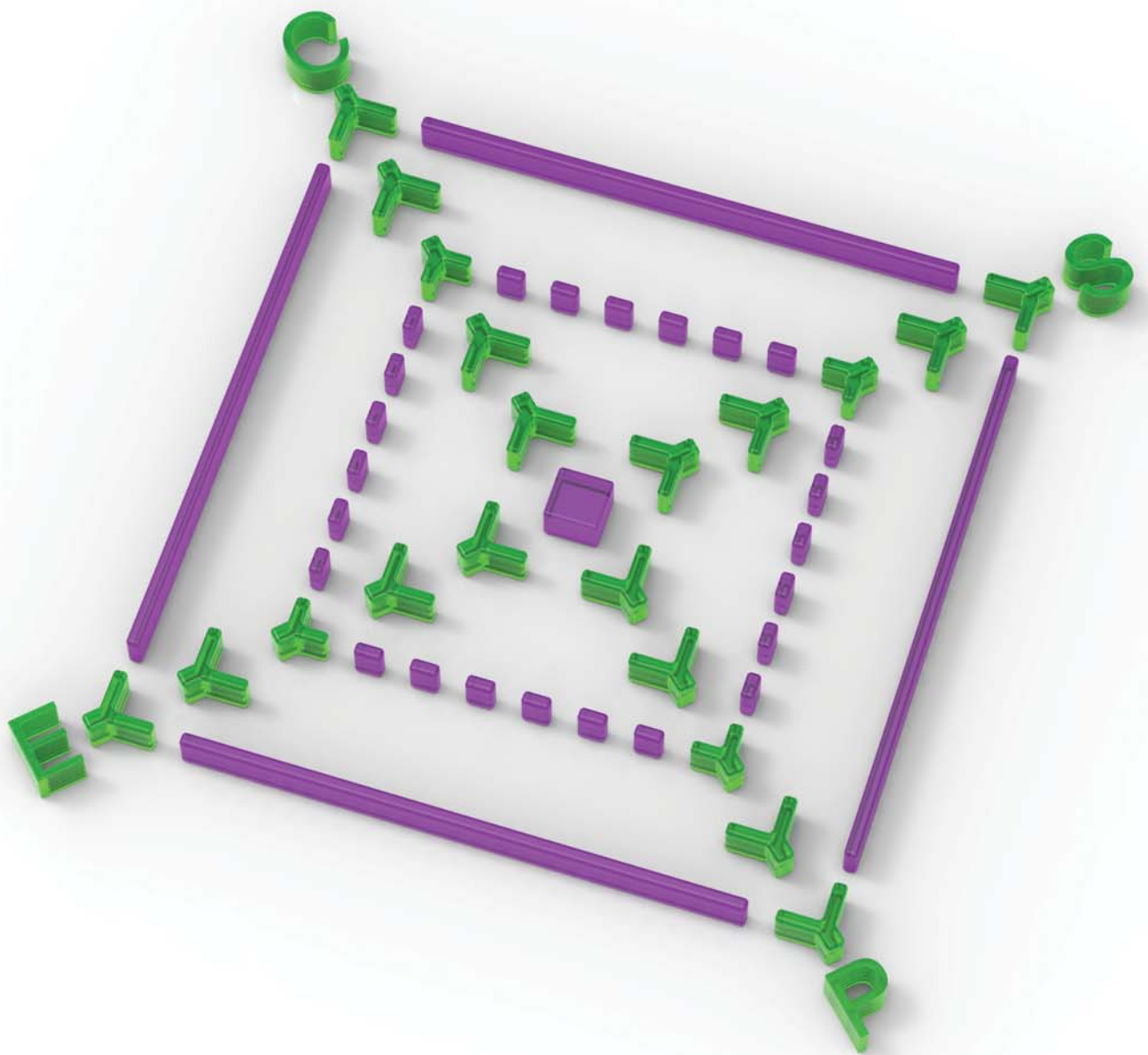


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# Exploring the Phygital: An Assessment of Modern Play Objects.

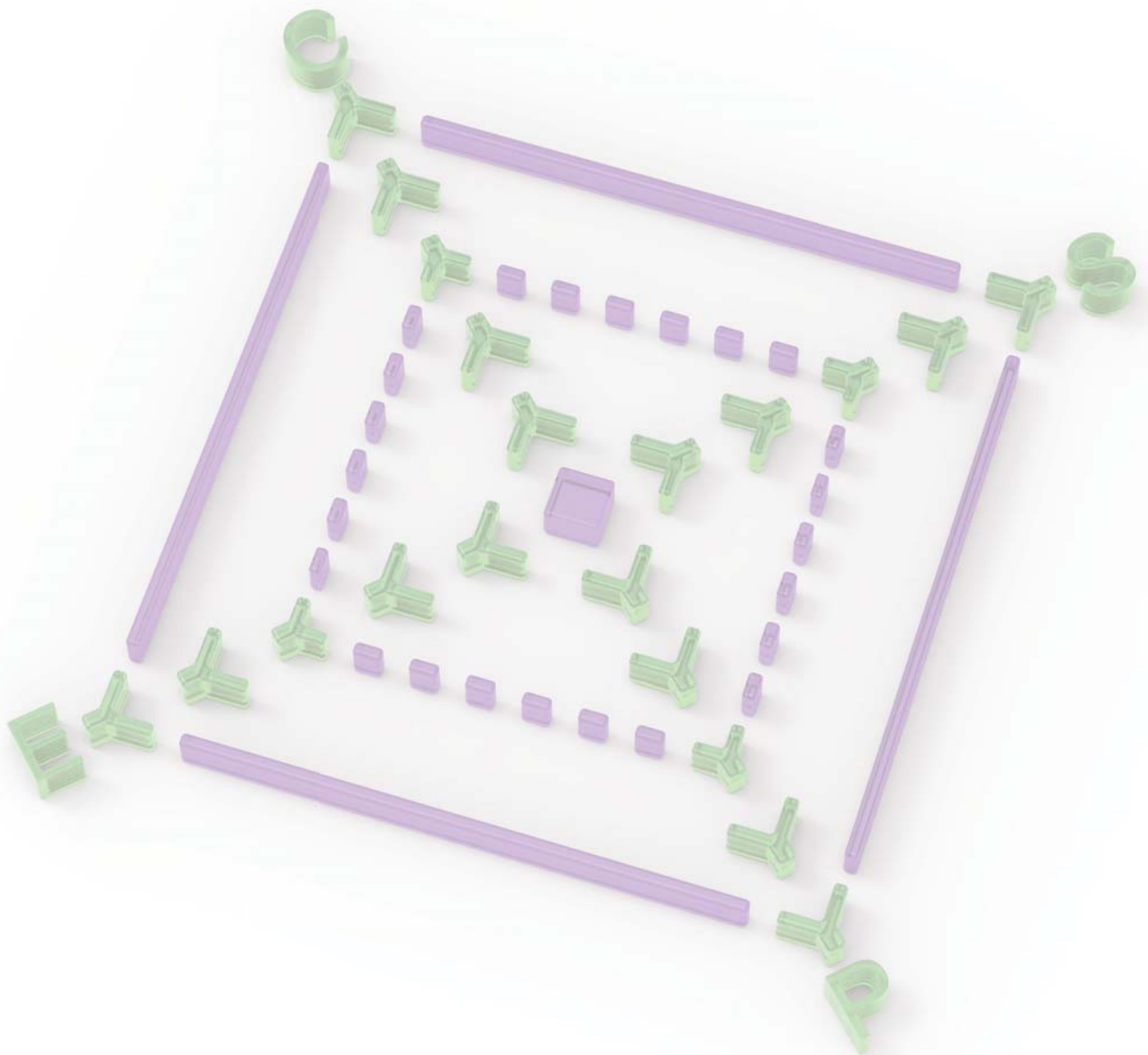


Chaz McManus



# Exploring the Phygital:

An Assessment of Modern Play Objects.



A thesis presented in partial fulfilment of the requirements for the degree of Master of Design at Massey University, Wellington, New Zealand / Chaz McManus

**Fig. 1:**



**Fig. 2:**



# 1.0

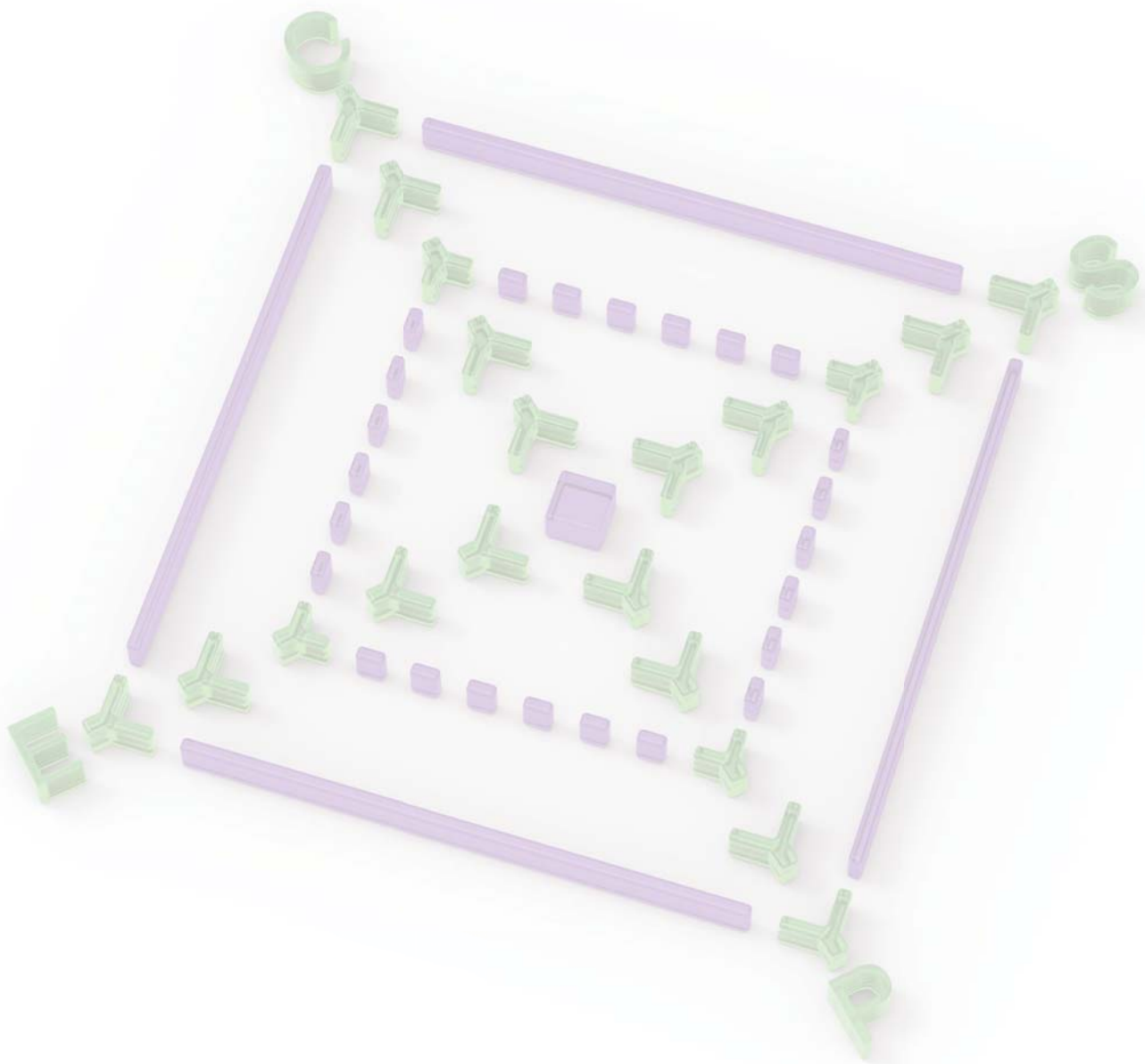
## Abstract:

The rise in household electronics, video games and computers - coupled with a parental perception that unguided outdoor play is unsafe - has led to an increase in children playing alone indoors (Gray, 2011). The result of this is a decrease in time spent engaging in spontaneous, unstructured play. Play theorists Burdette and Whitaker, (2006) find this concerning, as the decrease of unstructured playtime can present serious issues for the cognitive, emotional, physical and social development of children.

This change in the way children are playing is a result of the industry creating new types of *play-objects* and experiences; integrating physical and digital elements known as *phygital play-objects* (Trautman, 2014). Through my observation, the resulting play experiences for children lack *balance*. I have conceived the term *balanced play* to reflect my goal for *Phygital* play experiences, where the benefits of that play are spread equally across the areas of cognitive, emotional, physical and social development.

This investigation explores the benefits of play. Then uses this to form a guideline for *balanced play* experiences. It identifies the developmental stage of six to nine year olds and the ways a decline in play potentially affects their development. From this research, I produce a framework for assessing balanced play experiences when children use *phygital play-objects*.

This is achieved via the presentation of a design assessment tool and a *balanced phygital play-object* of my design created using this tool.



# 1.1

## Acknowledgements:

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For your mentoring and friendship.

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**Brad Heappey;**

Our weekly Pizza's kept me sane.

**Ross, Mon, Justin and Jason;**

The sense of community in our studio was real.

To those mentioned and unmentioned. Thank you for your kindness, support and love, it undoubtedly got me through. To quote Tom Hanks (the greatest actor that has ever lived) feels silly and appropriate, so here it goes.

“Man... believe me, the power and the pleasure and the emotion of this moment is as constant as the speed of light. It will never be diminished, nor will my appreciation and the meaning between two simple words that I can only offer you here: Thank you” (T.Hanks, 1995)

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Fig. 3: ViewMaster VR.



Fig. 4: Sphero



Fig. 5: Disney Infinity (PS4).



# 2.1

## Definitions and Glossary:

**Phygital:** Relates to the hybridization or combination of both physical and *digital play* experiences.

(See Fig. 3, 4 & 5).

**Digital play:** is any type of play imbued with technology, this can be anything ranging from digital environments on a gaming device to *phygital* or app-enabled *play-objects*. Examples: Cellphone, console and computer gaming.

**Play-object:** Is a term I coined. It is used as a method of referring to multiple styles of objects that can be used as playthings. Examples: Gaming consoles, *phygital* objects, blocks (Lego) and found items.

**Balanced play:** Is another term I coined that indicates the balance of a *play-object* in relation to the developmental potential it holds for a child or user.

**Play-tools:** is a concept that I use to identify this perspective on *play-objects*. This perspective views these play-objects as the tools a child uses during play.

Fig. 6:

