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Introducing 'Code Restitution': Applying the Concept of Minimal Intervention to the Conservation Treatment of Software-based Art

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ABSTRACT

This paper proposes a new treatment called for the conservation of software-based art that was developed as part of the research collaboration between the Guggenheim Conservation Department and the Computer Science Department at Carnegie Mellon University. Inspired by the concept of "minimal intervention" in the medicine, it designates new actions for which code restitution is necessary to revive the artwork's functionality. Traditional code migration, as practiced by conquest programmers, is not a viable option for time-based media artworks because it requires the wholesale replacement and/or rewrite of an artwork's code by recreating by means of contemporary programming languages, among the most elegant and efficient programming solutions currently available. This migration approach, the author argues

Blog entry by Caitlin Dover, October 26, 2016. www.guggenheim.org/blogs/checklist/how-the-guggenheim-and-nyu-are-conserving-computer-based-art-part-1 (accessed 10/1/18).

Guggenheim Blogs. 2016. "How the Guggenheim and NYU are conserving computer-based art—Part 2." Blog entry by Caitlin Dover, November 4, 2016. www.guggenheim.org/blogs/checklist/how-the-guggenheim-and-nyu-are-conserving-computer-based-art-part-2 (accessed 08/1/18).

Guggenheim Blogs. 2017. "Restoring *Brandon*, Shu Lea Cheang's early web artwork." Blog entry by J. Phillips, D. Engel, E. Dickson, J. Farbowitz, May 16, 2017. www.guggenheim.org/blogs/checklist/restoring-brandon-shu-lea-cheangs-early-web-artwork (accessed 08/1/18).

Guggenheim Blogs. 2018. "The Guggenheim Restores John F. Simon Jr.'s Early Web Artwork *Unfolding Object*." Blog entry by J. Phillips, D. Engel, J. Farbowitz, and K. Rosenberg, Nov. 19, 2018. www.guggenheim.org/blogs/checklist/the-guggenheim-restores-john-f-simon-jr-early-web-artwork-unfolding-object (accessed 05/09/19).

Guggenheim Collection Online. N.d. "Cheang. Shu Lea Cheang, *Brandon*." www.guggenheim.org/artwork/15337 (accessed 10/11/18).

Guggenheim Collection Online. N.d. "Simon. John F. Simon Jr., *Unfolding Object*." www.guggenheim.org/artwork/10702 (accessed 10/11/18).

Heiber, W. 1996. "Die Rißverklebung." *Zeitschrift für Kunsttechnologie und Konservierung*. 10 (1): 117–147.

Landers, C. E. 2001. "Appendix: Ethical questions in literary translation." In *Literary translation: a practical guide.* Channel View Publications. ProQuest Ebook Central. https://ebookcentral.proquest.com/lib/nyulibrary-ebooks/detail.action?docID=3007729 (accessed 10/19/18).

Muñoz Viñas, S. 2005. *Contemporary theory of conservation*. London: Elsevier Butterworth-Heinemann.

Muñoz Viñas, S. 2009. "Minimal intervention revisited." In *Conservation principles, dilemmas and uncomfortable truths*, ed. A. Richmond and A. Bracker. London: Elsevier Butterworth-Heinemann. 47–59.

Villers, C. 2004. "Post minimal intervention." *The Conservator*. 28 (1): 3–10.

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