Tectonic Afterlives: Repositioning Materiality and Collaborative Knowledge in the "Architecture of the Fitting"

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The Architecture, Construction, and Engineering (ACE) sector is currently grappling with a "regression crisis" precipitated by the unsustainability of extractive "cradle-to-grave" capitalist models. This paper interrogates the pedagogical potential of the Fabrication & Structure (VS3) studio at [university redacted], positioned as an "inquiry-based biotope" that destabilizes the traditional primacy of site and program. By prioritizing the inherent material traits of timber offcuts as the primary design driver, the studio reframes architectural practice as a humble, knowledge-driven response to the ecological limits of the Anthropocene.

Addressing EAAE Session 2 (UN-Build), the paper presents the Found.Designed.Made. project, which repositions materiality—specifically the reuse of timber offcuts—as the primary driver of form. Students are tasked with giving discarded timber an "afterlife" by treating it as a legitimate research medium through hands-on testing and physical prototyping. This fosters a "logic of low technology and high thinking" that aligns with the session's focus on the actions of Reuse, Reduce, and Recover.

Significant pedagogical innovations explored are the "spread authorship" method and the "design exchange" process. By staging projects so that ideas are swapped and developed by different teams, the studio reduces personal attachment to individual concepts and encourages rational, collaborative discussion. This method teaches students to negotiate the "goodness of fit" between structural requirements and available, often irregular, resources.

Ultimately, treating the studio as a site for collaborative knowledge generation creates a transferable model for sustainable education. Linked to the school's externally funded Circular Modularity research project, the studio provides generalizable strategies for addressing construction waste while empowering future architects to see form as a means of giving our built environment measure and direction. The result is a model that addresses the discipline's evolving mission to produce beauty and shared experience within planetary boundaries.