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**On Making Artificial Intelligence (AI) Work for the Smart Home
Teresita Abay Krueger**

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Abstract

There are two prevailing narratives about AI:

The first, a tale of job destruction (Schumpeter's creative destruction ¹) for low-skilled and routine workers and a second that promises a utopian world of exponential productivity, transforming the professional class of workers now classified as "knowledge engineers" ². Alongside, the workplace enhancements, the concept of "smart city" is considered as a new paradigm of urban development. That said, expect those AI technologies, as they transform cities into smart cities and improve the citizens' quality of life to permeate to the home environment.

I have a third vision to share. Much attention has focused on the workplace and urban environments while far less is discussed regarding the work of the home. The home is destined to become an integral part of the above-mentioned developments. The *Smart Home* will achieve the ultimate personalization, going as far as mimicking a living organism with a brain to serve our needs.³

Based on my career in the early development of Cognitive Computing AI systems that included:

Expert Knowledge-base systems — (developed a highly scalable ontological reasoning engine called *Syllog* ⁴, providing machine reasoning). SYLLOG is an example of AI's second phase, where AI centers on computer data stores. Phases that followed focused on landmark Web-based search engines and ontologies. So what comes next, is trending towards incorporating intelligence in our environment.

¹ https://en.wikipedia.org/wiki/Joseph_Schumpeter

² <https://www.forbes.com/sites/jeannemeister/2018/01/11/ai-plus-human-intelligence-is-the-future-of-work/#1597995a2bba>

³ <https://www.ibm.com/blogs/industries/a-house-that-knows-you-creating-smarter-homes-and-services/>

⁴ <https://link.springer.com/chapter/10.1007/BFb0049112>

My upbringing in the urban dystopia of The Bronx, New York, did more to inform my perspective on technology and a future of actionable intelligence, despite having no role models, segregated by low expectations, and where lived an aversion to knowledge acquisition — a misplaced view of the Biblical interpretation of the fruit from the tree of good and evil. It was through the eyes of a cultural system certain that the socio-economic state of individuals and entire societies, is predetermined.

Motivated by the belief that, "too much change in too short a period," leads to empty promises from tech wizardry. This turns out to be a misread of reality. Optimizing the use of the technology that matters, can significantly improve your life. For, as history has shown, the lived experience of people and technology has depended to a far greater extent than realized on a culture motivated by invention, creativity, opportunity, cooperative effort, and social initiative. As a side note - rescuing AI in terms of human flourishing rather than productivity as a personal virtue is far better for social activism.

I argue that AI has the potential to create a plethora of opportunities for anyone, seeking knowledge ⁵, by helping to solve some vexing and frustrating problems plaguing humankind. I propose a roadmap that makes AI purposefully productive ⁶ for the longest-lasting advantage of the work of the home. Precedence set by the initiatives for both smart workplaces and smart cities have difficulties to leverage value from AI technologies. How these initiatives start to examine the possibilities for smart services is, therefore, a fascinating question for the smart work of the home. What roles, practices, living standards, and workflows will be re-imagined with AI in the Home?

In closing, I step away momentarily by using the literary device, vignettes, to provide insight into a poetic AI slice-of-life. In Alvin Toffler's book, "The Third Wave"⁷ he identifies the home as the next dominant institution. [Where] most people will carry on their

⁵ But of the Tree of the Knowledge of good and evil, thou shalt not eat of it..a metaphor for thought, or rather the human capacity to think. It is the discriminating mind
- Genesis 2:17 KJV

⁶ <https://www.acton.org/pub/religion-liberty/volume-10-number-3/how-christianity-created-capitalism>

⁷ TOFFLER, A. (1981). The third wave. New York, Bantam Books.