



# Psychological and Behavioural Science

**This is Our Planet: How to Overcome Psychological Distance  
and Make Western Consumers Care  
about the Amazon Rainforest**

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## BACKGROUND

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The importance of the Amazon rainforest cannot be stressed enough. It is a vital ecosystem on which the world depends, while at the same time also serving as an important economic resource for the local people and economy. Below we provide some basic information illustrating its importance.

The Amazon rainforest stretches five and a half million square kilometres over nine different countries in South America, 60 percent of which is in Brazil (Simpson, 2010). Containing more than half of the world's animal and plant species (Barbosa, 2000), it is one of the most biodiverse ecosystems on the planet (Dirzo & Raven, 2003). Further, as the biggest area of remaining tropical rainforest, it is particularly important for slowing down global warming. By regulating the world's oxygen and carbon cycles and removing more CO<sub>2</sub> from the atmosphere than it emits (Phillips et al., 2009), it is often referred to as "the lungs of the planet" (Simpson, 2010).

In addition, the Amazon also influences climate stability by maintaining the balance between temperature and humidity, which can influence regional precipitation patterns (Ometto, Aguiar, & Martinelli, 2011). However, with ongoing deforestation, this stability is likely to change, resulting in a much hotter and drier climate (Fisher et al., 2007). Not only would this affect South America, but the global climate system is at stake (Le Quéré et al., 2009). Rainfall patterns could change across North America, Europe and Africa, with adverse effects for agriculture (Metcalf, 2019).

Further, many of the Amazon's plants have important everyday uses that the world relies on, including chocolate, coffee and moisturisers (Larsson, 2013). Also, up to 25 percent of the plants that are used in modern medicine come from the Amazon (Dunnell, 2018), while 99.5 percent of the flowering plant species have yet to be studied for their medical potential (Parker, 2019). Hence, the Amazon rainforest is a crucial environmental resource on which the world depends.

As stated above, however, the Amazon is also an important economic resource for Brazil and local inhabitants. Annually, it is estimated to contribute around \$8.2 billion to Brazil's economy through an array of products, including timber and agricultural produce (Metcalf, 2019). This poses a serious challenge for the country to preserve the rainforest, whilst meeting the increasing demands of its population (Davidson & Artaxo, 2004). As such, it is constantly under threat from increasing anthropogenic disturbances such as forest clearing and fires (Nobre & Borma, 2009), which inevitably come at the expense of biodiversity (Silva, 2019).

At present, Brazil is responsible for 80 percent of Amazonian deforestation, mostly due to the conversion into agricultural land (Soares-Filho et al., 2006). A particular problem is the recent surge in soybean production, whose related deforestation is responsible for almost a third of Brazil's greenhouse gas emissions. Around 70 percent of soy is used to feed livestock, meaning that the human population's demand for meat indirectly drives deforestation in the Amazon (Good, 2014).

To realise the magnitude and urgency of the issue, Brazil's National Space Research Institute recorded 40,341 fires as of August 2019 — an 85 percent increase compared to the previous year. This is equivalent to trees being cleared at a rate of five football pitches every minute (Zaki, 2019).

International concern over the destruction of the Amazon rainforest has been growing for years, yet this has often been interpreted as criticism and a threat to Brazil's sovereignty (Simpson, 2010). The current president, Jair Bolsonaro, has reduced the protection over the rainforest as a means to help the country's struggling economy (Zaki, 2019), which in turn has led to more fires. The issue is currently highly politicised and has caused increasing conflicts between the government and environmentalists.

# 1 INTRODUCTION

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The Amazon rainforest is an invaluable ecological resource for the whole world in terms of its effects on slowing down global warming, its impact on rainfall levels, and its natural abundance of daily commodities used by the global population. At the same time, however, it provides an extremely important economic resource and source of income to local inhabitants (see Background). This mismatch between local economic interests and global environmental benefits poses a significant challenge that we wish to address in our work.

One possible way of looking at the issue would be through the lens of the *tragedy of the commons* (Hardin, 1968), whereby one side has an incentive to overuse a resource at the expense of everyone else. Concretely, most of the gains from taking advantage of the Amazon are reaped by Brazil, whereas the environmental costs are shared amongst the rest of the world.

Furthermore, while the economic benefits are short-term, the environmental degradation is a relatively gradual and slow process, meaning that most people are likely to discount the magnitude of the problem (Dasgupta, 2008). Hence, given this temporal dimension, as well as the sheer size of the rainforest and number of different stakeholders involved (see Figure 1), this becomes a coordination problem whose possible solution is simply beyond the scope of our work.



Figure 1. Stakeholder Map

Instead, we have chosen to tackle the problem from the angle of increasing Western consumers’ demand for Amazonian products that are certified by the Rainforest Alliance and which would be sold at specialised pop-up stores. By Western consumers, we are referring to those in Europe, the Americas and Australasia (Kurth, 2003). Many items that naturally grow in the Amazon are already popular among Westerners – for example, the top ten coffee consuming nations of the world per capita are in Europe (Jones, 2018) and 64 percent of Americans have at least one cup of coffee a day (Sherman, 2018). Further, the top twenty chocolate consuming

nations of the world consist mostly of European countries, as well as New Zealand, Australia and the United States (Conway, 2019).

We chose to build on the Rainforest Alliance because it is a non-profit organisation whose aim is to advance the sustainability of forests, agriculture and business (Rainforest Alliance, 2019). It is currently certifying 407 farms across 18 million acres of protected rainforest in Brazil (Newsom & Milder, 2018) and achieving 80 percent lower deforestation rates (Rainforest Alliance, 2018a) – see Appendix 1 for more information.

We wish to focus on a solution that satisfies both Brazil's economy and the world's needs, and which is realistic and doable in the medium term. Therefore, our research question is:

*Consumers (in Western countries) are detached from the Amazon: What can be done to overcome the psychological barriers to support the sustainability of the rainforest?*

By decreasing psychological distance, we wish to promote the demand for sustainable, fair trade Amazonian products by Western consumers, most notably coffee, thus helping to preserve an important ecological resource, whilst also meeting the economic needs of Brazil. Other popular products originating from the Amazon that would be featured include chocolate, nuts, avocados and acai berries (Larsson, 2013). The reason for highlighting coffee is because it is the single most important product on the fair trade market (Dragusanu, Giovannucci & Nunn, 2014), as well as the fourth most consumed beverage in the world (Chan & Maglio, 2019).

In terms of the essay's structure, Section Two introduces relevant theories to define the issue: psychological distance, commodity fetishism and social representations. Section Three covers the theoretical framework for the solution using narratives, experiential marketing and principles of fair trade. Section Four explains the solution in detail, including practical application of relevant theories. Finally, Sections Five and Six cover limitations of our proposal and the essay's conclusions.



## 2 PROBLEM ANALYSIS

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In this section, we will introduce key theories to help define and analyse the issue in more detail.

### 2.1. PSYCHOLOGICAL DISTANCE (AND CONSTRUAL LEVEL THEORY)

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Despite broad scientific consensus about climate change and its immediate consequences, Sacchi et al. (2016) find that environmental issues are unlikely to elicit strong emotional responses. One possible reason may be due to *psychological distance*, which is considered to have four distinct dimensions — spatial, temporal, social and uncertainty (Spence, Poortinga, & Pidgeon, 2012). The authors find that when climate change is represented as a psychologically distant phenomenon, people are less concerned and less likely to have ecological attitudes and behavioural intentions. Indeed, Brügger et al. (2015) point to vast research showing that for people in the West climate change is usually perceived as a distant threat with no immediate consequences and rather something that affects people in remote areas.

Limited by scope, we will not cover all four dimensions of psychological distance, but wish to highlight the geographical component, which also plays a significant role in *commodity fetishism*, a concept introduced in the next section. We deem the geographical component to be the most relevant to our issue, since the geographical distance between consumers in the West and the Amazon rainforest is indisputable.

The relevance of psychological distance is further bolstered by *Construal Level Theory* (CLT) (Trope, Liberman & Wakslak, 2007), which states that psychological distance is related to how something is represented mentally. According to CLT, higher-level construals, which are schematic and abstract, are formed for more distant events, whereas low-level construals are more concrete and formed for close events. Experimental evidence shows that a focus on abstract features of an event increases psychological distance, whereas a focus on concrete features leads to perceived closeness (Spence et al., 2012).

Furthermore, psychologically close events encourage action per-se, as described by *Goal-setting Theory* (Locke & Latham, 2012). Interestingly, the association between construal level and psychological distance seems to be bi-directional (Trope et al., 2007). Not only does a more distant perspective foster higher construal level, but construing activities in high-level terms fosters perception of greater distance. It is thus conceivable that if the issue of the Amazon rainforest is somewhat too abstract for people to fathom, it may be considered a problem of the distant future, as well as something that does not require immediate actions. We propose to overcome this abstractness through changed narratives that will be introduced below.

Overall, if we wish to foster sustainable consumption and make people care about the Amazon rainforest, we will have to look at ways to manipulate psychological distance.

## 2.2. COMMODITY FETISHISM

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One of the most notable facts of modern life is that none of us know how to produce the things we consume in full (Boudreaux, 2014). Important economic thinkers such as Friedrich Hayek and Milton Friedman have shown how little we need to know in order to be able to take the right choices in the market and how for production and exchange to function, it is not necessary for people from distant areas to communicate, or even like each other (Hayek, 1945; Friedman & Friedman, 1990).

While undoubtedly impressive and speaking to the power of our current economic system, this nevertheless comes at a price. While Marx (1887, p.47) also noted that a “commodity appears, at first sight, a very trivial thing and easily understood”, he introduced the idea of *commodity fetishism* to show the way in which the market conceals social information and relations.

Hudson & Hudson (2003) show how modern capitalism conceals the environmental and social relations that go into the production of commodities, such as the ones that we are considering in our essay. It appears as if the commodity is completely detached from the

production process assuming a life of its own. According to the authors, then, the conditions under which workers have laboured are simply not taken into account.

Consequently, according to Harvey (1990, p.423) “we have to get behind the veil, the fetishism of the market and the commodity, in order to tell the full story of social reproduction”. Through our solution, we want to make the social and environmental features of our products more salient, so that people stop treating them as mere commodities.

### 2.3. SOCIAL REPRESENTATIONS & CLIMATE CHANGE

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Individual attitudes and behaviours in relation to the Amazon cannot be fully understood without acknowledging the social dimension of climate change. One theory that aims to address the complex nature of such phenomena is *social representations*. Its remit covers collective cognitions, ‘common sense’ and thought systems of groups of people that enable individuals to create order and facilitate communication (Höijer, 2011; Moscovici, 1973)

All three kinds of social representation — hegemonic, emancipated and polemic (Hulme, 2009) — are crucial for our exploration of the Amazon. Firstly, the hegemonic representation that centres around anthropogenic causes of climate change, albeit contested in the public sphere, offers a route to connecting individual behaviour change to communal solutions (Jaspal, Nerlich & Cinnirella, 2014).

Secondly, multiple representations exist for the same social objects (Howarth, 2006), which means that representations of climate change and the Amazon can be and are manipulated. This dynamism and continuous negotiation can be seen as both a threat and an opportunity.

Thirdly, Smith and Joffe’s (2012) research highlights the role of emotions in the assimilation of social representations, and the importance of complex emotions beyond anger, fear and guilt when constructing values and attitudes in relation to climate change. Emotional anchors, therefore, are crucial to public engagement with multifaceted issues like the future of the rainforest.

### 3 SOLUTION FRAMEWORK

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Sacchi et al. (2016) find that people feel more connected to the environment and are more willing to change their attitudes and behaviour when they perceive climate change as being close. According to Spence et al. (2012), the geographical distance can be manipulated in order to make people more aware of climate change and willing to emotionally and cognitively engage with it.

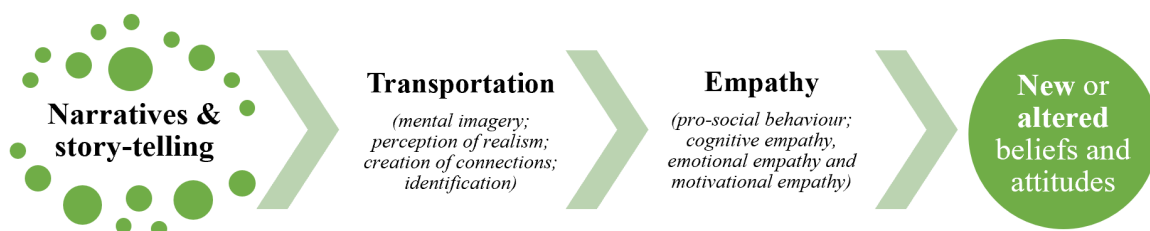
Thus, we wish to manipulate perceived psychological distance as a way of promoting sustainable behaviour through the use of narratives, sensory marketing and practical learning, while also taking advantage of the potential and aims of fair trade. Each framework is presented in more detail below.

#### 3.1. NARRATIVES, TRANSPORTATION & ATTITUDE CHANGE

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Narratives are a powerful tool for changing attitudes and beliefs (Green & Brock, 2000; Laer et al., 2014). In his critique of classical economic thinking, Shiller (2017) notes that narratives and storytelling are an essential part of human thinking, shaping economic behaviour and advancing cultural progress.

A key characteristic of narratives is *transportation* (see Fig 2), which allows people to escape the here and now and be transported somewhere else (Gerrig, 1993). Most interestingly, this *narrative transportation* can alter individuals' real-life attitudes and beliefs (Green & Brock, 2000).



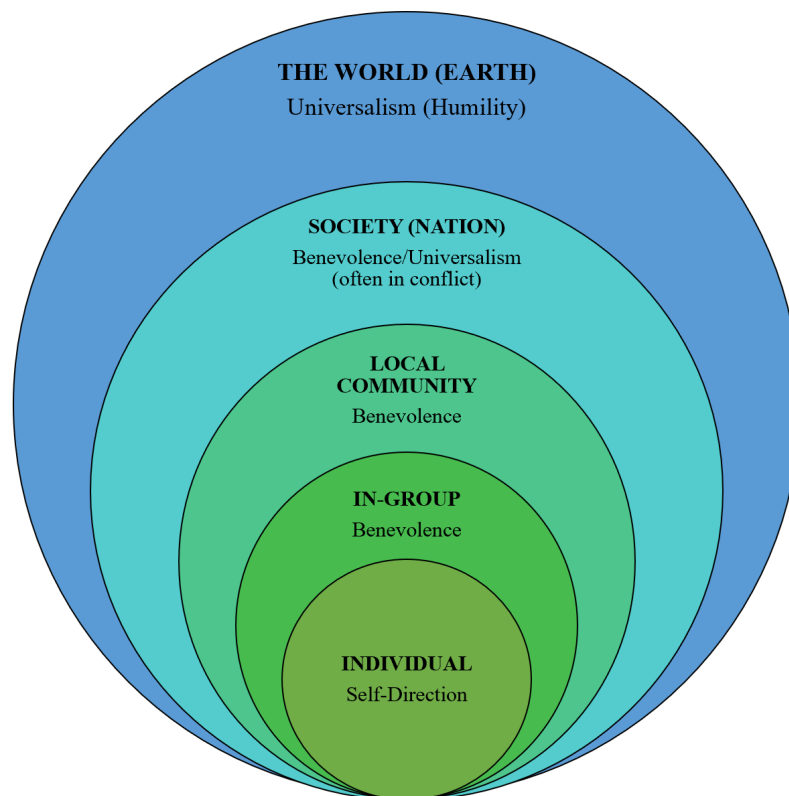
**Figure 2.** Narrative Transportation

Well-narrated stories encourage readers to share the emotions of the characters and increase the likelihood of mimicking those feelings and behaviours after the experience (Zak, 2014). In the context of global issues such as the future of the Amazon rainforest, universality of storytelling across cultures (Grisham, 2006) makes narratives crucial to finding common resolutions.

The social representation of climate change as a human-induced environmental problem is routinely contested in the public sphere, leading to a lack of universal understanding or agreement on what behaviours individuals must change in order to mitigate further environmental decline (Jaspal et al., 2014). Correspondingly, narratives that focus on feelings of guilt and fear have shown to be ineffective in promoting individual engagement and genuine motivation to act (Moser & Dilling, 2004; O'Neill & Nicholson-Cole, 2009). Wittmayer et al. (2019) thus proposes an alternative and forward-looking view, for instance by transforming prevalent dysfunctional narratives in favour of creating a new vision for the future (Milojevic & Inayatullah, 2015).

Furthermore, effective *narrative persuasion* in the context of attitudes towards sustainability requires a nuanced understanding of how our values impact motivation and pro-social behaviour. *Benevolence, universalism and self-direction* are of major importance to most people (Schwartz, 2012), highlighting an often-complex human need to incorporate self-expression with in-group belonging and the wider commune. Narrative-based strategies in relation to sustainability must acknowledge this spectrum of values, while directing individuals towards self-transcending *humility* (Schwartz et al., 2012).

In summary, expanding individuals' sense of space from local to global is one promising strategy that aims to address the negative effects of psychological and physical distance on universalism and pro-environmental behaviour (Heise, 2008). Narratives that incorporate both the *personal focus* and *social focus* values and move upwards from the individual to the collective (see Fig 3), can be used to test this strategy in practice.



*Figure 3. Identity, Values & Distance*

### 3.2. EMBODIMENT & SENSORY MARKETING

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*Embodied cognition* refers to the idea whereby cognition is strongly influenced by aspects of the body other than just the brain. Since people experience the world through their senses, sensory information plays a big role in human cognition (Wilson & Foglia, 2011). The use of *experiential marketing* — an in-depth sensory or emotional experience of a brand — can thus influence consumer preferences to a greater extent than attributes of the actual product itself (Zaltman, 2003) and can encourage emotional attachments to a brand or product (Schmitt, 2003). Therefore, experiential marketing could be particularly powerful in influencing consumers' perceptions of the Amazon rainforest. For instance, Chan & Maglio (2019) have shown that the mere exposure to coffee, even without actual consumption, increases arousal and decreases psychological distance by inducing lower level mental construals consistent with CLT.

A common form of experiential marketing is *sensory marketing*, which engages consumers' senses to affect their behaviour, judgement and perception (Krishna, 2012). Multiple, matching sensory cues in shops have been found to have a positive effect on reactions of customers (Spangenberg, Grohmann, & Sprott, 2005). They result in more personal experiences with a brand, which can lead to increased purchases of the product and recommendations to others (Ifeanyichukwu & Peter, 2018). Hence, this form of marketing could be particularly useful for encouraging people to buy products from the Amazon and getting them to spread the message of the store.

More specifically, to address the psychological distance between Western consumers and the Amazon, research suggests that some senses can be more effective than others (Schlosser, 2014). For instance, the proximal senses — taste and touch — have been suggested to have a closer psychological distance than sound, sight and smell (Elder, Schlosser, Poor & Xu, 2017). Therefore, making use of these senses in particular could be the most effective way to reduce consumers' psychological distance from the Amazon. Directly touching a product encourages a sense of control among consumers, which can increase feelings of psychological closeness (Wakslak & Kim, 2015). How we aim to implement these ideas concretely will be discussed in Section 4.

### 3.3. BENEFITS OF FAIR TRADE

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According to Dragusanu et al. (2014) fair trade has a number of goals. The first is to provide a stable price to producers that allows them to enjoy a decent livelihood. The second, particularly relevant for our essay, is achieving a production process that is not detrimental to the environment. Other goals include a much more stable relationship between buyers and sellers, better working conditions, as well as access to credit.

Overall, its rationale is to provide credible information to consumers, so that the above-mentioned veil of *commodity fetishism* is lifted. This is important since Dragusanu et al. (2014)

have shown that people are not merely interested in the physical properties of the product, but also derive satisfaction from the fact that it was produced in a sustainable manner. These findings are bolstered by real-life experiments conducted by Hainmueller et al. (2015), showing that sales for fair trade coffee were 10 percent higher even while being more expensive. Indeed, Dragusanu et al., 2014 find that fair trade farmers deem their economic environment as more stable and are more likely to engage in environmentally friendly practices.

## 4 SOLUTION FRAMEWORK

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As stated before, we propose that the Rainforest Alliance sets up specialised pop-up stores at which it would sell its certified products. We decided in favour of pop-up stores in order to avoid the high cost of having regular stores at prime locations. Research shows that they are fit for experiential marketing of conventional goods like groceries (Haas & Schmidt, 2016). The authors further find that long-term, communication-oriented pop-up stores increase emotional bonding of customers and generate involvement and interaction. Our overarching goals are twofold:

Firstly, we wish to take advantage of the widespread popularity of coffee and other everyday products such as chocolate and moisturisers in the Western world, but in a way that is in sync with the environment, while at the same time providing economic benefits to Brazil.

Secondly, and beyond mere consumption, the whole in-store experience is aimed at decreasing psychological distance and making people more aware of the Amazon and its importance. Hence, we wish for people to focus on the environmental and social conditions that helped produce these products, and thus identify less as consumers and be more engaged actors (Hudson & Hudson, 2003).

We are building on the findings of Griskevicius et al. (2010) that people are willing to pay more when shopping in public and when green products cost more than conventional ones.



Thus, as our products would be more expensive than those offered by the competition (such as Starbucks), this is not seen as a problem, but rather an advantage.

Another advantage of our proposal is derived from the fact that our stores would be operated by a reputable non-profit organisation, given that Bhattacharjee, Dana & Baron (2017) found that the default view of profits is at odds with the social good and is often considered as causing social harm. The following three sub-sections develop the ideas in detail.

#### 4.1. NEW NARRATIVES

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The Rainforest Alliance's current narratives revolve primarily around the failures of the past and present, aiming to create a sense of urgency through powerful visuals (the burning rainforest) and strong language (words like crisis, emergency and destructive). Consequently, the overall public sentiment on social media around the Alliance is either neutral or negative (Keyhole, 2019), with Twitter hashtags such as #climatecrisis and #deforestation skewing the conversation away from the work that is done by the non-profit organisation and its partners (Trendsmap, 2019). And although the essay's interpretation of the narrative-based solutions is limited to individuals' worldview and behaviour, this sentiment analysis (more in Appendix 2) acknowledges the importance of social discourse in the shaping and distribution of narratives (Davis, 2002).

We propose to develop new narratives that will evolve from *climate crisis* towards *sustainability* and feature future-focused stories of agricultural innovation and conservation efforts. This will allow for the development of positive public narratives that inspire purposeful action (Ganz, 2010) such as sustainable consumption. To replace the current narrative (Figure 4) a new narrative (Figure 5) has been created to feature on certified products such as coffee. It incorporates an optimistic, future-focused view and allows to expand individuals' space from local to global.



**Figure 4. Current Narrative**



**Figure 5. New Narrative**

Targeted to the more transportable individuals — higher education, female and familiar with the fair trade principles (Laer et al., 2014) — the story has a strong female protagonist, with consumers becoming a caring and supportive global network to help in her mission to preserve the rainforest. The character's traits reflect sustainability values that consumers are invited to share and align with. Psychological distance is reduced by creating a *common home narrative*, linking consumers' homes and the Amazon in a way that can be summarised as *bringing the Amazon into everyone's home*.

As our sustainability narrative aims to ultimately reduce consumerism, it is important to consider other ways of storytelling beyond the products sold in the stores. 'Plant a tree' movement is gaining momentum, with eco-friendly brands such as Pukka (Pukka Herbs, 2019) and celebrity-led initiatives such as #TeamTrees (BBC, 2019) raising the profile of tree planting as a tool for building a sustainable future.

To prolong the impact of narratives and reduce some of the negative effects such as *moral licensing* associated with *carbon offsetting* (Lovell et al., 2009), our 'plant a tree' solution will be extended to feature a 'mirror tree', given to loyal store customers (more details in Section 4.3). Customers will be asked to take care of an Amazonian plant in their homes, with one new tree planted in the Amazon in return (Figure 6).



**Figure 6.** *Plant a Tree Narrative*

Accessible through a QR code, longer-form narratives, supplemented by audio and visuals, will allow for more immersive and emotive experiences.

#### 4.2. SENSORY IN-STORE EXPERIENCE

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As sensory marketing in general has been found to have a positive effect on customers' perception of a brand and likelihood of recommending a product to others (Spangenberg et al., 2005), we propose to build on this finding by focusing on all five senses. Based on our field research (see Appendix 3), the stores would be filled with plants to make it look like the rainforest and would have sounds such as running water playing. The use of smell in this situation would mostly derive from the smell of our coffee.

As the proximal senses – taste and touch – have been suggested to be psychologically closer (Elder et al., 2017), we will primarily focus on these features. Samples of the Amazonian products would be handed out so that people can taste the products, thus decreasing psychological distance and fostering their in-store experience. In terms of touch, it has been

suggested that the use of interactive touch screens can increase feelings of ownership and decrease psychological distance (Brasel & Gips, 2014). Therefore, we suggest that our stores would involve touch screens, through which customers would learn more about the origins of the products and the story behind them.

To develop this sensory experience even further, we propose that the stores could offer customers the option to use a virtual reality (VR) device. These make use of the human senses – most commonly vision and hearing – to make a user feel a sense of presence within a different environment to the one they are physically in (Riva et al., 2007). It has been suggested that once a virtual presence is felt by a user, it allows for the possibility of altering the psychological distance between them and the virtual environment they are in (Lehtonen, Page, & Thorsteinsson, 2005). Therefore, giving customers the opportunity to be ‘present’ in the Amazon in this way could be useful for decreasing psychological distance. In turn, this could help to increase their concern for the Amazon and willingness to buy products that promote sustainable use of it.

This idea has recently been used by Greenpeace UK who developed a VR smartphone app that provides an immersive experience of environments such as the Amazon (Gross, 2017). Use of VR in this way allows people to see what is being protected and why it is so important that it be protected. Research finds that a relaxing VR environment – compared to a neutral one – can increase users’ sense of presence which can then lead to positive emotions (Riva et al., 2007).

Therefore, our VR experience of the Amazon rainforest would allow customers to explore it in a relaxing way so that they can see the sustainable work that is done by the Rainforest Alliance and the importance of preserving this important resource.

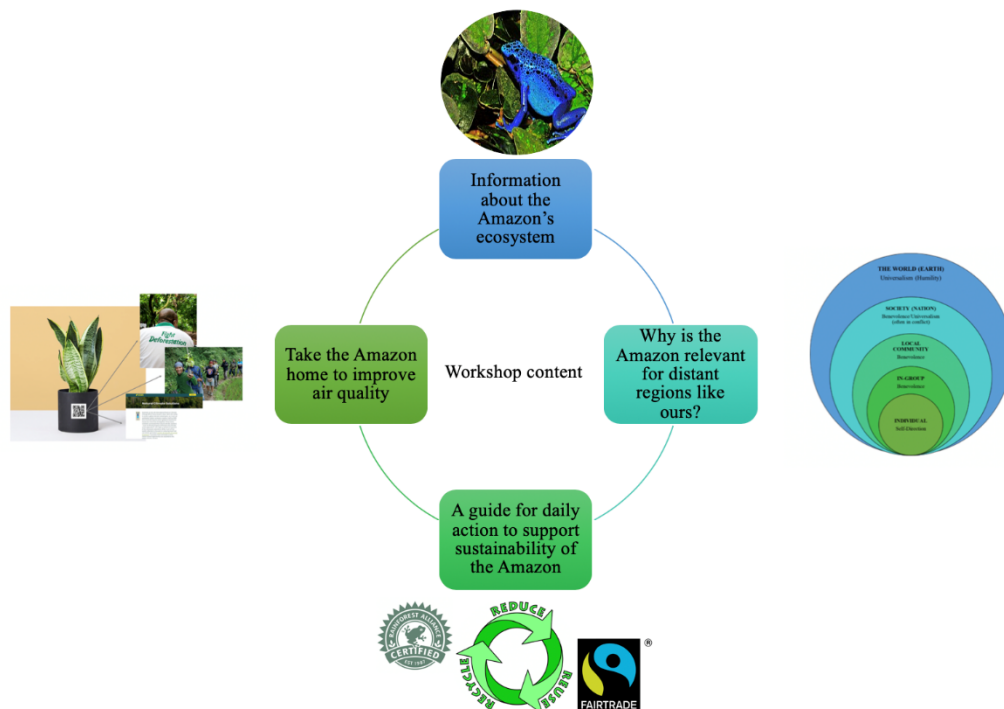
### 4.3. DE-FETISHISING IN PRACTICE

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As stated in the section on *commodity fetishism*, we wish for customers not only to care about the product that is being sold, but also about the underlying social process that created it.

Through our focus on fair trade, we wish to make the production process an inherent part of the product's identity to the customer. In addition to selling exclusively certified fair trade products, a genuine and reliable flow of information is needed to change consumer attitudes (Hudson & Hudson, 2003) and we wish to enable this by organising knowledge transmission sessions in the store.

Concretely, we propose weekly information session at which the production and impact of one specific product sold by the store is explored. In addition, we propose to hold monthly workshops which will not be about products, but about the Amazon rainforest itself (see Figure 7).



**Figure 7.** Workshop Content

By educating people about the ecosystem of the rainforest, we will provide an understanding of nature beyond its role as a resource for consumption. Events will give customers the opportunity to see how they are impacting the Amazon through their support of the Alliance's initiatives. We hope to attract children's attention with the experiential component and the decor of the venue, as described earlier. Teaching children to care for the

rainforest as a resource will contribute to a more sustainable mindset and an extended sense of self that includes the environment (Bonnett, 2002).

As mentioned in the narrative section, to prolong the effects of the above-mentioned measures, we suggest that participants of our workshops as well as loyal customers be given a snake plant to take home with them. We specifically chose snake plants, originating from the Amazon rainforest, as they have been found to be excellent air purifiers, and by virtue of this have gained in popularity recently (Rainforest Alliance, 2018b). Field experiments confirm gift giving as an effective measure to increase charity donations (Falk, 2007). In this line of thought, gifting is a token of appreciation for customers' fidelity and will likely increase willingness to spend money on certified products. Furthermore, this gift will decrease psychological distance and serve as a visual reminder to come back to the store, while providing information about the rainforest via the QR code on the pot (as seen in Figure 5).

## 5 LIMITATIONS

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Throughout our work, we set out to explore an option that is realistic, doable and which presents a win-win for both Brazil's economy, as well as the global environment. Nevertheless, we acknowledge that it falls short of a systematic and comprehensive solution, as it is once again based on consumption and embedded in the current system. It is plausible that the issue cannot be resolved without some radical change, such as the one proposed by the *degrowth* movement (Kallis, 2011), yet this is simply beyond the scope of our essay.

We are also aware of Žižek's critique (2010) when he noted that by purchasing a couple of fair trade products, people tend to feel they have done enough to alleviate global suffering and can thus continue to enjoy their lives without any feelings of guilt. Yet, through the use of special narratives, workshops and our mirror trees, we wish to prolong the in-store experience and transform people from mere consumers into engaged activists.

Furthermore, we chose to address only a small section of the stakeholder map (see Introduction), as our essay is merely focused on the demand side. It therefore leaves open the engagement with the Amazonian population and farmers, which would be crucial for success. We thus assume that increased demand for fair trade products would drive the adequate supply, yet this is in no way a given and is highly dependent on Brazil's political environment. In addition, fair trade still presents only a tiny share of the total consumption, which further diminishes the impact of our solution.

With regards to our narrative-based solutions, they revolve around the concept of *transportation*, which places a strong emphasis on individuals' attitudes and beliefs, often in isolation from the social context. Collective narratives, on the other hand, would have a much larger impact long-term on the formation and development of new values towards behaviour change (Ganz, 2010). While our solution employs tools that promote distribution of narratives through word of mouth, we do not offer a follow-up strategy that connects individual consumers to the global Rainforest Alliance community. The focus on more transportable easy-to-reach individuals, who are already likely to be fair trade consumers, also leaves out a large group of climate change sceptics, in line with our assessment of the social representations of climate change.

Finally, despite its usefulness in decreasing psychological distance, the experience provided by the virtual reality devices, as well as workshops, would inevitably be confined to a small number of people due to time constraints. However, customers would still be engrossed in the other elements of our sensory experience and would not miss out on this part of our solution.



## 6 CONCLUSION

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Throughout our essay, we wished to stress the Amazon's importance as a global ecological resource, without denying Brazil's right to take advantage of its economic potential. Instead of being discouraged by the complexity of the issue, we sought to address one part of the problem by promoting the sustainable use of this invaluable resource in which Western consumer would play a key role. Therefore, the question we selected to tackle in relation to the Amazon was:

*Consumers (in Western countries) are detached from the Amazon: What can be done to overcome the psychological barriers to support the sustainability of the rainforest?*

Based on scientific literature, we proposed that by reducing psychological distance, defetishising commodities, leveraging narratives and taking advantage of modern tools of experiential marketing, Western consumers could be encouraged to change their attitudes and in turn become more engaged and sustainable actors. Our solution built on the Rainforest Alliance's products and mission, applying relevant theories and empirical evidence.

Acknowledging all the limitations and aware that this might be considered as just a drop in the ocean, we nevertheless think that it presents a very important first step and believe in a popular saying which holds that "many small people, who in many small places, do many small things, can alter the face of the world".

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## APPENDIX ONE

### “GREATER INSIGHT IN TO THE RAINFOREST ALLIANCE”

1. Process of how the Rainforest Alliance works in Brazil



2. Further information on what the Rainforest Alliance do and what they achieve through this process:

WHAT THEY DO IN THE AMAZON	WHAT THEY ACHIEVE FROM THIS
<ul style="list-style-type: none"> <li>• Accelerate the social, economic and environmental sustainability of farms, forests and businesses.</li> <li>• Target both forest communities and smallholder farmers as well as corporate and civil society allies.</li> <li>• Certify sustainably produced products with the green frog seal.</li> <li>• Continuously improve their work by advancing their monitoring techniques.</li> <li>• Put pressure on the Brazilian government to conserve the</li> </ul>	<p><b>PEOPLE</b></p> <ul style="list-style-type: none"> <li>• Farms are made better and safer places to work.</li> <li>• Human rights, local communities and indigenous people are respected by the organisation.</li> </ul> <p><b>PLANET</b></p> <ul style="list-style-type: none"> <li>• Land, energy and water are used more carefully.</li> <li>• Less use of artificial fertilisers and pesticides.</li> <li>• Better waste management.</li> <li>• Reduction in pollution.</li> </ul>

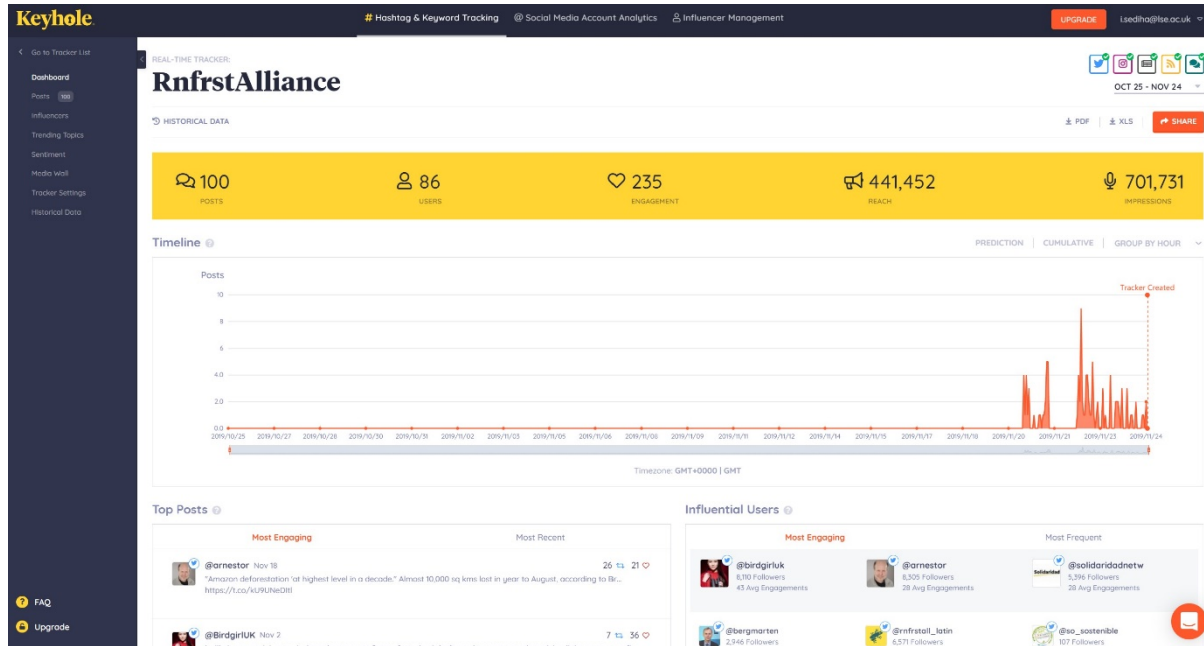
<p>Amazon so that both people and nature are supported.</p>	<ul style="list-style-type: none"><li>• Greater knowledge among farmers about how to protect forested areas, which supports the biodiversity of animals and plants.</li></ul> <p><b>PROFIT</b></p> <ul style="list-style-type: none"><li>• Farming methods used result in higher yields of better quality crops at a lower cost. This creates long-term increased productivity and better incomes to farmers.</li></ul>
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*All information taken from the Rainforest Alliance website: [www.rainforest-alliance.org](http://www.rainforest-alliance.org)*

## APPENDIX TWO

### “NARRATIVE SENTIMENT ANALYSIS ON SOCIAL MEDIA”

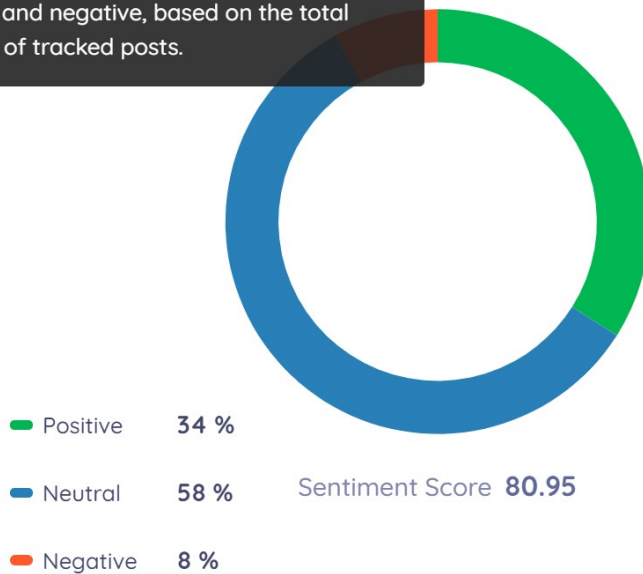
#### 1. Monthly public engagement with RA’s Twitter channel (Oct 25-Nov 24, 2019)



#### 2. Sentiment analysis of tweets mentioning RA

##### Sentiment ?

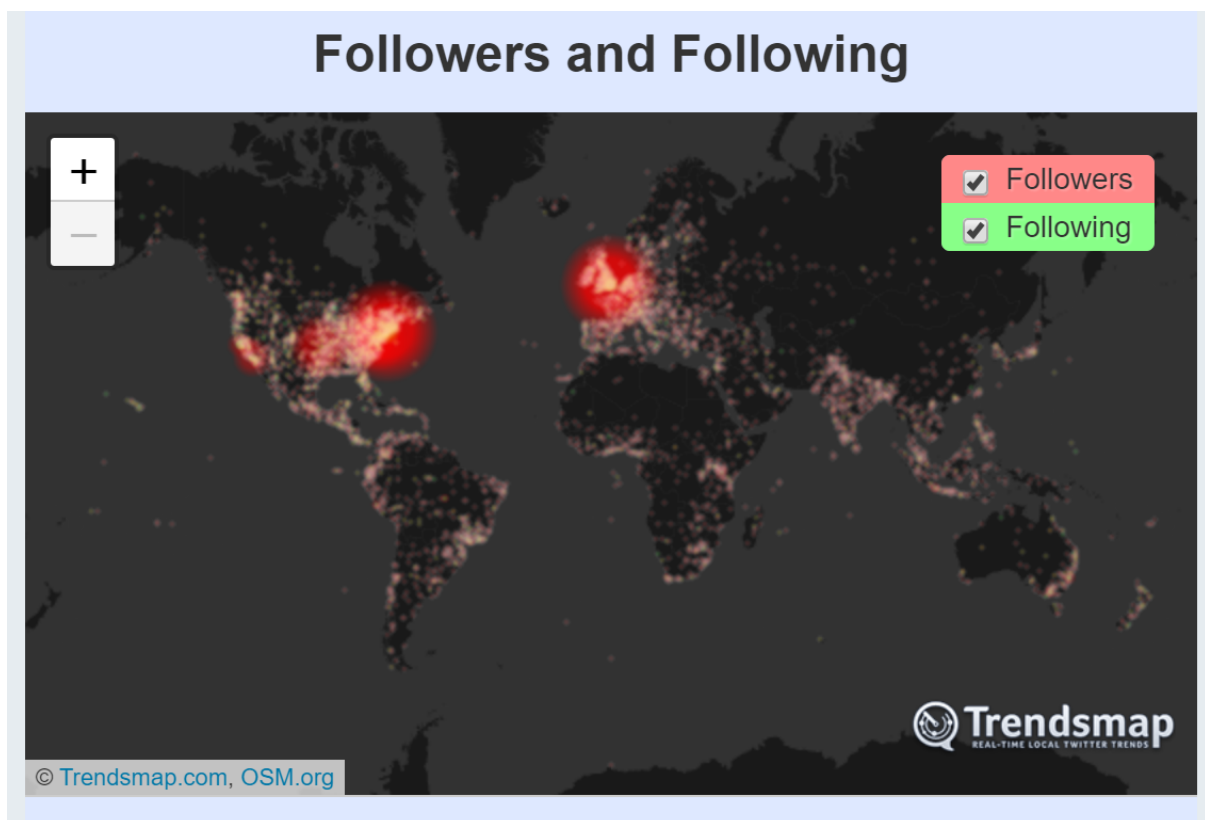
The percentage of posts that are positive, neutral and negative, based on the total sample of tracked posts.



3. Trendsmap: RA's sample negative hashtag use by number and %, last 28 days (1 December 2019)

Top Hashtags	Count	%
<a href="#">#climatechange</a>	20	10.0%
<a href="#">#climatecrisis</a>	10	5.0%
<a href="#">#deforestation</a>	9	4.5%

4. Trendsmap: Heatmap of Twitter engagement (user concentration), last 28 days (1 December 2019)



## APPENDIX THREE

### “ETHNOGRAPHIC RESEARCH FOR THE SOLUTION FRAMEWORK”

#### 1. The Rainforest Café, Piccadilly, London

This family-friendly café/shop succeeds at creating a space that looks like the rainforest, although other sensory elements are not considered (e.g. sound). We have also found it to be more geared towards profit-driven activities, with lost opportunities around education (about the rainforest) and sustainability (lots of plastic and seasonal merchandise).





## 2. Whole Foods Market, Piccadilly Circus, London

Whole Foods use their in-store space to inform and educate consumers about its sustainability efforts. They regularly update their walls with anti-commodity fetishism narratives like individual producer stories, as well as more globally minded narratives like “Whole Planet” and infographics about the global impact of their supply chain.



*All photos presented are researchers' own.*