

# SUSTAINABLE COFFEE CUP DRIVE – UNPACKING AN INITIATIVE TOWARDS ELIMINATING DISPOSABLE COFFEE CUPS

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## INTRODUCTION

In the recent years, a trend in the practice of take-away coffee has seen a global increase. As a result, international chains as well as privately owned cafes have become under a spotlight for the amount of disposable coffee cups that are given out, which mostly end up in the landfill. In the UK an estimated 2.5 billion disposable cups is used every year!<sup>1</sup> Similarly, in New Zealand, in 2011, 180 million coffee cups were distributed by Huhtamaki Group, a major manufacturer and distributor of disposable cups in New Zealand.<sup>2</sup> Various products, such as reuse cups and more environmentally friendly cups are being marketed to help mitigate the disposable cup waste. However, a café in Dunedin, New Zealand has been at a forefront of an unprecedented initiative. In 2016, Eden Café at the Otago Polytechnic tertiary institution initiated the Sustainable Coffee Cup Drive to cease the use of disposable cups in favour for other alternatives.

This paper examines the Sustainable Coffee Cup Drive in three parts; scoping research; insights from the research and describes the new system set up for Sustainable Coffee Cup Drive. Following this, the paper will use a practice theory approach to analyse the elements of coffee practice using a useful understanding suggested by Shove and Pantzer<sup>3</sup>. In practice theory, a focus is shifted away from individual's behaviour to assess social organisation of everyday activities. Examining coffee culture using this approach is helpful to analyse finer details associated with the rituals of takeaway coffee to highlight in what ways Eden Café's initiative has had an impact. Finally, this analysis suggests examining finer details of everyday coffee consumption patterns in consideration of further reducing coffee cup waste.

## EDEN CAFÉ, SUSTAINABILITY SCOPING STAGE

In 2015 a scoping research project, incorporating observation of customers and discussions with stakeholders was lead by a small working group made up of the Eden Café Staff, and Otago Polytechnic staff with keen interest in researching sustainability strategies. Its aim:

1. develop a system to become a market leader in the café industry with respect to environmental and financial sustainability;
2. engage with the café customers and the Otago Polytechnic community to ensure development of a strategy that is supported by the community;
3. test the strategies towards reducing catering related waste and carbon emissions related to café operation. This was carried out with a view to implement a new system a wider catering services at Otago Polytechnic and beyond.

As a basis to develop a new strategy, the working group used open-ended conversations with customers; noted consumption patterns of the customers; assessed financial data; and explored national and international precedence in sustainable café operations.

## INSIGHTS FROM EDEN CAFÉ, SUSTAINABLE SCOPING STAGE

A number of insights below were gained from the scoping phase.

1. The waste bin at the café often over flowed with disposable cups and had to be emptied more than once a day. This illustrated that, the disposable coffee cups were not being used for their intended function to help aid the “on the go” consumption. Instead, many of the customers were drinking their beverage on site.
2. Research into the production of the disposable cups uncovered vast carbon emission is associated with transport during production and distribution of disposable coffee cups for use in the New Zealand location. Huhtamaki Group which distributes most disposable cups in New Zealand sources raw timber materials from Russia. The timber is transported to Sweden to be pulped and transported to Auckland, New Zealand to be manufactured into disposable cups.<sup>4</sup> The cups are then transported, in this case another 1500 km to Dunedin, for use and despite the vast embodied energy, the cups are usually used for only a few minutes. Eliminating the use of these cups, in particular in our remote location, would make a meaningful impact on the environment.
3. Many customers voiced their interest in supporting the use of alternatives to disposable coffee cups. Some customers were already bringing reusable cups to the café to be filled up and to take back to their offices.
4. Many varieties of the disposable cups are made of cardboard fused with a plastic lining, which are difficult to separate and hence can not be recycled. On the other hand, some cafes are opting to give out cups made with biodegradable plastic lining. However, very few cups actually end up being recycled or composted. From our local perspective in Dunedin, the closest location for the biodegradable disposable cups to be recycled in large quantities through a commercial composting operation is 360km away in Christchurch. This brief assessment into the situation with disposable cups highlights some problems to ensure cups are disposed in ways suitable for various types of disposable cups.
5. The identification of a large network of local sources for food in order to reduce carbon emission related to transportation and to support the local economy.

## EDEN CAFÉ, SUSTAINABLE COFFEE CUP DRIVE SYSTEM

The main findings from the scoping stage were instrumental for the working group to make the decision of eliminating the use of disposable cups from the beginning of 2016. This initiative set a precedence in café industries world wide and prompted national and international media interest. In the first year of this initiative Eden Café estimates to have eliminated 38000 cups from landfill. At the same time as ceasing to offer disposable coffee cups, the café also started offering a number of alternatives when customers wanted to take-away their drinks.

1. The café purchased ceramic coffee cups and began encouraging customers to consume coffee on site.
2. The café continued stocking reusable coffee cups and began actively encouraging customers to purchase them for takeaway coffee purchases.
3. Second hand cups were purchased from local charity stores and were offered for take-away purchases for free. Customers were asked to bring back these second hand cups for reuse. The intention here was that the second hand cups could be classified “carbon neutral” assuming that the number times cups must be used to offset its embodied energy would have been reached before the cups were donated to charity stores.

4. To encourage more on site consumption, Eden Café partnered with the Dunedin School of Art staff, students and friends to produce hand-made ceramic cups. Approximately 50 cups were made with materials funded by both the Dunedin School of Art and Otago Polytechnic Sustainability advisor. The ceramicists were not paid for their work and time, but the funding off set the cost of making the cups. Drinks served in the hand made cups offer element of surprise and delight and works as a talking point in particular as all the cups are uniquely different from each other.

Eliminating the use of disposable coffee cups is a difficult decision to make for any cafe. A foremost concern is turning down customers, resulting in negative economic impact for the business. However, café driven sustainability initiative such as this may have a far reaching environmental impact than asking individuals to act on their sustainability conscience. This article will now turn to theoretical underpinnings in order to analyse the potential impact of this initiative.

## COMMON APPROACHES TO ADDRESS DISPOSABLE CUP WASTE

To address the issues around disposable coffee cups two common approaches are prevalent. This section will briefly introduce the two approaches to highlight the importance of Eden Café's initiative.

The first approach calls for cafes to dispense more environmentally friendly re-use cups. As briefly explained in Insights from Eden Café, Sustainable Scoping Stage section, examples of these cups include cups made out of biodegradable plastic lining, made with recycled materials and cup lid made of plastic that complies with local recycling systems. While these options help create a seemingly more sustainable option, a number of problems are raised to ensure the cups are actually composted or disposed as intended. Asking consumers to separate the cups alone raises a challenge. Various combinations of biodegradable and non biodegradable linings on the cup and lids being on the market, requires customers' understanding of the material to separate appropriately. In aligning with the convenience of the use of disposable cups, waste separation bins must be placed in convenient locations. However, as discussed previously, in cities that do not provide a large scale composting system for the biodegradable cups to be recycled as intended, these products could end up as mere "green wash." Despite the positive intentions, issues around disposal are associated with disposable cups.

Secondly, is a more complex behavioural change approach which puts the consumers responsible to take reusable cups to cafes. A classic approach to changing behaviour is to increase awareness and attitude towards sustainability issues, which would have a trickle down effect to changing behaviour. However, recent studies highlight the inconsistency between attitude and behaviour: Despite knowledge and pro-sustainability attitudes, behaviours in our daily lives often do not reflect our intentions.<sup>5</sup> Even consumers with positive attitudes towards re-use coffee cups can find themselves at a café for an unintended purchase and not having brought a reuse cup. Similarly, taking long showers or driving a short distance that can be travelled on foot are part of reality for many, even for those with pro-environmental attitude and intentions to use as few resources as possible.

Our previous observation at the Eden Café was consistent with the above research. Most customers of the café are tertiary education staff, students and visitors with a degree of exposure and knowledge about sustainability issues. However, until the initiative began many customers did not arrive at the café with re-use cups, despite the fact that they were on sale at the café and moreover, many staff were previously gifted free re-use cups from the New Zealand Tertiary Staff Union. Furthermore, the café had placed a large poster explaining the negative environmental impact of the disposable cups. This observation supports recent arguments by studies suggesting that additional measures must be taken above and beyond asking individuals to take responsibility.<sup>6</sup>

At the Eden Café, the initiative to cease dispensing disposable coffee cups helped to begin shifting the norms and patterns of coffee consumption. Next we turn to practice theory approach to understand the complex patterns surrounding coffee practice and how this understanding may help develop systems for more sustainable ways of consuming coffee.

## COFFEE CONSUMPTION AS A SOCIAL PRACTICE

Recently, an increasing number of sustainability and resource management research projects are being carried out through the application of practice theory, or theories of practice from sociology. Practice theory approach emphasises the move away from studying individual attitudes and behaviours to investigation of social organisation of everyday practices.<sup>7</sup> Rather than isolating an individuals' behaviour, the social practice model "looks into the possibilities for designated groups of actors to reduce the overall environmental impact of their normal daily routines involving clothing, food, shelter, travel, sport and leisure."<sup>8</sup> These routine types of behaviour are analysed through a number of interconnected elements. While there are a number of approaches to mapping out elements of practice, Shove and Pantzar's<sup>9</sup> understanding of practices is a useful tool of analysis. In their study, Shove and Pantzar<sup>10</sup> take cues from Reckwitz<sup>11</sup> and Shatzki<sup>12</sup> to argue that "...practices involve the active integration of materials, meanings and forms of competence."<sup>13</sup>

"Interogation of materials Materials"<sup>14</sup> involve elements that are equipment or products and include people involved in the practice. For example showering would include material elements such as a bathroom, shower head, as well as hair, body and bathing products.

"Symbolic Meanings and Images"<sup>15</sup> refer to elements of a practice that offer meaning to a practice, for example, a meaning around walking may be for health, getting fresh air or a social activity.

"Competence and Procedure"<sup>16</sup> is concerned with ways of carrying out a practice, knowledge and know-how. These procedures in social practice are shared by actors through education, media or by taking cues from each other. For example, elements of competence and procedure for the showering may involve knowledge such as which cleaning products to use and competence of how to turn on the shower. Frequency and length of showering may be a form of knowledge that is culturally shared in the way that showering every morning may be an accepted norm for one culture and not so in another.

## COFFEE CONSUMPTION MEANINGS, COMPETENCE AND MATERIALS.

Coffee purchase does not occur in isolation from other activities or without meaning. Rather, a coffee purchase is intertwined in routine and habits of everyday life. Shove and Panzer's<sup>17</sup> above understanding was used as a model to explain the intricate elements surrounding coffee consuming practice.

Figure 1, highlights the elements that are connected to the everyday practice of coffee consumption. The materials concerned here list associated coffee products such as disposable and reusable coffee cups, coffee machines, variety of food on offer and the smell and sound that are strongly associated with a café coffee consumption. The loud noise, the intense smell of coffee and the hustle and bustle is synonymous with cafe environment is difficult to replicate at home or a work office.

Symbolic meanings and image uncover perhaps some more recent meanings connected with café and takeaway coffee practice. Takeaway coffee projects broader nuanced meanings than simply that of convenience. Along with the newly formed ideas around "good coffee" as opposed to "bad coffee", takeaway coffees and walking carrying them, provides a way of asserting personal taste, or to follow cues within a social group.

Finally, the elements of the competence and procedure of coffee practice highlights the compounding of materials and symbolic meanings that has shifted everyday patterns and norms of how coffee consumption is performed. The disposable coffee cups enabling on-the-go consumption along with the meanings, have transformed the daily routines of many. Arriving at work early to buy coffee before starting work or walking to a café during morning tea break reflect a more recent and flexible allowance for time within a working day to accommodate a coffee purchase ritual. The meanings, materials and procedure indeed work together to shape how coffee drinking takes place during day to form a new habit or a norm.

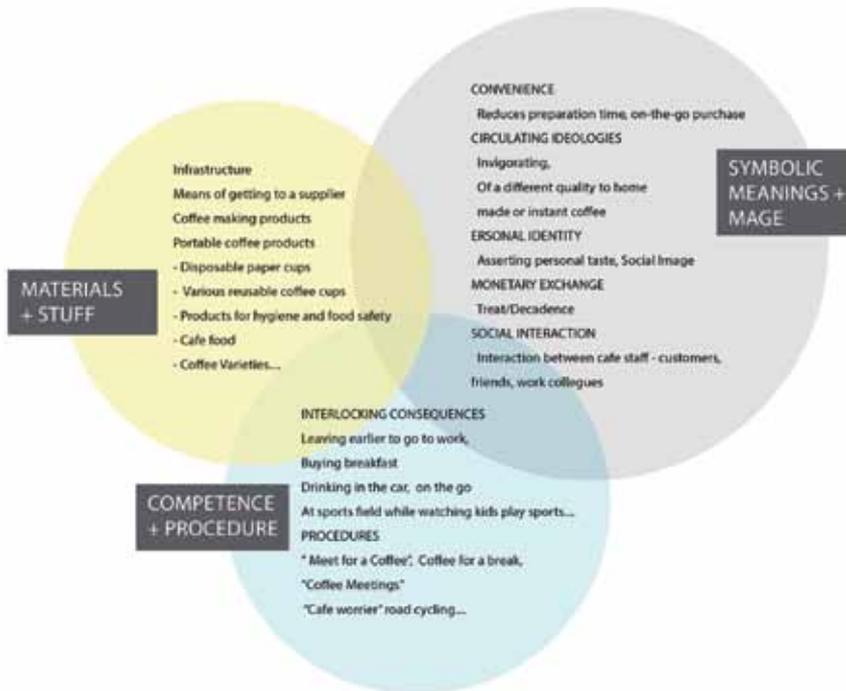


Figure 1. Meanings, materials and competence of takeaway coffee consumption.

In a recent observation, a caravan coffee store was providing hot beverages in disposable cups for parents watching their children's football games at a large football field on a Saturday morning. On this cold winters morning when the players breath are clearly visible in the fresh airs, hot beverage offers even more meanings to parents who are spectators, such as warming their hands and their body as well as passing time. This Saturday morning local scene alone hints a vast shift of meanings, norms, and expectations around the ways coffee is consumed.

## CONCLUSION

While the disposable coffee cups have been the overall theme of this paper, the elements of meanings and competence associated with coffee consumption are key to understanding nuances of habits and rituals associated. Moreover, the elements of materials and meanings together introduce new procedures for 'doing coffee'.

The analysis through social practice approach is helpful in identifying that disposable cups as an element of material or stuff have helped construct new meanings and competence around 'on the go' coffee consumption. Caravan cafes offering only take-away coffees, drinking coffee during a commute or taking a café-bought coffee back to a work office, are new forms of consuming coffee that are enabled by disposable coffee cups. As a result, a growing dependence and expectation on this resource-intensive product has become a norm.

Coming back to Eden Café's initiative, eliminating the disposable coffee cups is no doubt acting as a catalyst for forming new expectations, norms and meanings around 'doing coffee'. On one hand this initiative sheds light on the environmental issues surrounding disposable cups to their customers. On the other hand, it shifts the expectations of customers regardless of varying attitude towards environment and the waste. As a response to the initiative,

Café staff are noticing that more customers are sitting down at the café or bringing reusable cups. Not having the option to use a disposable cup may also lead to conversations such as "...I'm just going back up to the office to get a reusable cup", "shall we just sit down here?" or "Have you got your cup?" to be an accepted and necessary norm for utilising the café.

The significance of this initiative is also in the additional approaches taken to enhance the 'eating in' experience, in particular providing handmade coffee cups from the art school students and friends from the same institution. Café staff mentioned that the handmade cups create a talking point between café staff and their customers. Incidentally the environment in which the café operates have recently renovated to become a 'Hub' and is acting a busy social space where people are having meetings, lunches and working away from their offices. This newly created environment may be a contributor to more of the cafe customers dining-in rather than taking away.

Here it must be mentioned that, prior to the initiative, Eden Café used disposable cups as a default option and did not offer ceramic cups. While their swift move away from the disposable cups is to be commended, using combination of washable cups and disposable cups would have help them run a more environmentally sustainable practice from the beginning. However, using disposable cups as a default or the only option is an operation seen often in cafes locally and nationally. In particular, cafes with limited spaces, such as caravan cafes and small 'hole in the wall' cafes would be difficult to cease using the disposable cups because of the lack of space to store and wash ceramic cups.

This makes us comes back to the reality that eliminating disposable coffee cups may have been a distinct possibility for the Eden Café located within educational organisation, with a community not only aware of sustainability issues but is reinforced as an institutional agenda.

It is no doubt that eliminating the use of disposable cups from an operation is a large financial risk for commercial cafes. However, Eden Café's precedent is a key to breaking the current norms around 'doing coffee' to build a new sets of norms in nuanced ways that are incrementally making positive changes towards environmental sustainability. In addition, the way in which the Eden Café not only ceased the use of disposable coffee cups, but also offered other alternatives allow customers to still make their decision to enjoy takeaway coffee and purchase from the café. The various alternative offerings are a key to this initiative's success. Therefore Cafes taking the initiative to make reusable coffee cups for sale as its only sustainability initiative will have small effect to shifting customers' behaviour; instead a number of alternatives to be offered as a part of the system are necessary.

## **FUTURE SCOPE**

Further research in regard to the responses from the customers of this café will enrich this study. Currently, data gathering is in progress from customers of Eden Café to gauge how they have responded and accommodated the changes driven by the Sustainable Coffee Cup Drive initiative. Analysis of the customers' response along with more recent financial data of the café will enable us to compile a more comprehensive summary of this initiative. The summary will help develop a set of recommendations to interested parties, such as external café operations, city council bodies and various groups with interest in food waste minimisation.

The working group responsible for this project are also currently scoping further areas of improvement to the sustainability of its café operation. These include, reducing the use of meat ingredients to decrease the food production related carbon footprint, and sourcing locally grown ingredients to implement further strategies towards making a positive shift for the environment.

## REFERENCES

- 1 Hugh Fearnley-Whittingstall, "Viewpoint: The Waste Mountain of Coffee Cups " *BBC*, <http://www.bbc.com/news/magazine-36882799>.
- 2 Eloise Gibson, "The Great Coffee Cup Recycling Challenge," <http://www.stuff.co.nz/business/industries/6200628/The-great-coffee-cup-recycling-challenge>. 2011
- 3 E. Shove, Panzer, M, "Consumers, Producers and Practices Understanding the Invention and Reinvention of Nordic Walking," *Journal of Consumer Culture* 5, no. 1 (2005).
- 4 Gibson. 2011
- 5 For Example McKenzie-Mohr, "Promoting Sustainable Behavior: An Introduction to Community-Based Social Marketing," *Journal of Social Issues* 56, no. 3 (2000).
- 6 For Example E. and Walker Shove, G, "Governing Transitions in the Sustainability of Everyday Life," *Research Policy* 39 (2010). A Thorpe, "Desin's Role in Sustainable Consumption," *Design Issues* 26, no. 2 (2010). S Clune, "Design and Behavioral Change," *Journal of Design Strategies* 4, no. 1 (2010).
- 7 A Reckwitz, "Toward a Theory of Social Practice. A Development in Cultrualist Theorising," *European Journal of Social Theory* 5, no. 2 (2002).
- 8 G. Spaargaren, "Sustainable Consumption: A Theoretical and Environmental Policy Perspective," *Society & Natural Resources* 16, no. 8 (2003); *ibid.* p668
- 9 Elizabeth Shove, Mika Panzer, "Consumers, Producers and Practices Understanding the Invention and Reinvention of Nordic Walking," 2005
- 10 *Ibid.*
- 11 Reckwitz. 2002
- 12 Theodore Schatzki. (2001) *Social Practices*. Cambridge: Cambridge University Press.
- 13 Elizabeth Shove, Mika Panzer. 2005
- 14 *Ibid.* p53
- 15 *Ibid.* p51
- 16 *Ibid.* p53
- 17 *Ibid.*