, Richard (ed) *The Routledge Companion to Labor and Media*, edited by Richard Maxwell, 190–201. Routledge.

Jones, Nick. 2023. “Far from Houdini: The ‘Magic’ of the VFX Breakdown.” *Animation* 18 (1): 42–58.

Nair, Kartik. 2022. “Toward a Phenomenology of Film Production.” *Discourse* 44 (2): 158–180.

---. 2024. “The Digital Crowd.” In *Media Res*. Feb 28. <https://mediacommons.org/imr/content/digital-crowd>.

The Movie Rabbit Hole. 2023. “‘No CGI’ is Really Just Invisible CGI.” 27 Oct. <https://www.youtube.com/watch?v=7ttG90raCNo>.

## Review by Julie Turnock, University of Illinois, Urbana-Champaign

First of all, this video essay is excellent. As a scholar who has researched and published on the history, aesthetics, and technology of global special/visual effects, Guha’s focus on S/VFX in the global south and specifically work being done in India is urgent and important. S/VFX workers around the world, even those in the global north, systematically experience devaluation and even rhetorical erasure of their considerable skilled labor by conglomerate production teams, and even by scholars. This neglect is especially true for so-called “off-shored” creative labor in the global south. Moreover,

his originally-conceived argument convincingly refutes the notion that FX work done in India is not as creatively rich or as skillfully done as that in the more recognized creative “hubs” of the mostly Anglophone effects locales (the United States, Canada, the UK, Australia). This study made me re-evaluate some of my own assumptions about the flow of global labor. As a video essay, the research material is presented clearly and creatively. The author consistently presents an argument supported by persuasive evidence.

### **Licensing**

CC by 4.0

---

