The Internet of Toys and Things (IoTTs) for children: Surveillance capitalism and children's data

## Donell Holloway

Surveillance capitalism refers to new economic conditions in which online information (data) is converted into valuable commodities, and where the production of these commodities (data) relies on mass surveillance over the internet. This data is often extracted from the same population that will be eventual be its targets (Zuboff, 2104). In the case of children, the advent of internet-connected toys and children's wearables, along with screen-based apps and games for children, has provided a significant opportunity for the appropriation of children's digital labour for commercial profit within a surveillance economy.

Concerns have been raised about how the commercial appropriation of children's online information compromises the privacy and data security of children; often from children who are too young to consent to or understand the implications this practice. In addition, the consequences of accumulated data over a child's lifetime—which will quickly outstrip the data accumulated by their parents—is of concern.

This talk examines the positioning of children both as objects of economic activity (as digital labourers) and subjects of market relations (as digital consumers) under surveillance capitalism (Andrejevic, 2014; Zuboff, 2015; Chowdry 2016). It traces the history of children's engagement with the market economy from: their engagement in the labour force before and during industrial revolution times; their subsequent retreat, after a series of child labour law reforms in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries, into unproductive, domestic spaces; the ensuing positioning of children as market consumers in the 20<sup>th</sup> century (with varying degrees of agency and competency); and, more recently, their emergence as both data sources and data consumers within a big data economy.

This talk will highlight how the emergence of internet-connected toys and things for children is significantly amplifying the value and significance of children's data for commercial entities within the surveillance economy. Firstly, and despite having already been purchased and owned by consumers, the presence of embedded and connected software means that the customer is subject to long term contractual obligations. These terms and conditions enable data exchange between the child and the platform; the child and parent; and the child and other data sharing recipients. Furthermore, the assortment of sensors embedded in IoTTs for children provides new data sets that are already being captured and datafied. These new data sources include children's voices, movements, locations, images, breathing and heartbeat patterns. This increase in the quantity and variety of data available for commercial profit raises concerns regarding children's privacy and data security into the future.