

Local Currencies: a tool for sustainability?

A Transitions Perspective on the impacts of local currencies for sustainability – The case of the Bristol Pound

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Abstract:

This research investigates the contribution of local currencies to sustainability. I look at a specific local currency scheme (the Bristol Pound, in Bristol, United Kingdom) through a transitions perspective, employing a Transitions Evaluation Framework, Multi-Level and Multi-Phase Perspectives to conduct my analysis. I use a qualitative triangulation approach to collect data, namely semi-structured interviews in combination with participant observation and document review, and analyze this data through inductive and deductive coding. My findings reveal that the Bristol Pound's contribution to sustainability is diffusive, that is, concerns the experiment's capacity to influence mainstream regimes. As of now, the Bristol Pound does not provide intrinsic contributions to sustainability. The currency contributes to increasing people's sense of socio-ecological stewardship and democratic governance, but does not increase resource maintenance and efficiency, intra- and intergenerational equity and livelihood sufficiency and opportunity, despite its intention. The scheme lacks mechanisms to stimulate the localization of supply chains, relying on the assumption that when it achieves a higher volume of trade in the local currency, localization will naturally occur. I show how this assumption is misguided. Moreover, the transition experiment is confined to a very homogeneous group of users, not engaging with the demographics of Bristol. Indicators to track its social and environmental performance are also lacking; the scheme relies on the assumption that local businesses naturally perform better than international businesses on those grounds. This lack of performance tracking makes the community of users and businesses unsure about the benefits the local currency delivers to the city. The City Council is also unsure about these benefits, and therefore cannot justify funding the local currency scheme. These factors limit the sustainability contribution of the scheme and require the development of accountability and stimulation mechanisms to drive local procurement, performance indicators to track its environmental and social performance, and initiatives to engage the city's demographics. I discuss how the transition experiment could follow either successful or unsuccessful transition pathways in light of these limitations, and then suggest possible strategies to follow a successful pathway, taking inspiration from another local currency scheme. I conclude reflecting on the implications of this research for the field of sustainability science.

Keywords: sustainability transitions; local currencies; multi-level perspective; Bristol Pound; sustainability assessment

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Ah, and thank you! Yes, you, the person reading this thesis. Don't forget to dream out loud.

“Ora, direis, ouvir estrelas? Certo, perdeste senso?

E eu vos direi, no entanto:

Enquanto houver espaço, corpo, tempo e algum modo de dizer ‘não’, eu canto.”

— Belchior, Divina Comédia Humana

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List of abbreviations & acronyms

BCU	Bristol Credit Union
BP	Bristol Pound
BPCIC	Bristol Pound Community Interest Company
BP Team	Organizers of the Bristol Pound
EF	Evaluation Framework
GPM	General Purpose Money
IMA	Independent Money Alliance
LC	Local Currency
MLP	Multi-level perspective
MPP	Multi-phase perspective
TE	Transition experiment

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1. Introduction

1.1. Problem Statement

The mode of production of the modern global economy is often incompatible with sustainability. Goodland and Daly (1996) argue that natural capital limits economic throughput and that material disparities between Global South and Global North cannot be overcome if economic growth remains attached to environmental exploitation. Furthermore, current modes of production are incompatible with societal well-being. Both commodity fetishism (Marx, 1995) and subjectivity fetishism (Bauman, 2007) work to reduce social relations and people's sense of self, respectively, to market rationale, creating an assortment of consequences for society and individuals. A social as much as an economic issue, with unbearable environmental costs, this condition demands people to devise different ways of producing and consuming. An increasing number of innovations aim to tackle this challenge (Seyfang, 2008). One of the most ambitious of these innovations are local currencies, which propose a different arrangement of economic activity by limiting the traditional functions of money (Seyfang and Longhurst, 2013a).

Differing from time banks or other forms of community exchange tools, a local currency (LC) is a type of money complementary to the national currency, geographically tied and designed to meet the needs of a specific community (Seyfang and Longhurst, 2013a). The Bristol Pound, for example, can only be used in Bristol (UK), earns no interest, is accepted only by businesses that meet certain criteria, is both physical and digital and aims to strengthen the local economy and reduce its environmental impact (Bristol Pound CIC, 2018). Breaking from mainstream economic traditions, the conceptualization of LCs pose money as a mechanism that shapes and influences the organization of society, instead of looking at it as a “neutral” tool (Seyfang, 2008). The motivation that brings about LCs is often related to the socio-economic and environmental problems associated with globalization and the economic system (Michel and Hudon, 2015).

1.2. Research gaps and aim

LCs have been found to change consumption patterns towards sustainability (Graugaard, 2012) and facilitate the inclusion of marginalized groups in the economy (Michel and Hudon, 2015; França Filho, Júnior, Torres and Rigo, 2012). However, multiple studies challenged the usefulness of LCs for sustainability. Michel and Hudon (2015) argue that LC schemes are usually confined to a small scale, which prevents them from affecting the economy significantly. Although often associated with economic

localization (and thus reduction of carbon footprints), there is little evidence that LC schemes drive localization (Graugaard, 2012; Michel and Hudon, 2015) and some evidence suggesting they do not (Marshall and O'Neill, 2018). Dittmer (2013) goes further, saying that LCs are less effective in achieving localization than taxation, and therefore should not be pursued. On top of that, many studies reveal that most impacts of LCs are confined to the social sphere (Graugaard, 2012; Ryan-Collins, 2011; Seyfang, 2006), undermining the hype around LCs in the sustainability debate. All this praise and critique of the innovation cast doubt as to what local currencies contribute to sustainability.

Some authors pointed out that the lack of a comprehensive evaluative framework to assess the impact of LCs prevents comparison between different studies and different schemes (Michel and Hudon, 2015; Seyfang and Longhurst, 2013a). Few researchers tried to amend this issue by proposing frameworks, such as Place and Bindewald (2015). However, these frameworks are not designed to assess sustainability performance, making them unsuitable for investigating the contribution of LCs to sustainability. Studies which attempted to apply sustainability concepts to LCs have, so far, kept themselves within the triple bottom line approach (Seyfang, 2008; Michel and Hudon, 2015).

Due to their innovative proposal, LCs have been associated with transition literature by Seyfang and Longhurst (2013a, 2013b), but have not been analyzed with a framework structured around sustainability transitions. The use of a standard evaluation framework applied to different transition initiatives has been identified as necessary to advance transitions research (Luederitz et al., 2016). Furthermore, Seyfang and Longhurst (2013a) argue that there is little knowledge regarding the potential and the drawbacks of LCs, adding to the argument that empirical data is necessary to advance LCs research (Michel and Hudon, 2015; Place and Bindewald, 2015).

Taken together, then, the gaps in literature identified above are: the need to determine *what is the contribution of LCs to sustainability* and *how to measure this contribution*. My aim with this thesis follows from the research gap: investigate the extent to which local currencies contribute to sustainability and how to measure this possible contribution.

1.3. Research questions

I conduct a single case study to achieve my aim, which allows me to perform an extensive evaluation, considering this thesis time frame. I chose the Bristol Pound, a LC scheme located in Bristol, United

Kingdom, and representative of UK's Transition Currencies. Therefore, the overarching research question (RQ) that I follow to achieve my research aim is: Does the Bristol Pound (BP) contribute to sustainability?

To explore this RQ in depth, I derive the following sub-research questions (sub-RQs):

- RQ1: If yes, in what way?
- RQ1.1. Are there factors hindering this contribution and if so, how?
- RQ2.: If no, why?
- RQ2.2. Can it contribute and if so, how?

I use the evaluative framework proposed by Luederitz et al. (2016) to approach these questions. To understand the multi-level context of the BP throughout the years since the scheme launched, I use the Multi-level and Multi-Phase Perspectives. The use of those tools allows for comparisons between the BP and different transition experiments in future studies, therefore placing LCs under a wider context of research and cross-scale learning.

1.3. Thesis Structure

Section 2 covers the literature about LCs, detailing some of the points mentioned in sections 1.1 and 1.2. Section 3 presents my theoretical foundations, explaining the transitions perspective I employ throughout the thesis. Section 4 explains my methodology, including the evaluation framework (EF) used to assess the BP's contribution to sustainability, as well as my approach to Multi-level Perspective (MLP) and Multi-Phase Perspective (MPP). Section 5 presents the Bristol Pound as the case study, giving an account of some of its history and my personal experience with the currency. Section 6 presents the analysis and results, where I use the MLP and MPP to situate the BP in its multi-dimensional context, and the EF to explore the sustainability of the currency. I close the section by answering my overarching RQ and sub-RQs (sections 6.3. and 6.4.). In section 7 I discuss my findings, exploring their implications for the BP as a transition experiment. I also discuss some actions the BP can take to advance as an experiment, critically reflect about my research and how I achieve my aim, and make suggestions for future studies. I conclude this thesis in section 8, reflecting on my contribution to sustainability science.

2. Literature Review

2.1. Community currencies and local currencies

Alternative types of community exchange mechanisms have a long history in the modern economy (Seyfang and Longhurst, 2013a). Usually referred to as "community currencies" (CCs), these mechanisms

are design to create structural change by addressing problems of the modern economic system (Michel and Hudon, 2015). Seyfang (2006) affirms that the “key to understanding the role and function of community currencies is to view all money systems as socially constructed infrastructure: the design of exchange mechanisms builds in particular purposes and characteristics [...], which in turn promotes particular types of behavior” (p. 784). The design of these mechanisms enables the differentiation between LCs and other CCs.

Seyfang and Longhurst (2013a) classify CCs in four types: service credits, mutual exchange schemes, barter markets and local currencies. Although this thesis only concerns the latter, Figure 1 describes each of them for clarification purposes.

Type	Service Credits	Mutual Exchange	Barter Markets	Local Currencies
Description	Users exchange a sort of time-based currency unit, earning those credits as they engage in an activity demanded by the community.	These schemes work on the basis of a ledger that tracks what each user "owns" to the others, with varying forms of accounting for this debt (time-based, currency value, etc).	Similar to mutual exchange schemes, but the trading occurs only at a specific location and during a specific event.	Local currencies are a physical (paper) or digital currency used to give value to products and services, usually complementary to the national currency.
Examples	Banco de Tempo (Portugal) Time dollars (USA)	LETS (United Kingdom) Tauschringe (Germany)	Trueque (Argentina) Trocs tes Trucs (Canada)	Palmas (Brazil) Bristol Pound (United Kingdom)

Figure 1 – Types of Community Currencies. Figure describing the typology of CCs, highlighting in dark blue LCs, my object of analysis in this study. Source: own figure (2018), based on Seyfang and Longhurst (2013a).

All CC types build new social and economic structures Seyfang (2006) and can embody sustainability goals (Michel and Hudon, 2015; Place and Bindewald, 2015). However, this thesis focuses only on LCs because they directly challenge banking and financial institutions, arguing for the democratization of financial power by redesigning money itself (Seyfang and Longhurst, 2013a).

The way LCs redesign money is by altering its functions. Traditionally, the definition of money assumes it has three functions: being a medium of exchange (it enables trade); a store of value (it preserves purchasing power for the future); and a unit of account (it is the common measure of value within a society) (Mankiw, 2011). On top of that, money is also characterized by liquidity (its ability to easily convert itself into goods and services) and mobility (its ability to access financial markets) (Mankiw, 2011). LCs tweak these functions, reinforcing the medium of exchange function and weakening the store of value

function, and at the same time reducing money's liquidity and mobility (Graugaard, 2012). This characteristic distinguishes LCs from what Hornborg (2017) calls "general purpose money" (GPM) (national currencies, such as the Dollar or Sterling).

2.2. Local currencies and sustainability

Hornborg (2017) sees money as the reflection of the "ideas people in that context have about the interchangeability or commensurability of various goods and services" (p. 625) and argues that the design of GPM promotes an idea of pervasive "efficiency" that degrades the environment and society. LCs challenge GPM by reinventing the type of exchange they want to promote, the actors involved in this exchange, how the exchange ought to take place and for what purposes (Place and Bindewald, 2015), or, in other words, by proposing a new production-consumption arrangement (Seyfang and Smith, 2007).

Michel and Hudon (2015) present a comprehensive overview of how LCs incorporate sustainability values into their goals and design. After establishing that LCs are based upon "the rejection of the credit-money foundation of the capitalist system" (Michel and Hudon, 2015, p. 161), the authors explore the theoretical contributions of LCs to sustainability applying the triple bottom line concept (which divides sustainability into economic, social and environmental dimensions). They discover the following theoretical benefits: 1) economic dimension: stimulation of the local economy and recognition of informal labor; 2) social dimension: community building, expansion of social networks and less social exclusion; and 3) environmental dimension: localization of the economy and increased awareness of environmental issues. However, after analyzing studies on different LCs, they conclude that the impact of LCs for sustainability is minimal. Although they find evidence that certain schemes have environmental and economic effects, most of the impacts identified pertain to the social dimension (Michel and Hudon, 2015). Seyfang and Longhurst (2013a) conduct a similar study, identifying varying degrees of economic, social and environmental sustainability in the goals of different LC schemes. Their findings suggest that environmental goals are usually combined with other goals which, in the end, have more traction.

What both studies have in common is: 1) they are based on literature review, relying solely on data provided in other articles to conduct their evaluation of LC schemes' contribution to sustainability; 2) they use the three pillars concept as their evaluation tool and the notion of sustainable development as their evaluation framework. Although it might be coherent to the sustainable development approach, I argue that the three pillars concept is too broad to be used as an evaluation method and would not suffice to

conduct an analysis that answered my RQ, because it does not provide clear evaluation standards. Sections 3 and 4 explain how I then deviate from this approach to conduct my analysis.

3. Theoretical Foundations: Transition Perspective, Social Innovations and

Niches

Sustainability transitions are goal-oriented systemic changes targeting a societal problem, involving multiple actors and the interaction between different domains, such as culture, technology, politics, and markets (Geels, 2017). They aim at correcting the system failures of our society (Rotmans and Loorbach, 2009), or, in other words, the lock-in mechanisms that stabilize the current system in an unsustainable configuration (Geels, 2011). From a transition perspective, systems are characterized by their deep structures, comprised of often intangible aspects (Rotmans and Loorbach, 2009; Geels, 2011). All actors involved in the system end up reinforcing and maintaining these deep structures with their practices (Geels, 2011). Rotmans and Loorbach (2009) call the deep structure “incumbent regime,” under which different sub-regimes interact with each other. A transition starts when actors form a structure outside of the regimes: a niche. This niche might eventually become a regime itself and substitute the incumbent regime (Rotmans and Loorbach, 2009). Therefore, niches act as “seeds for systemic change” (Geels, 2011, p. 27) and are essential for sustainability.

In the context of LCs, Haxeltine et al. (2013) and Seyfang and Smith (2007) see niches as “social innovations.” This characterization accounts for the roots in civil society of LCs and their break with the market rationale present in most technological innovations (Seyfang and Smith, 2007). Social innovations provide two types of sustainability benefits: intrinsic benefits, relative to the innovation by itself contributing to sustainability, and diffusive benefits, relative to the innovation's capacity to influence mainstream regimes towards sustainability (Seyfang and Smith, 2007). The strength of this capacity grows as regimes become unstable. What leads a regime to lose or solidify their stability is what Geels (2017) calls “landscape” developments. These are broad trends or shocks (Geels, 2017), such as financial crisis, new information and communication technologies and climate change.

For the sake of using common terminology, I will call social innovations and niches “transition experiments” (TEs). The next section details how I incorporate these theoretical foundations in my methodology.

4. Methodology

4.1. Multi-level and Multi-phase Perspectives

To visualize and analyze the elements presented in section 3, I employ the Multi-Level Perspective (MLP) presented by Geels (2017) in combination with the Multi-phase Perspective (MPP) presented by Rotmans, Kemp, and Van Asselt (2001), as shown in Figure 2. The MLP depicts the multi-dimensional nature of systemic changes (Haxeltine et al., 2013), guiding the investigation of TEs and shedding light on interesting questions rather than providing definite answers (Haxeltine et al., 2013; Geels, 2011). In this sense, the MLP incorporates a “process theory” approach, with the intention of contextualizing the TE, accounting for sequences and timing of actions and events to explain the experiment's outcomes (Geels, 2011). It poses landscape developments, the incumbent regime and TEs in different levels, and “suggests that transitions come about through the alignment of processes within and between the three levels” (Geels, 2017, p. 225). The MPP, on the other hand, details the different phases a TE usually goes through. I apply the MLP and MPP to the Bristol Pound case in section 6.1, and use these tools to answer my sub-RQs once the overarching RQ is answered (sections 6.3 and 6.4).

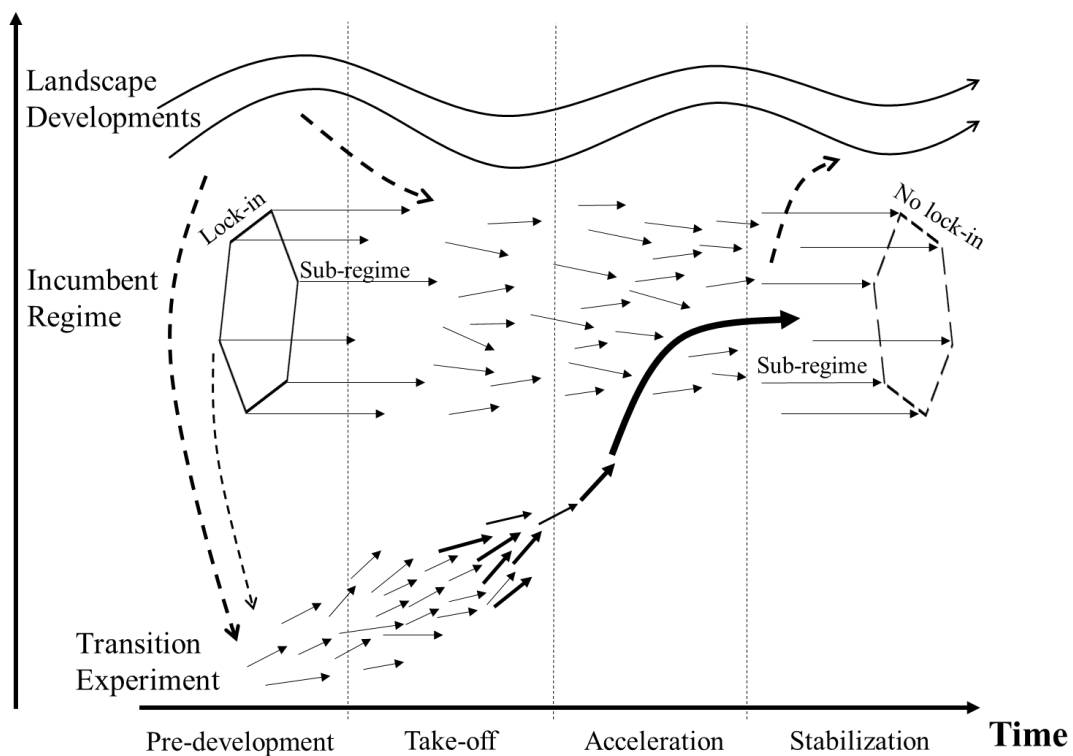


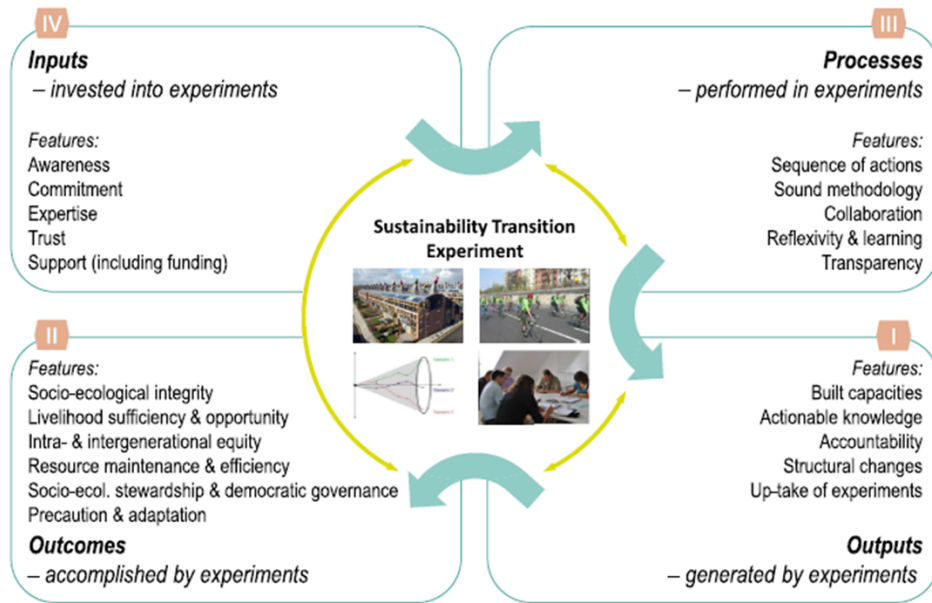
Figure 2 — MLP in combination with MPP. This figure depicts the multi-level dimension of transitions (MLP), as well as the different phases they go through (MPP). Source: own figure (2018), based on Geels (2017) and Rotmans, Kemp and Van Asselt (2001).

4.2. Evaluation Framework

While I use the MLP to contextualize the BP, I assess its contribution to sustainability using the Evaluation Framework (EF) proposed by Luederitz et al. (2016). This framework was developed “to appraise the extent to which a sustainability transition experiment generates desired effects, and how this was accomplished” (Luederitz et al., 2016, p. 64). All sustainability aspects included in the EF are derived from Gibson's (2006) approach to sustainability assessments. Thus, the EF proposes a very different take than the triple bottom line approach employed by Michel and Hudon (2015) and Seyfang and Longhurst (2013a), providing clear metrics to evaluate sustainability. The EF can be used in an ex-ante or ex-post fashion, assisting the people involved with the transition to “adapt, extend and revise the envisioned pathway” (p. 62), allowing the use of diverse research methods (Luederitz, 2016).

Four dimensions are analyzed: the inputs invested, the processes performed, the outputs generated, and the sustainability outcomes accomplished (Luederitz et al., 2016). For each dimension, specific features are evaluated using guiding questions. Outcomes, for example, are explored with the general question “what was generated by the transition?”, and the feature “built capacities” relates to “does the transition experiment build capacities in participants to generate sustainability solutions?”

All dimensions of the framework are interdependent, informing each other in a cyclical way to assist reflexivity in the evaluation process — e.g., inputs are needed in different stages of the transition, not only in the beginning, and therefore connect to the outcomes and processes. Figure 3 shows how the framework is organized. The evaluation starts from outputs to outcomes, which then trace the transition back to its processes and inputs – first identifying what the experiment generates and achieves, and then exploring what enabled these results (Luederitz et al., 2016).



Legend

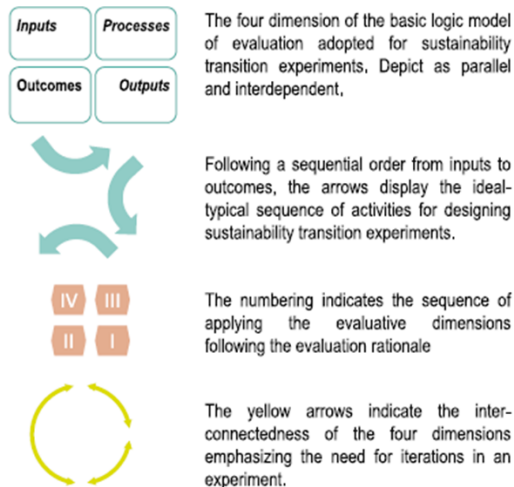


Figure 3 — Dimensions of the Evaluation Framework for sustainability transitions. This figure reveals the cyclical nature of the evaluation, as well as the order it should be conducted, indicated in Roman numerals. Source: Luederitz et al. (2016).

This framework gives this thesis structure and provides a transitions-tailored evaluation standard. But, as my focus is the sustainability contribution of the BP, not all dimensions of the framework are relevant for the analysis. In the next section, I explain how I apply this framework to answer my overarching RQ: “Does the BP contribute to sustainability?”

4.2.1. Relevant dimensions for a sustainability assessment: how I use the EF

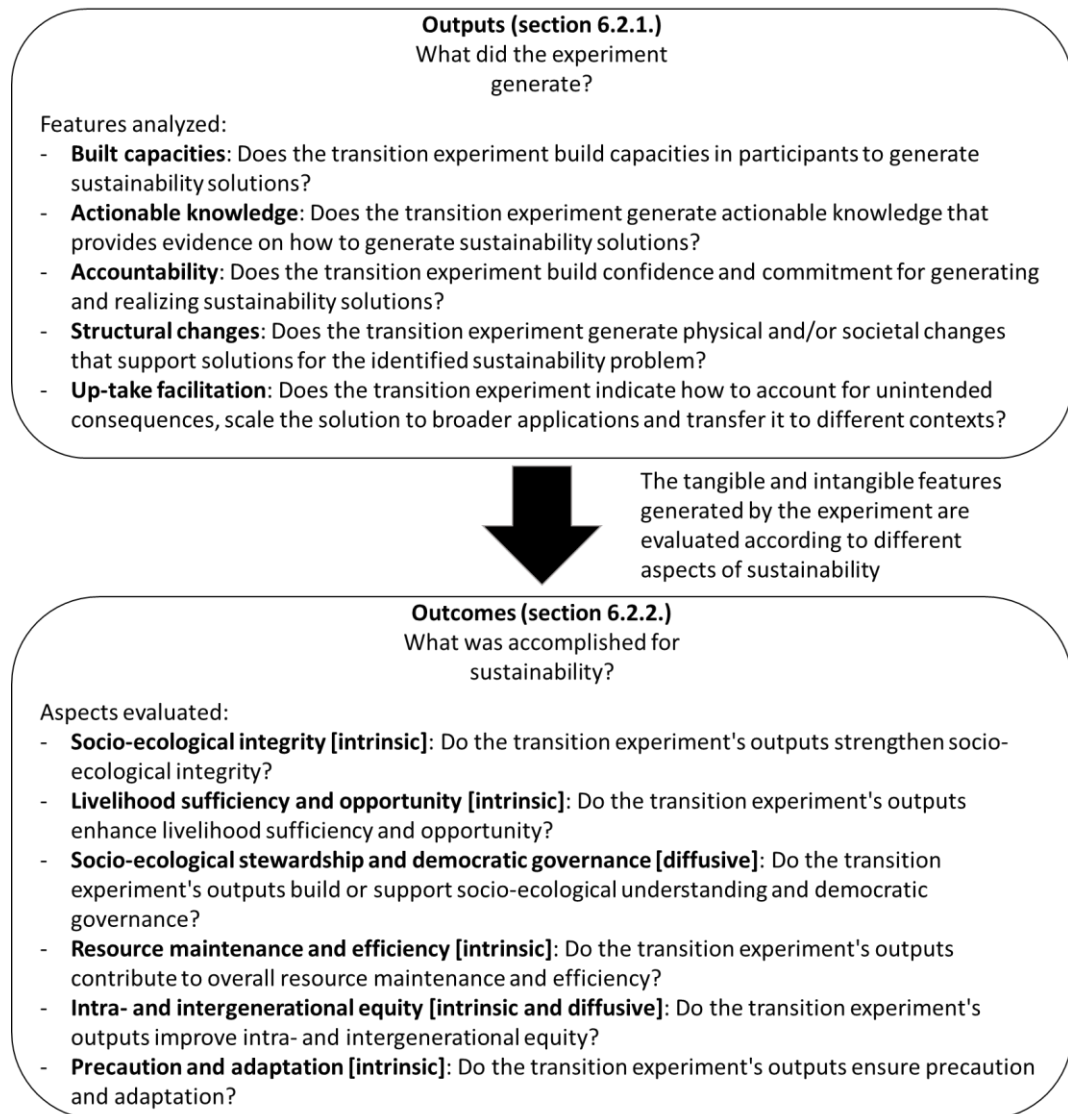


Figure 4 — The dimensions of the EF covered in this study. This figure details the “outputs” and “outcomes” dimensions of the EF proposed by Luederitz et al. (2016), as well as the guiding questions related to each dimension, showing how the “outputs” of the TE are evaluated in terms of its “outcomes” for sustainability. I classified the outcomes as intrinsic or diffusive. Source: own figure (2018), based on Luederitz et al. (2016).

As I am not investigating how the creators of the BP organized themselves to conduct the TE, I don't include the "inputs" and "processes" dimensions of the EF as part of my study. I analyze the BP in terms of what “outputs” the experiment generates and how they generate “outcomes” for sustainability. Therefore, those other two dimensions would not contribute to answering any of my RQs¹. Figure 4 (see above)

¹ Still, to ensure the complete application of the framework and contribute to its development, those dimensions were also covered and can be found in Appendix 6.

illustrates the dimensions of the EF that are relevant to sustainability and that I investigate in sections 6.2.1. and 6.2.2, presenting the guiding questions proposed by Luederitz et al. (2016) as well. I distinguish between "intrinsic" (relative to the innovation by itself contributing to sustainability) and "diffusive" (relative to the innovation's capacity to influence mainstream regimes and make them more sustainable) outcomes, as explained in section 3.

4.3. Research Methods

I approach this investigation through qualitative triangulation, applying different qualitative methods to study the BP (Bryman, 2008). To collect the bulk of the data, I relied on semi-structured interviews and the analysis of official documents and news articles. To capture a nuanced understanding of the case, I used participant observation during a visit to Bristol.

4.3.1. Case study selection

Case studies are used to investigate phenomena within its context using different sources of data (Noor, 2008) and allow for experiencing places and situations in depth (Donmoyer, 2000). To decide which LC I should investigate, I limited my sampling to Europe (to allow for a field visit, given the resources available) and to cases that had similarities with other LCs. This led me to the Transition Currencies in the UK — LCs originated by actors involved with the Transition Towns movement —, from which I chose the largest (in circulation and number of businesses involved): the BP, conducting a single case study. Due to the diverse nature of LC schemes in their goals and design (Michel and Hudon, 2015; Seyfang and Longhurst, 2013a), I follow Flyvbjerg's (2004) "information-oriented selection" (p. 128). More specifically, the BP can be considered a paradigmatic case, that is, a case "that highlight more general characteristics of the societies in question" (p. 130) – the BP is exemplar of the LC schemes within the cultural paradigm of Transition Currencies.

4.3.2. Interview Sampling

Interviewees were selected through purposive sampling. This method aims at selecting interviewees that are relevant to the RQ of the study (Bryman, 2008). I decided to interview the four different groups of actors involved in the experiment (identified in Bristol Pound CIC, 2015): businesses, users, the BP organizers and the local government. In total, 13 interviews were conducted, some of them with more than one person at the same time (covering 7 businesses, 10 users, the Bristol City Council and the BP organizers).

The businesses sample started with the Cashpoints (where people can not only spend their BPs but also exchange Sterling for BPs). In total, there are 20 businesses in this category (Bristol Pound, n.d.). I was not able to contact anyone willing to represent 5 of those businesses (a museum, Bristol's Tourist Station, a leisure center, a student union and a train station). An additional 6 businesses did not want to be interviewed. 2 businesses I could not contact at all (one of them seemed to be closed when I visited it). This left me with seven businesses that agreed to be interviewed.

As for the users, I approached people attending an event organized by the BP organizers (in what follows, called "BP Team") on March 10th, 2018: a design competition for the new BP bank notes. My assumption is that people who attended this event are more committed to using the currency regularly, as well as more committed to the project of the LC itself — this type of user fits my investigation, as the mobilization of a committed community is important for TEs (Seyfang and Smith, 2007). I was able to interview ten people, eight of them in pairs.

I interviewed two people from the City Council, chosen because the BP is presented in Bristol's Resilience Strategy (Bristol City Council, 2017) as an innovation that reduces the environmental impact of Bristol's economy; hence, the Council seems to have a vested interest in the currency.

I conducted one interview with two people from the BP Team. This was the last interview of the study, allowing me to confront them with my findings so far and ask their opinions on some of the critiques made to the BP.

4.3.3. Document sampling

Documents can be useful not only to acquire new data but as sources of evidence to validate what was said during interviews, as well as to inform the interview questions (Noor, 2008). The documents I selected range from official government reports, websites and videos of different organizations, and online news articles. In total, 44 documents were analyzed. For a list of all documents and a detailed account as to how I found them, see Appendix 2. The following criteria, suggested by Bryman (2008), were used to determine if a document was suitable: authenticity (does the document have a reliable origin?); credibility (is the evidence free from distortions or error?); representativeness (is this a standard document for this kind of evidence?); meaning (is the evidence comprehensible?). All documents were subject to these criteria not

only for selection but also for scrutinizing its contents. Regarding online newspapers, I prioritized the ones with direct quotes from people interviewed.

4.3.4. Semi-structured interviews

Each actor type was approached with different questions, tailored to their specific role in the TE (for interview protocol, see Appendix 3). All interviews were conducted face-to-face. Semi-structured interviews give the researcher certain flexibility, allowing adaptation of the questions wording and to follow interviewee's responses with further questions, which facilitates capturing the interviewee's worldview (Bryman, 2008). Few businesses and users agreed to be recorded. I took extensive notes when recording was not possible. For a list of interviews, see Appendix 2.

4.3.5. Participant observation

To add a more in-depth perspective to my research, I used my fieldwork period to immerse myself in Bristol's local economy. This was important to understand the scale of the LC scheme and how it affects the city. Apart from using the currency and visiting different local businesses, I also attended two events: a conference organized by the project Avon Mutual Regional Banking (which aims to benefit Bristol's local economy by changing the UK's banking system landscape), and the Design Competition for the BP notes. Participant Observation was my method for this immersion, helping me get a sense of how it feels to engage with Bristol's local economy — which I recorded as field notes, as suggested by Mack, Woodsong, MacQueen, Guest and Namey (2005). The method was used to inform my interviews with further insights, giving me ideas of relevant follow-up questions, as well as helping me understand the context of the case study. I incorporate some of the content of my field notes in section 5, where I describe the case study in a narrative form, as suggested by Mack, Woodsong, MacQueen, Guest and Namey (2005) — the writing style of that section is different from the rest of the thesis to allow for this narrative.

4.4. Data Analysis

My first step was transcribing the interviews, which I did in detail, down to the recurrent “ahn” and “you know”. Then I analyzed interview transcripts and notes, and the selected documents. Initially, data were coded in categories and subcategories (according to Bryman, 2008) derived from the EF. During this process I also created categories for reoccurring topics, combining inductive and deductive coding (for a visual example, see Appendix 4). I also used this process to extract quotes that could illustrate the analysis. This analysis informed both the EF, the MLP and the MPP. Figure 5 depicts the whole process.

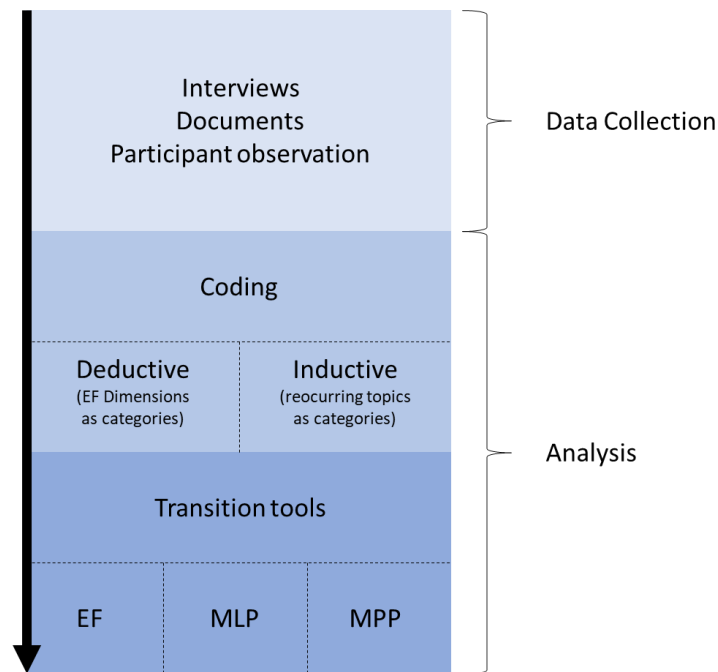


Figure 5 - My data collection and analysis process. This figure shows the methods used to collect data, and how this data went through a deductive and inductive coding process. Coding informed the use of the EF, MLP and MPP, the tools I employ to derive information from the data. Source: own figure (2018).

4.5. Ontology and Epistemology: Critical Realism

This study follows the ontological and epistemological tradition of Critical Realism (CR). According to Sayer (2000), CR is based on the distinction between different dimensions: the real, the actual and the empirical. The real is relative to physical processes and social phenomena, independent of people's theories about them (e.g., bureaucratic structure of the BP). This is where power is concentrated and idle. The actual is when those powers are put in motion (e.g., bureaucracy produces a BP note). The empirical is the observed phenomena, our experience (e.g., the BP note itself). Hence, CR argues that, ontologically, reality goes beyond observable phenomena, and epistemologically, phenomena occur due to complex causal interactions (Sayer, 2000). My data concerns the empirical, and I use qualitative triangulation, deductive and inductive coding to access the actual. I attempt to grasp the real employing transition tools, acknowledging that it can never be fully known.

4.6. Ethical Considerations

My main ethical concerns are about the interviews, which form the backbone of this thesis. Following Mack, Woodsong, MacQueen, Guest and Namey's (2005) ethical principles, I 1) used a Consent Form

(Appendix 5) that gave interviewees the option to remain anonymous and/or not be recorded; 2) explained my research project before I asked interviewees any questions; and 3) clearly stated when I was starting or stopping the recording, when recording was allowed. Furthermore, the semi-structured interview approach and my questions aimed at giving interviewees freedom to explore their feelings and opinions. I decided to anonymize any names of people and businesses, even if they allowed me to identify them in the research.

Regarding my analytical framework, evaluation methods that include "retrospective and prospective evaluation and envisioning" (p. 8) are necessary to engage in research that contributes to positive change — but they can both empower and disempower actors (Luederitz et al., 2016). As put by Luederitz et al. (2016), "who evaluates whom and for what purpose?" (p. 73) is a crucial question. Thus, I use the term "evaluation" alluding to the idea of exploring the potential of LC schemes for sustainability.

5. What's the story, Bristol? Putting things in perspective²

We are in Bristol, United Kingdom. It is September 19th, 2012 and the BP has just been launched (Bristol Pound CIC, 2015). According to one of its co-founders, the local currency is about "saying yes to something new" and "tapping into a different set of values about money" (The Telegraph, 2012), and, in this process, "reduce the carbon emissions of supply chains" (Bristol Pound CIC, 2015). It doesn't aim to overthrow the Sterling, but coexist with it — the BP is pegged at 1-to-1 conversion rate with the Sterling.

It is the first LC scheme to strive for city-wide implementation in the UK (Bristol Green Capital, 2015a), and we are talking about UK's 8th biggest city, with more than 441,00 inhabitants (Bristol City Council, 2012). Expectations for the BP are high. The Green Party elected a mayor whom will eventually accept all his salary in BPs (Kelly, 2012) as the scheme grows. "We need to run things from the bottom up and from the grassroots so that people have control over how things happen where they live," says a business owner (The Telegraph, 2012). The scheme was supposed to be launched in May, but businesses were so interested that it had to be postponed to today (The Telegraph, 2012). One year from now, more than £200,000 worth of BPs will be in circulation and more than 1,000 BP accounts will be open (Bristol Green Capital, 2015b).

² As suggested by Mack, Woodson, MacQueen, Guest and Namey (2005) and explained in section 4.3.5., I incorporate some of my field notes in this section by adapting the language to fit a narrative form. This is the only section that employs a different writing style.

Now let's fast-forward to 2015. Recognized for its low energy consumption in comparison to UK's major cities, Bristol has become the European Green Capital (Bristol 2015 European Green Capital, n.d) – yay! All of Europe is now looking to Bristol to learn from their practices. The BP is featured in the official document praising Bristol and its greenness (Bristol Green Capital, 2015a). More than 440,000 BPs are in circulation, the number of accounts raised by 500 in comparison to 2012, and almost 800 local businesses now accept the BP (Bristol Green Capital, 2015b). The BP Team says, “we're not just measuring the success of the scheme in the number of members and the amount of £B out there, but also in the awareness we raise” (Smedley, 2014). Nice! But wait... Isn't there more to it than awareness and the amount of BPs in circulation?

Fast-forward again. It is April 2018. Bristol has a little more than 450,000 inhabitants now. It is not European Green Capital anymore. The specter of Brexit looms, so it might not even be in the European Union some time from now. The City Council is in a tricky financial situation and had to cut £233m from its budget (The Bristol Mayor, 2018), on top of announcing it will stop providing financial support for the BP (Bristol City Council, 2018c). The BP faces some same old problems. It claims to value "our communities and the environment over shareholders and profit" (Bristol Pound, n.d.), but the organizers still struggle to track their impact on the local economy, even more on the environment.

Although there are 832 businesses accepting BPs in the city (not much more than there were in 2015), I saw or heard no mention of the LC until I started actively looking for it. You have to pay attention to the shops' facades (don't get distracted by Banksy's graffiti spread all around the city), and sometimes use a map to find a business that accepts BPs. Maybe that's because there are more than 22,000 businesses in Bristol and the city's economy is estimated to be around £14.31bn (Bristol City Council, 2018b) – way more than the 5 million BPs that have circulated since 2012 (Bristol Pound, 2017b). Anyway, less than 24 hours after arriving in Bristol I was spending BPs at local shops and talking to local business owners. I also talked to people using the currency and to the minds behind the project.

I could feel excitement about the transition when talking to engaged members of the scheme. But my first attempt to conduct an interview with a business owner was received with "we receive requests [to give interviews] all the time, but we're not interested, it is just such a small part of our income." Not very inspiring. I asked everyone what changed in Bristol since the BP was launched. The homogeneous response

I got was "I don't think it's changed much." Are you sure? What happened to "saying yes to something new" (The Telegraph, 2012)? Isn't this thesis about a sustainability transition – system change, not climate change, and all of that?

Let's find out.



Figure 6 - Pictures from the field. These pictures were taken in Bristol, in March 2018. On the left, a BP note worth 5£. On the right, advertisement for the BP near Museum Street, Bristol BS1. Source: own figure (2018).

6. Analysis and Results

This section is based on my data analysis process explained in section 4.4. Many references used in the analysis follow the abbreviations in the "List of Interviews" and "List of Documents" (Appendix 2). Furthermore, I use quotes to illustrate the analysis, which are also referenced in the same manner. All sources cited in this section (apart from the interviews I conducted) can also be found in the reference list in APA style.

I begin applying the MLP and MPP to explore the multi-dimensional context of the BP (6.1.), and then I apply the EF to determine the BP's contribution to sustainability (6.2.). The insights derived are then used in sections 6.3. and 6.4. to answer my RQ and sub-RQs.

6.1. Applying MLP and MPP: the multi-dimensional context

In this study, I adapt Hornborg's (2017) ideas (explained in section 2.2) to a transitions perspective. I look at Bristol's economy as the incumbent regime, under which other sub-regimes interact. This incumbent regime is characterized by a system failure that empowers multinational conglomerates and promotes

environmental degradation, and one of the lock-in mechanisms that stabilize this configuration is the hegemony of GPM. The incumbent regime destabilizes as certain landscape developments occur, creating space for the appearance of TEs such as the BP. The BP, therefore, aims to transform a destabilized incumbent regime by getting rid of one of its lock-in mechanisms.

To understand the Multi-Level context within which the BP is situated, it is necessary to start in January 2007, when Transition Bristol was being set up, part of the Transition Movement (Transition Bristol, n.d.). Soon after, Transition Bristol became a member of the Bristol Green Capital Partnership (BGCP), a coalition of organizations "who have committed to working towards Bristol becoming a sustainable city with a high-quality of life for all" (BGCP, n.d.). It was through the BGCP that many different projects were developed, from planting fruit trees all around the city to setting up a community-owned low-carbon energy company (Transition Bristol, n.d.). 2007 was also the year that marks the start of the Great Recession, and by the end of 2009, the Eurozone Crisis would start.

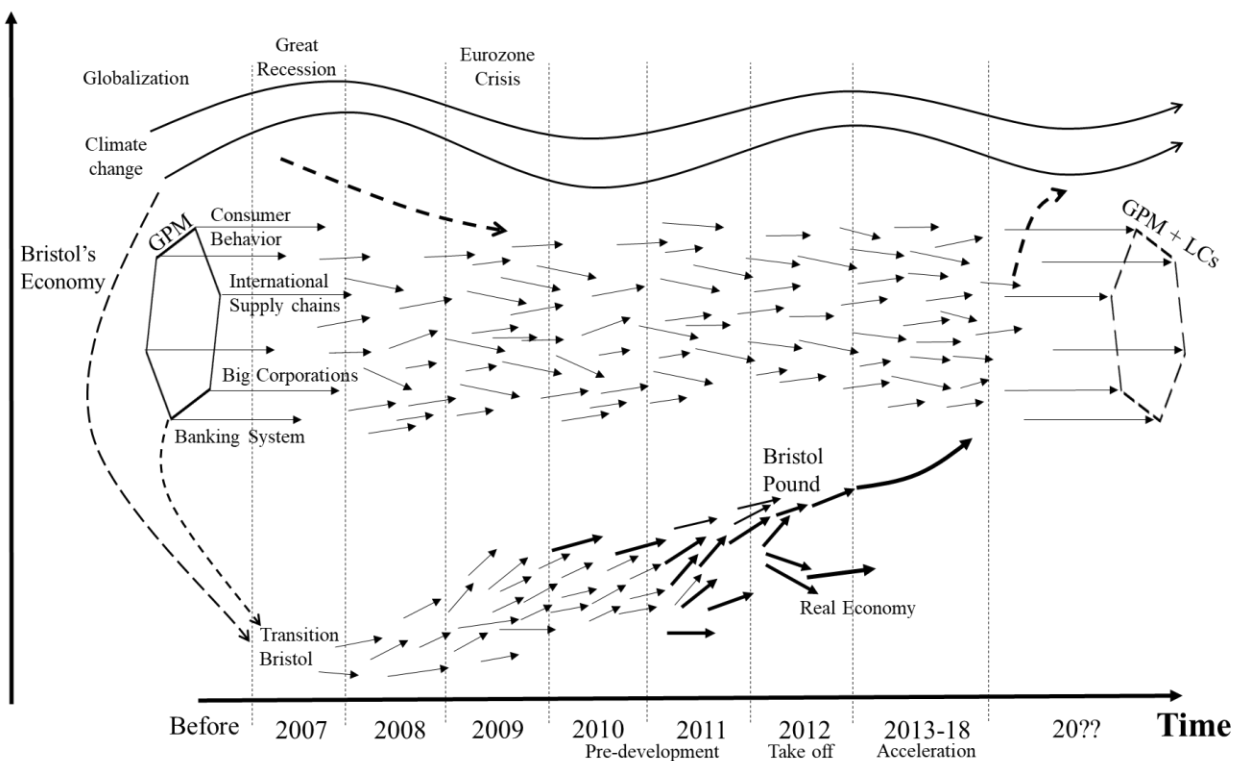


Figure 7 — MLP and MPP applied to the BP case. The figure shows how the experiment originated from Transition Bristol and evolved over the years, as well as the lock-in it tries to address and the landscape developments that influenced it. Source: own figure (2018), based on Geels (2017) and Rotmans, Kemp and Van Asselt (2001).

In June 2010, the first meeting regarding the BP took place (Transition Bristol, n.d.). “The Bristol Pound kind of came about with a lot of funding from the Green Capital partnership [...] I think that it was part of the movement in Bristol, it wasn't kind of a project on its own” (BPT). Two years later the BP would launch, through the creation of the non-for-profit Bristol Pound Community Interest Company (BPCIC) in partnership with Bristol Credit Union (BCU) (Bristol Pound, n.d.). Since then, the LC scheme has been featured as one of the most iconic projects that came out of the BGCP (Transition Bristol, n.d.). As it developed, the BPCIC created a partner organization, the RealEconomy, which is another TE by itself concerned with food provision in Bristol, associated with the BP (BPT). Figure 7 (see above) depicts this trajectory through the MLP and MPP, showing how these events connect with each other. Through inductive coding (see section 4.4), I identified the following sub-regimes the BP aims to challenge: the Banking System, the Predominance of International Supply Chains, Big Corporations and Consumer Behavior.

With the history of the TE and its multi-dimensional context in mind, it is necessary to look at the experiment's critique to the different sub-regimes it challenges to understand the reasoning that led to the advent of the BP. Figure 8 presents this critique, as well as how the BP poses itself as a solution.

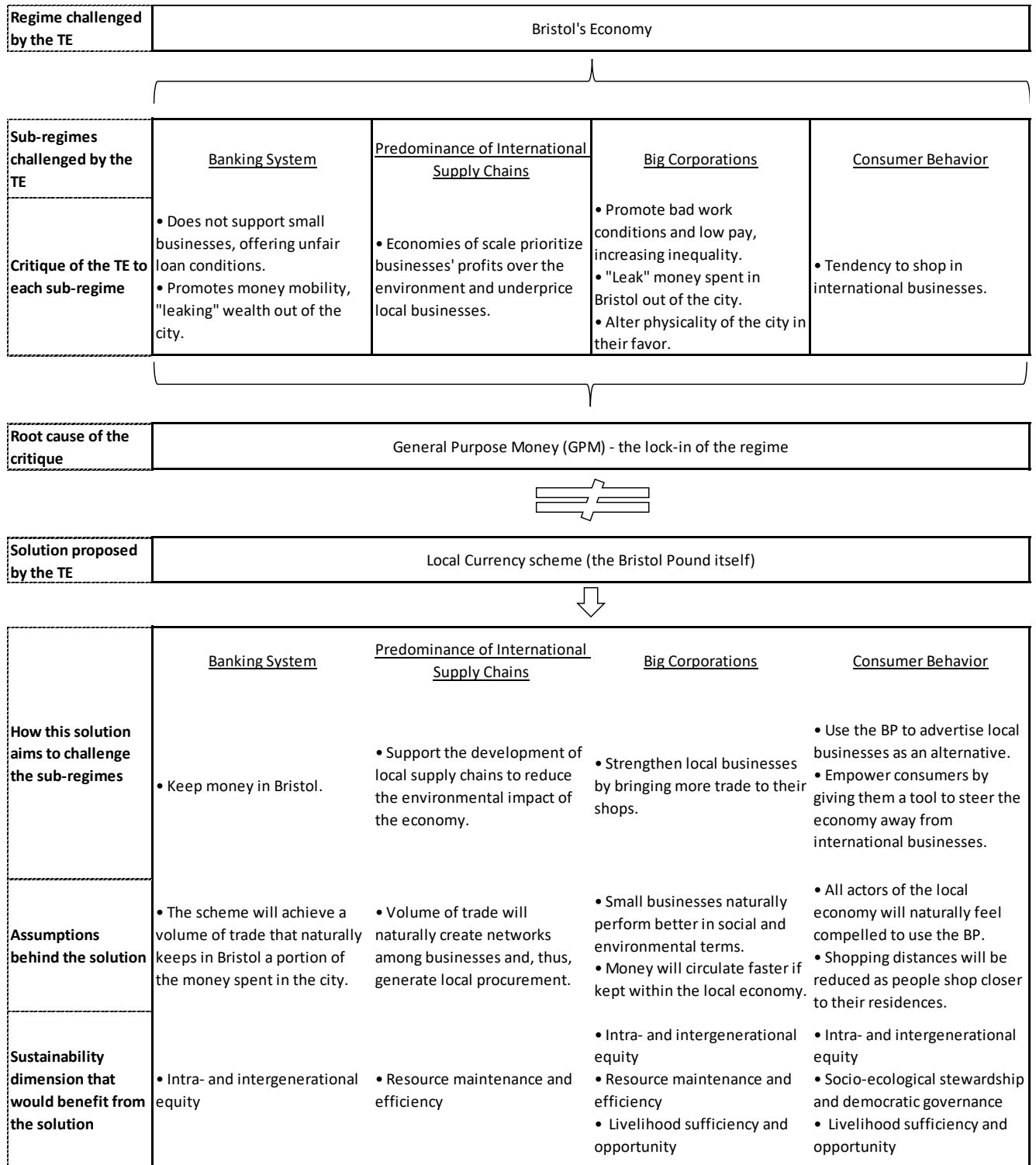


Figure 8 — Bristol Pound's critique of the economy and how it aims to challenge the different regimes that operate in the economy. The BP poses itself as a solution to break the lock-in of GPM, responsible for the critique the BP makes of the economy. Breaking this lock-in would, in turn, benefit different dimensions of sustainability. Source: own figure (2018).

6.2. Applying the Evaluation Framework: BP's contribution to sustainability

6.2.1. Outputs — What was generated?

Built Capacities — Does the transition experiment build capacities in participants to generate sustainability solutions?

Short answer: Yes. The experiment generated an innovation that aims to empower people (even if its effects are yet small) to support the local economy, apart from helping build competencies among participants.

The BP involves participants in developing the experiment (e.g., hiring Currency Champions and board members and organizing regular member meet-ups) (UI4, DN29). This engagement creates competencies among participants so that the TE can continue (DN26). Furthermore, the currency itself attempts to empower participants, giving them the option to enforce the values embodied by the BP while consuming (BPT). This power is limited, though, due to the small size of the scheme in comparison to Bristol's economy.

"At [member meet-ups] we facilitate feedback sessions and encourage further involvement through volunteering to help in the office and at the various events held and attended during the year."

OD02

RealEconomy, BPCIC's partner organization, is also engaged in empowering people, although by conducting a different TE (OW4). On top of that, the BP has been featured in an educational material "designed to support children to debate the key aspects for and against a local currency" (Sustainable Learning, n.d.). The BP Team are also the founders of the Independent Money Alliance (IMA), a network that assists people in developing LC schemes (OW5).

Actionable Knowledge — Does the transition experiment generate actionable knowledge that provides evidence on how to generate sustainability solutions?

Short answer: Somewhat. The innovation generates knowledge on how to and why implement a LC scheme, but does not generate knowledge regarding how to measure the sustainability performance of LC schemes.

The EF divides actionable knowledge into three types: analytical-descriptive, normative and transformational. The first refers to knowledge regarding the sustainability problem, the second to knowledge about the goals of the transition, and the third to knowledge regarding transitioning to a sustainable system (Luederitz et al., 2016).

Regarding analytical-descriptive knowledge, the BP's blog relates recent events with LC schemes. For example, the article "From Panama to Paradise: break the cycle and change the system with Bristol Pounds" concludes that "alternative currencies are structured around the radical notion that the economy should be equal and fair" (DN28). Another article is about big corporations: "the work they create is often repetitive, low-skilled and often workers' rights are diminished with zero hours' contracts and minimum wage" (DN27).

As for normative knowledge, BP's goals are clearly stated on their website: make banking and money work for and not against people (OW3). The website also explains how the currency works towards achieving this goal.

In relation to transformational knowledge, The Bristol Method (OD04) is a document with advices for people setting up their own LC schemes. The document describes how the BP started, what the key actions were in making the scheme a reality and how it is designed. On the BP website, there is a list of academic studies about the currency (OW3). However, there is a lack of knowledge regarding how to measure the "sustainability" of LCs (BPT) (for example, the BP has no indicators to track reductions in shopping distance). Thus, even though the BP generates knowledge on how to create similar experiments, how to measure these experiments as "sustainability" transitions remains an open question.

Accountability — Does the transition experiment build confidence and commitment for generating and realizing sustainability solutions?

Short answer: No. As there is no performance-tracking of the scheme in sustainability terms, it is hard to inspire confidence. Besides, the scheme does not hold the members accountable for their sustainability performance or for the localization of their supply chains.

11% of participants that answered a recent Member's Survey conducted by the BP Team said they would use the BP more if they had a better understanding of its impacts (see Appendix 1). The reasons why the

City Council cut funding for the scheme are also partly related to a lack of understanding of the scheme's impacts (BCC).

"[...] we didn't get so clearly the actual economics of it."

"[...] we couldn't demonstrate the value for money of supporting it."

(BCC)

The City Council's document authorizing the cease of financial support (GR01) suggests that if the BP was to disappear due to this funding loss, the Council's decision might have been different. This might represent some degree of confidence in the BP's capacity to deliver benefits. However, the inability to show proof of the scheme's impacts remains an issue.

Furthermore, the scheme does not demand a sustainability performance from its members. There are no rules concerning the origin of the products sold or the impacts of the services provided (OD01). This allowed a public transportation company to join the scheme and pose itself as a "green" company (BPT), for example. The membership rules stipulate that "with reasonable cause (to be decided in their absolute discretion by the Company and/or BCU) any Scheme Member may have their Scheme Membership suspended or closed" (GR01), but gives no further details regarding what might lead to this suspension.

One of my interviewees said they "wouldn't choose a supplier based on it [if the supplier accepts BPs or not]," (BI3) arguing that localization is not their priority when choosing a supplier. Besides, businesses are not required to spend their BPs; they can exchange the BPs to Sterling at any time (GR01).

The positive side concerning this feature is the organizational transparency of the BPCIC. The company keeps members updated on their work and promptly reports technical issues with their platforms on their social media accounts (e.g., Bristol Pound Twitter Account, 2018). This can build confidence among participants, but is only auxiliary to the sustainability solution.

Structural Changes — Does the transition experiment generate physical and/or societal changes that support solutions for the identified sustainability problem?

Short answer: Yes. The experiment delivers societal changes that support solutions.

The BP itself is a solution to the sustainability problem identified. 47% of users claim to shop more in independent shops since they started using the currency (Appendix 1). However, the scheme has little effects on the revenues of local businesses'. All the businesses I interviewed told me they had a negligible monthly turnover of BPs.

One of my interviewees said that accepting BPs is not their criteria when choosing a supplier (BI3), but they and all other businesses interviewed have a few suppliers they pay in BPs. All business interviewed said this local procurement network is still very small, though, and consists mostly of shops that already had business relations with each other before the BP was launched. At the moment, most of the procurement comes from the City Council because it is possible to pay business rates (a type of tax) in BPs (OW3; Marshall and O'Neill, 2018).

The experiment created two organizations in Bristol committed to the transition effort (BPCIC and RealEconomy). Even though in Bristol there are other organizations concerned with the local economy, such as the Federation of Small Businesses, the BP claims to have a more bottom-up approach (BPT). Furthermore, the BP shapes the debate about LCs in the media — it has been featured in many media outlets as sort of a sustainability symbol (e.g., DN05 and DN19).

But maybe the most relevant change brought by the BP is the awareness it creates in people, showing them that their spending habits have environmental and social effects. All business and users I interviewed said the BP increases this awareness somehow.

"People, you know, quite often spend without really thinking about it, but I think this [the BP] makes you think about where your money is going, how you're sort of voting to spend it almost."

(BI4)

Up-take facilitation — Does the transition experiment indicate how to account for unintended consequences, scale the solution to broader applications and transfer it to different contexts?

Short answer: Somewhat. The experiment has unintended consequences to which it has no solutions yet, and its transferability to different contexts might prove difficult, although there is a blueprint of how the scheme was implemented.

An unintended consequence of the BP is the demographic divide between users and non-users of the currency (BPT). Gender balance is somewhat in place, with 47% females and 53% males, but less than 1% of the users are under 25 years old³, and 93% identify themselves as white⁴ (Appendix 1). Furthermore, the scheme has not yet penetrated in disadvantaged areas of the city (OD04, BPT). Even though solutions to these issues are being discussed and implemented at varying degrees of success, such as founding RealEconomy, the organizers think this is a structural problem related to TEs, which mostly attracts middle-class people (BPT).

As for scalability, the BP is an example of how to implement a city-wide LC scheme (OD04). Considering Bristol's size in the UK's context⁵, other LCs (especially Transition Currencies) can learn from the BP. It is important to keep in mind, though, that accounting for the unintended consequences first might be preferable than promptly engaging with scalability.

Regarding transferability to different contexts, the BP does not indicate how to do so. Studies such as Seyfang and Longhurst (2013a) highlight how LCs incorporate different characteristics according to the location they are implemented in and the issues they intend to tackle. Therefore, it is hard for me to assert which aspects of the BP are transferrable to other contexts as well. However, I believe that their critique of the economic system (analytical-descriptive knowledge) and their goals (normative knowledge) could inspire other schemes, as these aspects relate to a global phenomenon (explained in section 2).

6.2.2. Outcomes — What was accomplished?

Socio-ecological integrity — Do the transition experiment's outputs strengthen socio-ecological integrity? [Intrinsic]

Short answer: Not applicable to the case study.

This aspect concerns the direct relationship between biophysical conditions and human well-being. It pertains to how the structural changes generated affect these conditions. For example, a CC scheme in the form of time banks that promote the reconstruction of a damaged area (e.g., Nakazato and Lim, 2017)

³ 2016 population estimates indicate that around 34% of Bristol's population is under 25 (Bristol City Council, 2018a).

⁴ 2011 census data indicates that black or minority ethnic groups make up 16% of Bristol's population (Bristol City Council, 2018a).

⁵ Bristol is the 8th largest city in England and the largest in the southwest region (Bristol City Council, 2018a).

could fit this aspect of the framework. In the case of the BP, however, there is no direct relation between the currency's structural changes and the socio-ecological integrity of Bristol. The socio-ecological effects of the LC scheme pertain more to the "Resource Maintenance and Efficiency" aspect, explained in the following paragraphs. Therefore, I think this is not applicable to the BP and the scheme should not be evaluated on these terms. Luederitz et al. (2016) acknowledge that some of the framework's features might not be applicable to all kinds of experiments.

Livelihood sufficiency and opportunity — Do the transition experiment's outputs enhance livelihood sufficiency and opportunity? [Intrinsic]

Short answer: Somewhat. The experiment does not yet promote significant changes that could affect people's economic power, but it gives people opportunities to develop new skills and steer them towards sustainability.

The LC scheme is the main output of the experiment, and it gives its members some sense of agency over their economic activities, as my interviews with all actors revealed. Still, this effect is very small when compared to the economic forces active in Bristol (BPT, BI5). As mentioned before (6.2.1. — "structural changes"), the network of local procurement should be more developed. My interviews with users suggests that people's sense of satisfaction and control seem to increase when using the BP, but that is not enough to say that the currency increases their livelihood sufficiency and opportunities, especially considering the homogenous demographics of users.

However, as shown in "built-capacities" (6.2.1.), the experiment involves participants in the transition process, nurturing new skills among the community. Currency Champions, all the people working in the BPCIC, and even the people contributing to the design competitions have more opportunities to engage with sustainability because of the experiment.

"We came today because [...] our daughter has an entry into the [finalist drawings of the design competition for the BP bank notes]."

(UI3)

Socio-ecological stewardship and democratic governance — Do the transition experiment's outputs build or support socio-ecological understanding and democratic governance? [Diffusive]

Short answer: Yes. Examples are the participatory settings organized by the members and the awareness promoted by the currency, as well as its influence over other organizations.

In terms of democratic governance, the BP Team organizes meetings for all members to elaborate strategies to tackle the scheme's current challenges and to increase the usefulness of the currency (e.g., DN29 and DN30). These meetings aim to pass the governance of the project to the community itself (BPT). Concerning socio-ecological stewardship, the BP's objective is to promote a new economic model which places social and environmental concerns at its center. This generates awareness among members (6.2.1. — "structural changes"), which in turn supports a socio-ecological understanding of the world. Furthermore, the promotion of this new economic model impacts other organizations as well — not only those directly associated to the BP but also businesses in Bristol that are not members of the scheme, the City Council and organizations elsewhere that are exposed to the debate about LCs.

"the BP is like a tiny little flag saying, 'these things [how the economy works] could be different'."

(B15)

An example of this impact is the City Council's inclusion of the BP in Bristol's Resilience Strategy, referring to it as a "pattern-disrupter" for the city.

"Many of Bristol's innovative projects and pattern disrupters are focused on promoting self-sufficiency and circularity of systems – for example encouraging local consumption and production with the Bristol Pound."

Bristol City Council (2017, p. 21)

The BP, therefore, can be seen as a tool that engages people in a collective act of decision making (the use of the currency) that promotes sustainability.

Resource maintenance and efficiency — Do the transition experiment's outputs contribute to overall resource maintenance and efficiency? [Intrinsic]

Short answer: No. There is a theoretical argument to say that the scheme contributes to resource efficiency, but, in practice, there are no mechanisms promoting that.

In the context of the BP, this feature relates to reducing the impacts of the economy on the environment. Thus, it requires that the BP delivers its theoretical benefits (related to the localization of the economy). In practice, however, the "accountability" output (6.2.1) reveals that the BP does not hold its members accountable for their sustainability performance or for localizing their supply chains. On top of that, the lack of performance indicators shows that, apart from not being required, this performance is also not being measured.

Marshall and O'Neill (2018) investigated the extent to which the BP facilitated local procurement and local production across different businesses involved in the scheme. Their conclusions revealed the BP "merely replaced the unit of account in which (some) local trade is denominated" and "has had no discernible impact on local productive capacity" (Marshall and O'Neill, 2018, p. 281). The BP Team reacted to this research with the following statement:

"They seem to think that localization happens when academics advise government on policy changes that are needed and grassroots actions like Bristol Pound are not affecting the thinking of policymakers. Wrong! £5m in five years and thousands of transactions leading to thousands of conversations in Bristol and wider. This changes how people think and behave."

BPCIC spokesperson (Ashcroft, 2017)

This statement correlates with my earlier conclusion in the "socio-ecological stewardship and democratic governance" aspect: the BP creates awareness and influences other organizations. However, it does not refute the evidence showing the BP is not promoting localization. Marshall and O'Neill's (2018) results are in accordance with what I discovered in all my interviews with businesses – the network of local procurement is still very small and existed before the currency was launched (6.2.1., "structural changes"). Thus, I found no evidence that the BP generates localization. Even though the BP promotes resource efficiency in theory, its practical effects may be undermined by the lack of accountability among members.

Intra- and intergenerational equity — Do the transition experiment's outputs improve intra- and intergenerational equity? [Intrinsic and diffusive]

Short answer: No. The experiment should involve disadvantaged communities, impact Bristol's economy more significantly and guarantee a level of sustainability performance from its members to claim that it is improving equity in practical terms.

The "built capabilities" and "up-take facilitation" outputs (6.2.1.) reveal that the BP somewhat promotes empowerment among its members, infusing them with a sense of agency to support local businesses, despite having little impact in the overall economic activity. Therefore, the currency attempts to instrumentalize intra- and intergenerational equity. However, as noted by Haxeltine et al. (2013), it is important to scrutinize the assumption that TEs generate empowerment. In the BP case, some members of the scheme feel empowered, but people in disadvantaged communities are seldom involved with the scheme, and, by consequence, might end up disempowered — increasing intragenerational differences.

"We're empowering independent businesses I think, but not all of them. And we're probably empowering wealthier people in the community in the sense that we're making them feel like they're doing something good and we're giving them the opportunity to make a statement with the money that they spend."

"[...] unfortunately, but not for lack of trying have we failed to engage with the demographics in the city."

(BPT)

Furthermore, as the effectiveness of the currency in delivering resource efficiency is unclear, there is reason to consider that the BP might be promoting only an illusion of intergenerational environmental equity. Therefore, even though the BP theoretically promotes both intra- (against corporations and the banking system) and intergenerational (against an unsustainable future) equity, in practice there is no evidence of significant effects.

***Precaution and adaptation — do the transition experiment's outputs ensure precaution and adaptation?
[Intrinsic]***

Short answer: Somewhat. The organizers of the BP are aware of the risks in running the scheme and are autonomous enough to implement solutions, but this has not yet led to making the scheme more sustainable.

“What adapts to what” (de Haan and Rotmans, 2011, p. 93) is an important question regarding adaptation. In the case of the BP, adaptation is required to better reflect community needs (BPT). The "actionable knowledge" (6.2.1) generated suggest a degree of reflexivity, specifically rethinking and learning from the

TE. The "built capabilities" (6.2.1) suggest the same, by engaging members of the community to solve problems and propose changes. The promptness the BPCIC informs users of technical issues provide a degree of precaution. The BP Team runs the currency with complete autonomy, which facilitates the implementation of solutions (BPT). Besides, the organizers are aware of the risks in conducting the TE. Funding and community involvement were mentioned as the most detrimental aspects to maintain the experiment (BPT). However, this precaution and adaptation have not yet made the scheme steer its actions to contribute more to the other aspects of sustainability analyzed here. Therefore, this feature is present in the experiment but has not made it contribute more to sustainability.

6.2.3. Summary

Figure 9 presents a summary of the findings of the EF, covering both outputs (6.2.1.) and outcomes (6.2.2.).

	Dimension	Question	Answer	
Outputs (6.2.1.)	Built Capacities	Does the transition experiment build capacities in participants to generate sustainability solutions?	Yes. The experiment generated an innovation that aims to empower people (even if its effects are yet small) to support the local economy, apart from helping build competencies among participants.	
	Actionable Knowledge	Does the transition experiment generate actionable knowledge that provides evidence on how to generate sustainability solutions?	Somewhat. The innovation generates knowledge on how to and why implement a LC scheme, but does not generate knowledge regarding how to measure the sustainability performance of LC schemes.	
	Accountability	Does the transition experiment build confidence and commitment for generating and realizing sustainability solutions?	No. As there is no performance-tracking of the scheme in sustainability terms, it is hard to inspire confidence. Besides, the scheme does not hold the members accountable for their sustainability performance or for the localization of their supply chains.	
	Structural Changes	Does the transition experiment generate physical and/or societal changes that support solutions for the identified sustainability problem?	Yes. The experiment delivers societal changes that support solutions.	
	Up-take facilitation	Does the transition experiment indicate how to account for unintended consequences, scale the solution to broader applications and transfer it to different contexts?	Somewhat. The experiment has unintended consequences to which it has no solutions yet, and its transferability to different contexts might prove difficult, although there is a blueprint of how the scheme was implemented.	
Outcomes (6.2.2.)	Socio-ecological integrity [intrinsic]	Do the transition experiment's outputs strengthen socio-ecological integrity?	Not applicable to the case study.	
	Livelihood sufficiency and opportunity [intrinsic]	Do the transition experiment's outputs enhance livelihood sufficiency and opportunity?	Somewhat. The experiment does not yet promote significant changes that could affect people's economic power, but it gives people opportunities to develop new skills and steer them towards sustainability.	
	Socio-ecological stewardship and democratic governance [diffusive]	Do the transition experiment's outputs build or support socio-ecological understanding and democratic governance?	Yes. Examples are the participatory settings organized by the members and the awareness promoted by the currency, as well as its influence over other organizations.	
	Resource maintenance and efficiency [intrinsic]	Do the transition experiment's outputs contribute to overall resource maintenance and efficiency?	No. There is a theoretical argument to say that the scheme contributes to resource efficiency, but, in practice, there are no mechanisms promoting that.	
	Intra- and intergenerational equity [intrinsic and diffusive]	Do the transition experiment's outputs improve intra- and intergenerational equity?	No. The experiment should involve disadvantaged communities, impact Bristol's economy more significantly and guarantee a level of sustainability performance from its members to claim that it is improving equity in practical terms.	
	Precaution and adaptation [intrinsic]	Do the transition experiment's outputs ensure precaution and adaptation?	Somewhat. The organizers of the BP are aware of the risks in running the scheme and are autonomous enough to implement solutions, but this has not yet led to making the scheme more sustainable.	

Figure 9 — Summary of the findings from the EF. This figure lists the feature analyzed, to which dimension the feature pertains (“outputs” or “outcomes”), the guiding question of the analysis, as well as my answer based on the BP case. The symbols next to the answer illustrate a positive (green), negative (red) or mixed (orange) result. Source: own figure (2018).

Considering these findings, in section 6.3. I answer my overarching RQ and sub-RQ1. Then I explore the problematic of those findings in section 6.4., combining them with insights derived from the MLP, answering sub-RQ1.1.

6.3. The scheme’s contribution to sustainability: “a means to an end”

The findings of the EF reveal that the answer to RQ (“Does the Bristol Pound (BP) contribute to sustainability?”) is “yes, somewhat”. This leads to sub-RQ1 (“If yes, in what way?”) and excludes sub-RQ2 (“If no, why?”).

Answering sub-RQ1, the BP contributes to an increased understanding and enhanced governance of the socio-ecological dimensions of the economy. Evidence of this contribution are: 1) the creation of partner organizations of the BPCIC (IMA and RealEconomy), concerned with rearranging economic activity for sustainability; 2) the awareness created among members of the scheme, making them reflect on their individual habits and giving them a sense of empowerment; and 3) the actions of other organizations that incorporate some of the BP's worldview in their practices. In transition terms, this contribution can be classified as diffusive, that is, concerns the BP's ability to influence mainstream regimes in becoming more sustainable. Thus, the BP is a "means to an end" for sustainability, and not something that is valuable for its own sake.

This does not mean the BP cannot have intrinsic benefits. The scheme attempts to influence the resource efficiency of Bristol's economy and to provide its members with increased livelihood sufficiency and opportunities; it is also designed to act as a tool for intra- and intergenerational justice. However, as of now, these intrinsic benefits are not being delivered, which leads to the sub-RQ1.1: “are there factors hindering this contribution and if so, how?”

6.4. The limitations of the BP: factors that prevent the scheme from contributing more to sustainability

The MLP analysis highlights the sub-regimes the BP challenges, and exploring this multi-level context in combination with the EF findings reveals the factors that hinder the BP's contribution to sustainability.

The BP has specific critiques to each sub-regime and poses itself as a solution. As explained in section 6.1, the underlying assumption is that by dealing with the lock-in mechanisms that affects all sub-regimes (i.e., GPM) it is possible to generate changes across all of them, leading to a new regime configuration.

Theoretically, this assumption can be justified. However, in practice, the EF revealed the BP has some limitations that may prevent the scheme from meeting this objective (Figure 10).

Sub-regimes challenged by the BP	<u>Banking System</u>	<u>Predominance of International Supply Chains</u>	<u>Big Corporations</u>	<u>Consumer Behavior</u>
How the BP aims to challenge the sub-regimes of Bristol's economy	<ul style="list-style-type: none"> Keep money in Bristol. 	<ul style="list-style-type: none"> Support the development of local supply chains to reduce the environmental impact of the economy. 	<ul style="list-style-type: none"> Strengthen local businesses by bringing more trade to their shops. 	<ul style="list-style-type: none"> Use the BP to advertise local businesses as an alternative. Empower consumers by giving them a tool to steer the economy away from international businesses.
Assumptions behind the BP	<ul style="list-style-type: none"> The scheme will achieve a volume of trade that naturally keeps in Bristol a portion of the money spent in the city. 	<ul style="list-style-type: none"> Volume of trade will naturally create networks among businesses and, thus, generate local procurement. 	<ul style="list-style-type: none"> Small businesses naturally perform better in social and environmental terms. Money will circulate faster if kept within the local economy. 	<ul style="list-style-type: none"> All actors of the local economy will naturally feel compelled to use the BP. Shopping distances will be reduced as people shop closer to their residences.
Factors that limit the capacity of the BP to challenge the sub-regimes	<ul style="list-style-type: none"> Scheme is too small to make relevant quantities of money stay in Bristol. BP can be converted to Sterling. 	<ul style="list-style-type: none"> There are no incentives that encourage businesses to develop local supply chains. Even if volume of trade was higher, there are no accountability mechanisms to enforce local procurement. 	<ul style="list-style-type: none"> There are no performance indicators to guarantee that local businesses are promoting sustainability and equality and that more money is circulating in the local economy. Scheme is too small to divert trade from international to local businesses and impact the total revenue of local businesses'. 	<ul style="list-style-type: none"> The homogeneous demography of the members of the scheme does not represent all consumers involved in Bristol's local economy, thus changing the preferences of only a handful few. Businesses members of the scheme are mostly concentrated in the city center.
Sustainability dimension negatively impacted by these limitations	<ul style="list-style-type: none"> Intra- and intergenerational equity 	<ul style="list-style-type: none"> Resource maintenance and efficiency 	<ul style="list-style-type: none"> Intra- and intergenerational equity Resource maintenance and efficiency Livelihood sufficiency and opportunity 	<ul style="list-style-type: none"> Intra- and intergenerational equity Livelihood sufficiency and opportunity

Figure 10 — The limitations of the BP and how they hinder the currency's capacity to contribute to sustainability. This figure shows the reasons why the scheme is not able to deliver more sustainability benefits, as well as to which sustainability dimension of the EF these reasons pertain. Source: own figure (2018).

My interviews reveal the businesses members of the scheme would be willing to pay more suppliers with BPs if they were to get paid in BPs more often. Therefore, part of the reason as to why the BP has not been able to drive localization is due to the small volume of trade in BPs. If there was more trade in BPs, the scheme assumes that naturally localization will follow. However, this might not be the case. Businesses might have other priorities on top of being local when developing suppliers, as my interviews revealed. Furthermore, as the membership rules of the BP do not hold members accountable for localizing their businesses, there are no guarantees that with a high volume of trade in BPs those businesses will not just simply convert their BPs to Sterling and use them elsewhere.

The BP could argue that it has a mechanism in place preventing that from happening: the City Council collects business rates in BPs. This is one of the selling points of the currency to businesses: even if you find nowhere to spend your BPs, you can use them to pay taxes (Bristol Pound, n.d.). However, the volume of trade could surpass the amount of taxes due. This mechanism only addresses the symptom (BPs being converted back into Sterling) and not the problem itself (the lack of other mechanisms to promote localization). The City Council is only one actor in Bristol's economy and wouldn't represent true localization. This limits the BP's capacity to challenge the Banking System and the Predominance of International Supply Chains.

Furthermore, there are no indicators to track if the BPs are in fact making money circulate faster within the local economy, which is the underlying assumption when arguing as to why the BP makes local businesses stronger. On top of that, there are no indicators to measure the environmental and social performance of those local businesses. The whole scheme assumes that, because the business is local, it naturally performs better on those dimensions than big corporations. There are reasons to believe this assumption is true, as well as there are reasons to believe that the BP's other assumptions are also true, but the lack of accountability mechanisms prevent the scheme from guaranteeing those assumptions reflect reality, and not only theory. This limits the capacity of the scheme to challenge Big Corporations. Furthermore, the fact that the scheme is confined to a specific demographics hinder its ability to empower consumers of the local economy, limiting the capacity of the scheme to challenge current Consumer Behavior.

6.4.1. What is the cause of these limitations?

My interview with the BP Team reveal what might have led to this configuration: the initial challenge of the BP was to achieve volume, which was done at the cost of putting some of its goals aside (BPT). Regarding the partnership with the local transportation company, for example, one interviewee said, “I personally think that was a mistake, but at the time it was about getting the BP to scale” (BPT). Achieving volume was necessary so that the scheme could gain enough traction to serve as an advertisement tool for local businesses and consolidate itself as an alternative to the problems it claims to solve (BPT), which guaranteed a successful launch and expansion over the years.

Furthermore, the BP Team believes the scheme naturally recruits businesses who sell "ethical" products, which are expensive, and therefore ends up attracting users who can afford higher prices (BPT). This view is also in line with one of the businesses I interviewed (BI4), revealing a possible structural problem of the scheme that prevents it from engaging with different demographics.

But now the scheme needs to align its design with its goals to move forward. It is difficult to justify funding the BP without having proof of its performance (BCC). Users would be more willing to spend in BPs if they understood its real effects better (Appendix 1). The lack of accountability mechanisms and metrics impact the foundational elements of the scheme: funding and community. In turn, less funding and less community involvement lead to less trade in BP.

Thus, I argue that the BP needs a combination of 1) accountability and stimulation mechanisms to drive local procurement, 2) performance indicators to track its environmental and social objectives, and 3) initiatives to engage the city’s demographics. Those elements are a prerequisite to generate more trade and deliver intrinsic sustainability benefits. The assumption that more trade in BPs is enough to achieve the scheme's goals is misleading and counterproductive to those goals.

7. Discussion

Now that my research questions have been answered, I explore the answers’ implications for the TE. Firstly (7.1), with further insights from different MPP scenarios, I identify possible future pathways the TE can take. Secondly (7.2), I take inspiration from another LC scheme and propose ways for the BP to follow a pathway that will lead to the success of the experiment. To close the discussion (7.3), I present a critical

reflection about my thesis, highlighting how I achieve my research aim, and make suggestions for future studies.

7.1. The future of the BP: possible consequences of the scheme's limitations

As explained in section 6.1, the BP is currently in the stage of acceleration. This means the experiment is slowly growing in popularity and in numbers, learning from its past and influencing other regimes. In a successful transition process, the next stage would be stabilization (Rotmans, Kemp and Van Asselt, 2001), which implies becoming a regime itself. However, this can happen in different ways, and there is a risk of not reaching that stage. de Haan and Rotmans (2011) describe different generic pathways transitions can take, out of which I highlight four that fit the BP's case. I divide them between Successful and Unsuccessful Pathways.

7.1.1. Unsuccessful Pathways: possibility of backlash or lock-in

If the BP continues growing at the stable (but slow) level it seems to have reached, but does not overcome the limitations identified in section 6.4, it could end up in a backlash situation marked by hype-disappointment. Backlash occurs when, despite its temporary popularity, the experiment fails to become a mainstream regime and fades out, due to not satisfying community demands or to an unexpected risk (de Haan and Rotmans, 2011) – a situation related to Geel's (2011) "hype-disappointment cycles", when innovations do not live up to their promises or expectations. Articles like Dittmer (2013) and Marshall and O'Neill (2018) already tell a story of a certain disillusion with the potential of LCs, the BP in particular.

Another possible pathway is lock-in: the regime refuses to adapt to the experiment and manages to fulfill the societal need the experiment was trying to fulfill in a different way, still reproducing itself and maintaining status quo (de Haan and Rotmans, 2011). The experiment maintains some popularity, but remains unable to replace the regime. This could happen if a program like the Bristol Region Deal (United Kingdom Government, 2012), or if another experiment like the Avon Mutual Regional Bank or the government-promoted cryptocurrency Hullcoin (Christie, 2017) are incorporated by the regime. The BP could then arrive at a lock-in stage — still existent, but marginalized.

7.1.2. Successful pathways: possibility of emergent or teleological transitions

If the BP overcomes the limitations identified, it could rise as an emergent regime and overthrow the GPM hegemony. Emergent transitions occur when the experiment becomes the new regime without the active

involvement of the old regime (de Haan and Rotmans, 2011). I believe following this pathway is unlikely, though, as the BP is pegged to the Sterling. The Bank of England issued a report (Naqvi and Southgate, 2013) saying that, due to this 1-to-1 condition, LC schemes are not a threat to their monopoly on money supply — the report hints that, if contrary, the BP might be treated with coercive measures, which could lead the scheme to another backlash scenario.

A successful pathway more likely to happen is a teleological transition – when the regime incorporates the novel features of the experiment (de Haan and Rotmans, 2011). The BP can achieve this by overcoming the limitations I identified and working alongside the regime, but still detached enough from it. This path is usually the one aimed by transition management, and I argue the most likely successful pathway for the BP. Thus, the way to for the BP to go forward is to address the limitations the scheme faces currently and aim for a teleological approach using transition management.

7.2. The way forward: overcoming limitations and avoiding a lock-in

Given the complex nature of transitions, the long history of the BP and the commitment of the BP Team, it would be too assuming to propose a definitive and concrete solution to the challenges the scheme faces. Therefore, I will allude to initiatives implemented by another LC scheme in the hopes of providing inspiration and food-for-thought for the BP, as well as reflect on the shortcomings of this other LC to strengthen my case as to why the limitations I identified should be addressed. But first, I will present what the BP Team is already developing.

7.2.1. Overcoming limitations: what the BP is about to implement

The BP Team about to launch a pilot project to provide zero-interest credit to the businesses accepting BPs, with the intention of giving them autonomy from high-street banks and further improving the scheme's funding mechanisms (BPT). If successful, this could serve as a stimulation mechanism for the development of new business relations, increasing local procurement among members. The positive aspect of this solution is that it does not require additional membership rules demanding localization from members, but rather gives them an incentive to localize. The solution bypasses some of the issues I outlined, as BPs acquired through this credit scheme wouldn't be convertible to Sterling (BPT), and localization would not depend solely on the City Council. Once those new business relations form, the businesses might also have more use to the BPs they receive from clients, thus once again offsetting the risk of converting BPs to Sterling. Furthermore, this could challenge the banking system, giving businesses

a different option to expand their operations or increase their working capital. I tend to agree with one of my interviewees, which sees this as the next step in the transition process:

"The real change will happen when we go back to lending within [the] local economy, [when] lending and all the services that global banking normally does are happening within [the] community."

(B15)

The BP Team is also investigating how to break away with the homogeneous demography using the currency. Recent member meet-ups focused on this issue, resulting in the creation of a "Student Engagement" task-force, to attract younger people to the scheme, and in plans to diversify their staff (Bristol Pound, n.d.B). Furthermore, setting up the IMA seems to be part of a plan to develop performance indicators, as the association aims to "establish ways to monitor the social and environmental impact of the schemes" (Independent Money Alliance, n.d.).

All these initiatives could be fruitful and, together, start to overcome the challenge. Nevertheless, I will pitch a few other ideas I believe could be worth exploring.

7.2.2. Overcoming limitations: what else the BP could implement

During my time in Bristol, it was suggested to me by the BP Team, by the City Council, and by two business owners that the BP could learn from LC schemes originated in the Global South. Therefore, I decided to list three initiatives that have been used by Banco Palmas, the organization behind a LC currency scheme operating in the city of Fortaleza, Brazil.

Despite the different context of Banco Palmas, these initiatives were successful in dealing with limitations similar to the ones faced by the BP, and are part of the reason why Palmas is the most famous LC in Brazil. I used Silva Jr (2008), the original report funded by the Brazilian Government, as a source.

- **Performance Indicators and Accountability:**

- Create a partnership with Bristol University for a research project that creates performance indicators and accountability mechanisms for the scheme. This could also contribute to involving younger people with the BP. Banco Palmas successfully conducted

a study in partnership with the Federal University of Ceará to measure their impacts on the community.

- Local Procurement:
 - Increase the influx of BPs in the economy by providing zero-interest credit to customers, and not only to businesses. Banco Palmas offered micro-credit in their LC (Palmas) to people and local businesses.
- Community Involvement:
 - Invest in educational projects in disadvantaged communities and link those projects to the BP somehow. Banco Palmas invested in educational projects in a deprived neighborhood, including a project to help women open their own businesses or find a position in the job market.

The initiatives above have some synergy with what I discussed with the BP Team and could assist envisioning future alternatives for the scheme. But I bring the Palmas example to reflect not only on how this LC overcame similar limitations, but also how it has arrived at a lock-in situation since the 2008 report by Silva Jr. The BP can learn from what Banco Palmas did in the past, but also from its current stage.

7.2.3. Avoiding a lock-in: reflecting about Banco Palmas

Rigo and de França Filho (2017) identified that, over the years, a vast network of businesses accepting Palmas developed, but the currency flow diminished (low frequency of trade and low volume, in comparison to the city's economy). The members nowadays have sufficient access to credit in Reais⁶, which reduces the need for Palmas (Rigo and de França Filho, 2017) – that is, the regime adapted to incorporate the needs of the community, marginalizing the LC. Even though members of the scheme think it is important to consume locally, they do so in Reais and see no need to use Palmas – they do not actively use the currency, but at the same time see value in the social ties the scheme generates (Rigo and de França Filho, 2017).

The authors conclude that the currency has instrumental and non-instrumental values: the former related to its capacity to stir the local economy and the latter to its symbolic representation of caring about the local community (Rigo and de França Filho, 2017). These values could only arise and develop

⁶ Brazilian national currency.

interdependently, but now the instrumental value of the Palmas is negligible (due to other mechanisms that suffice this instrumentality better), and only the symbolic value remains (Rigo and de França Filho, 2017). Hence, Palmas maintains its influence but has lost its practical relevance.

This configuration is similar to the BP's relationship with sustainability: the currency contributes to diffuse sustainability ideas, but has low intrinsic value for the cause. Therefore, the Palmas example only strengthens my analysis: to move forward, I argue that the BP must enhance its intrinsic value by overcoming the limitations identified (6.4), thus avoiding lock-in and following a successful transition pathway.

7.2.4. Final suggestion: committing to a sustainability vision

Given the above discussion about instrumental and non-instrumental values of LCs, I arrive at my final point: a reservation about the symbolic component of "sustainability" in the BP experiment. Due to the contested nature of the term "sustainability," different interpretations within the TE are bound to exist (Frantzeskaki, Loorbach and Meadowcroft, 2012). The BP Team seems to adhere to a sustainability paradigm that acknowledges that "[...] you can't have endless growth on a finite planet" (BPT). From businesses, users and the City Council, I heard mixed responses, varying from "make the business case for sustainability" (BCC) to "get used to the idea of living with less" (BI5). All these different paradigms utilize a currency that does not charge interest and only circulates within a limited geographical area — mechanisms that bring it close to Daly's (1972) idea of a steady-state economy with efficient resource allocation. The BP, therefore, acts as a convergence point for different visions.

However, internally the BP experiment has hit "a fork on the road" (BPT) between further expansion with lax sustainability standards, or further community involvement to build a common sustainability vision. I argue that the latter is more desirable, given the paramount need for a clear vision in transition management (Frantzeskaki, Loorbach and Meadowcroft, 2012; Geels, 2011). As explained by Seyfang and Smith (2007), TEs don't always need to practice strong sustainability, but there is a relation between the experiment's ideology and its empirical results — and this relation builds the image of the experiment as an alternative as well as shapes its purpose for the community. Therefore, whichever direction the BP takes will determine its symbolism and limit its functions within the community it serves. I argue, then, that committing to a clear sustainability vision is essential to attune the non-instrumental and instrumental values of the currency, bringing symbolism and functions together.

7.3. Critical reflection, limitations and future research

This study applies the "tentative" EF proposed by Luederitz et al. (2016). The EF is useful not only to determining the sustainability contribution of the BP but also to reveal the limitations (and their causes) currently faced by the TE. Using MLP and MPP, I contextualize the TE and derive further insights. This combination of tools forms the backbone of this study, revealing how the EF can be applied alongside other, well-established transition management tools to explore the contributions of TEs to sustainability. Thus, I achieve my research aim ("investigating the extent to which LCs contribute to sustainability and how to evaluate this possible contribution") with the use of the EF.

Furthermore, I use different data-gathering methods (suited to the short time and few resources I had to conduct this thesis), showing that interviews, participant observation and document analysis can compose part of the methodology that Luederitz et al. (2016) intend to develop for the EF.

However, there are many other methods that future studies could incorporate. This study could have benefited from the use of other transition management tools, such as participatory processes, vision-building, knowledge-creation, scenario drawing, etc (Frantzeskaki, Loorbach and Meadowcroft, 2012), all of which would require further involvement of the BP Team in the evaluation process, not possible due to limited resources and time. Moreover, the use quantitative data can be useful to investigate LCs, but that would require performance indicators, which, at the moment, do not exist for the BP.

My sampling was limited to the number of business and users that I could interview. Regarding businesses, I believe the sample is adequate to represent the "cashpoints." The businesses that didn't agree to be interviewed said they were not interested or had no time. As for users, I wish I had had more time to talk to more people. The data I was able to gather was enough to fulfill the purposes of this study, but a deeper understanding of the nuanced perceptions of users and businesses could have been fruitful.

Regarding my theoretical approach, applying the MLP requires defining boundaries, i.e. what is the incumbent regime and what are the sub-regimes (Geels, 2011). Depending on how these boundaries are defined, the transition process can be interpreted differently: regimes and sub-regimes often seem to be interchangeable (Geels, 2011); e.g. a sub-regime like Big Corporations does not necessarily operate under Bristol's Economy as my analysis portrays — rather, it could be placed above Bristol, or even above the

UK. However, my reasoning to place Big Corporations under Bristol's Economy is to account for the goal-oriented nature of transitions (see Geels, 2017); in the case of the BP, the goal is to impact Bristol's local economy, and not necessarily the structures relative to the global economy or even to UK's economy (although the TE does challenge them). In this sense, I adhere to Geels (2011) definition of regimes: "'regime' is an interpretive analytical concept that invites the analyst to investigate what lies underneath the activities of actors who reproduce system elements" (p. 31). My analysis deals with how the BP aims to tackle the activities that perpetuate an unsustainable economic system, and the interchangeability of regimes and sub-regimes is not addressed in the definition of each regime, but in how I interpret the transition process to best reflect the goals of the TE. Different interpretations of the case could lead to alternative configurations of the MLP, but scrutinizing these alternatives is beyond the scope of this research.

In addition, while writing this thesis I could not help but think that a social movements perspective might provide further insights into the dynamics of the TE. Future studies about LCs could explore this possibility, maybe blending social movements and transition literature, akin to Nastar's (2014) research. Furthermore, throughout this study I do not question the scale of the economic activity aspired by the BP. The propositions made by the BPCIC reveal they assume a local, Bristol-sized scale for economic activity would be beneficial for the environment and for society, thus the push to increase local procurement. This assumption, however, does not account for the following observation made by Daly and Farley (2004, pp 331): "[...] trade may decrease the chances of surpassing sustainable scale in any one area [...]". Therefore, future studies could explore how LCs could incorporate the notion of sustainable scale in their design (maybe getting inspiration from the Six Design Principles proposed by Daly and Farley, 2004); which I believe would be beneficial to understand the optimal boundaries in the coexistence between the BP and the Sterling, for example.

8. Conclusion: Local Currencies and Sustainability Science

In this thesis, I discovered that the LC scheme Bristol Pound serves as a means to an end for sustainability – that is, the currency influences the incumbent regime in becoming more sustainable, but does not provide benefits for sustainability by itself. My main contributions to sustainability science with this research pertain to the questions "how can the 'sustainability' of alternative pathways of environment and development be evaluated?" and "how can society most effectively guide or manage human environment systems toward a sustainability transition?" (Kates, 2011, p. 19450).

Regarding the first question, I reveal how TEs can be evaluated using mixed methods and applying Luederitz's et al. (2016) framework in combination with other, well-established tools (i.e., MLP and MPP). Thus, I add to the body of transitions literature and how to evaluate TEs. I also contribute to testing the framework proposed by Luederitz et al. (2016) and developing a methodology for its application.

As to the second question, I conclude that, to be effective, transitions should contain both instrumental and non-instrumental values attuned to a sustainability vision — with my analysis, I try to negotiate a road between the two. I argue that the BP needs to develop mechanisms that promote sustainability intrinsically, and not just diffusively, otherwise the experiment runs the risk of becoming marginalized. Furthermore, LCs have long been praised as tools for sustainability, but few have investigated the topic by conducting a thorough sustainability evaluation of a scheme. I hope this thesis paves the way for future studies looking at LCs through sustainability science lenses.

As a closing remark, I believe that the problematic of the BP, and LC schemes in general, is they are part of the move from an unjust to a just configuration of the economy — this is expressed in the BP's goal of promoting a "fairer and greener economy that improves community life" (Bristol Pound CIC, 2015), for example. If we are to discuss justice from a transitions perspective, the departure point should be the basic assumption of the concept: "transition" means "process," the passing from one stage to another. This fits with Sen's (2009) approach to justice, which I adhere to and starts with the question "how would justice be advanced?" (p. 9), instead of looking at "what would perfect justice be?" Placing "sustainability" as a central element of my conception of justice, I can, therefore, say that the BP advances justice, even if not intrinsically. Considering this, being a "means to an end" is not a demerit. The road from unsustainability to sustainability is bound to be filled with different transition experiments, each contributing to the cause at different levels. I hope this research elucidates how these experiments can expand their contribution to as many levels as possible.

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Appendix 1 – Member’s Survey.

Provided to me by the BP Team via e-mail.

Members Survey 2017 Key Findings

Do you have a Bristol Pound account?

148 out of 148 people answered this question

1	Yes	131 / 89%
2	No	17 / 11%

No Account:

Prefer cash	Information/knowledge on how	Haven't got around to it/haven't had time	Don't have enough money	Difficulty setting up in person
5	6	3	2	1

Why did you decide to start using the Bristol Pound?

131 out of 148 people answered this question

1	Dislike of current financial system and corporate power	69 / 53%
2	Other	18 / 14%
3	Meeting and talking with a Bristol Pound member of staff	17 / 13%
4	Talking to friends, family or colleagues who are Bristol Pound members	16 / 12%
5	Directory– seeing all the places you can spend them	5 / 4%
6	Seeing advertising in shops	5 / 4%
7	Discounts/special offers by businesses members	1 / 1%

Local Economy	P/R Advertising	With it from the beginning	Real Economy	Pride in Bristol
9	5	2	1	1

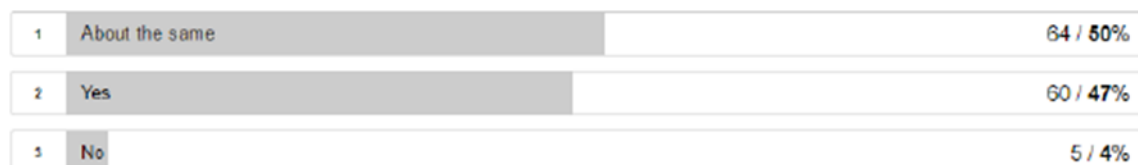
What do you spend most of your Bristol Pounds on?

129 out of 148 people answered this question



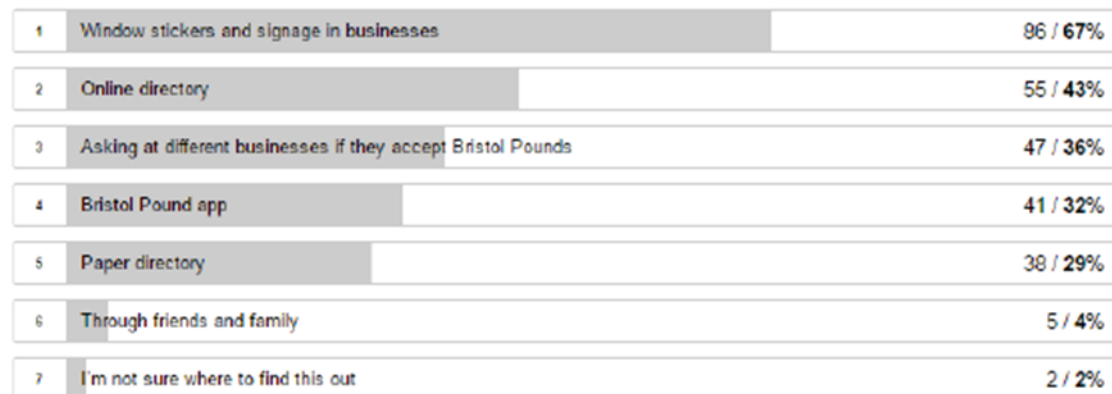
Since using the Bristol Pound, do you shop more in independent shops and businesses?

129 out of 148 people answered this question



How do you find out where to spend Bristol Pounds?

129 out of 148 people answered this question



What would encourage you to spend more Bristol Pounds?

147 out of 148 people answered this question

1	A card payment method	77 / 52%
2	Increasing the number of shops which accept Bristol Pounds in your area	76 / 52%
3	Businesses themselves encouraging/prompting customers to pay in Bristol Pounds	71 / 48%
4	Easier to use technical systems: app, website and online banking	55 / 37%
5	Special offers and discounts by business members	49 / 33%
6	More cashpoints	42 / 29%
7	More visibility around Bristol	36 / 24%
8	Gaining a better understanding of how the Bristol Pound works and its impact	16 / 11%
9	Other	8 / 5%
10	More friends and family becoming Bristol Pound members	3 / 2%

Already Spend Enough	Not having enough money	Given as Change	BP staff not responsive	Direct Debit	Website Button
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What stops you from spending more Bristol Pounds?

146 out of 148 people answered this question

1	Not enough businesses accepting Bristol Pounds in my area	62 / 43%
2	Forgetting to pay with Bristol Pounds and using Sterling instead	46 / 32%
3	Convenience – it's easier to use Sterling	44 / 30%
4	Forgetting to top up or not having enough Bristol Pounds to pay	39 / 27%
5	Not enough cashpoints	27 / 19%
6	Technical difficulties with online or text payments	22 / 15%
7	Staff at Bristol Pound business not sure how it works	19 / 13%
8	Feeling awkward about asking if a business accepts Bristol Pounds	16 / 11%
9	Unsure how to make payments – cash or online	15 / 10%
10	Other	10 / 7%

Business lack enthusiasm	No smart phone	Forgetting to top up	Business not receiving enough	Time/effort
2	1	2	1	2

Optional Equality and Diversity Form

Male – 53%

Female – 47%

What is your age group?

133 out of 148 people answered this question

1	45 - 64	64 / 48%
2	25 - 44	58 / 44%
3	18 - 24	7 / 5%
4	65+	4 / 3%

Which ethnic group do you consider yourself to belong to?

132 out of 148 people answered this question

1	White – British (to include Northern Ireland, Scotland & Wales)	84 / 64%
2	White	23 / 17%
3	White - European	10 / 8%
4	Asian or Asian British – Indian	3 / 2%
5	Other White	3 / 2%
6	White – Irish	3 / 2%
7	Black or Black British – African	1 / 1%
8	Do not wish to disclose	1 / 1%
9	Mixed	1 / 1%
10	Mixed – White & Asian	1 / 1%
11	Other Black	1 / 1%
12	Other Mixed	1 / 1%
13	Asian	0 / 0%
14	Asian or Asian British – Bangladeshi	0 / 0%
...	Other	0 / 0%

What is your present occupation or (if no longer working) was your last position?

130 out of 148 people answered this question

1	Employee: in regular position (sales person, typist)	25 / 19%
2	Employee: with special qualifications (e.g. drafts-person, book keeper, accounts specialist)	20 / 15%
3	Employee: in highly specialised position (e.g. division head, scientist)	16 / 12%
4	Self-employed: independent or co-op	13 / 10%
5	Self-employed: professional or independent academic	13 / 10%
6	Employee: Other	9 / 7%
7	Employee: in leadership position (e.g. director, president of larger corporation)	8 / 6%
8	Self-employed: Other	6 / 5%
9	Other: trainees, students, conscripts	5 / 4%
10	Civil servant: middle level service	4 / 3%
11	Self-employed: independent with 10 or more employees	2 / 2%
12	Self-employed: independent with up to 9 employees	2 / 2%
13	Civil servant: Other	1 / 1%
14	Civil servant: higher lever service	1 / 1%
...	Other	5 / 4%

Appendix 2 – List of Documents and List of Interviews

List of Interviews

Actor	Interview Code
User 1	UI1
Users 2 and 3	UI2
User 4 and 5	UI3
User 6	UI4
Users 7 and 8	UI5
Users 9 and 10	UI6
Business 1	BI1
Business 2	BI2
Business 3 and 4	BI3
Business 5 and 6	BI4
Business 7	BI5
Bristol Pound CIC	BPT
Bristol City Council	BCC

List of Documents

Official government documents were selected by searching on the Bank of England and Bristol City Council websites for the keywords "local currency*", "community currency*", "complementary currency*", "alternative currency*" and "Bristol Pound". Documents from other organizations were selected based on the relevance of the organization to the case study. Online news articles, except for the ones published in the Bristol Pound Blog, were selected using Google search engine. My search term was "bristol pound". I applied a filter from the year the project was born, 2012, until March 1st, 2018. Google automatically prioritizes the 100 most relevant results, which I used as my sample.

All documents below that are cited in the thesis text are included in the references list. Other documents, listed below but not used in the text are not included in the reference list, following the LUMES Thesis Format directive, i.e. "the [reference] list should only include works that are cited in the text."

Type	Document Code	Title	Retrieved from
Government Report	GR01	Bristol City Council Equality Impact Relevance Check — Cease funding for Bristol Pound	https://www.bristol.gov.uk/documents/20182/2275681/RS26+Relevance+Check+-+Cease+financial+support+for+Bristol+Pound.docx/2d91868a-94e8-38fd-f5c9-f7d3f9b7cd69

Government Report	GR02	Bristol City Council (2018b). Bristol Economic Briefing March 2018. Bristol, UK.	https://www.bristol.gov.uk/documents/20182/33191/Bristol+Economic+Briefing+March+2018/b06e9894-5dc3-03d7-2727-50c2dcf8bce1
Government Report	GR03	Banknotes, local currencies and central bank objectives	https://www.bankofengland.co.uk/quarterly-bulletin/2013/q4/banknotes-local-currencies-and-central-bank-objectives
News article	DN01	The innovators: the Bristol pound is giving sterling a run for its money	https://www.theguardian.com/business/2015/jun/07/the-innovators-the-bristol-pound-is-giving-sterling-a-run-for-its-money
News article	DN02	Bristol: A tale of economic growth	https://www.theguardian.com/local-government-network/2013/dec/03/bristol-innovation-economic-growth
News article	DN03	Bristol pound is just one example of what local currencies can achieve	https://www.theguardian.com/local-government-network/2013/jun/17/bristol-pound-local-currencies
News article	DN04	Brixton banks on community currency to boost local economy	https://www.theguardian.com/small-business-network/2015/nov/18/community-currency-brixton-pound-local-business
News article	DN05	Could community currencies produce a more sustainable financial system?	https://www.theguardian.com/sustainable-business/community-currency-bristol-brixton-sustainable-finance
News article	DN06	We don't want to be part of 'clone town Britain': City launches its own currency to keep money local	http://www.dailymail.co.uk/news/article-2097398/Bristol-pound-City-launches-currency-money-local.html

News article	DN07	Bristol Pound' currency to boost independent traders	http://www.bbc.com/news/uk-england- bristol-16852326
News article	DN08	Bristol mayor: George Ferguson elected to lead city	<a href="http://www.bbc.com/news/uk-england-
bristol-20340154">http://www.bbc.com/news/uk-england- bristol-20340154
News article	DN09	Bristol Pound to be accepted on First buses in city	<a href="http://www.bbc.co.uk/news/uk-england-
bristol-24077078">http://www.bbc.co.uk/news/uk-england- bristol-24077078
News article	DN10	Bristol businesses queuing up to join local currency scheme	<a href="https://www.telegraph.co.uk/finance/cur-
rency/9478973/Bristol-businesses-
queuing-up-to-join-local-currency-
scheme.html">https://www.telegraph.co.uk/finance/cur- rency/9478973/Bristol-businesses- queuing-up-to-join-local-currency- scheme.html
News article	DN11	What is the point of local currency?	<a href="https://www.telegraph.co.uk/finance/per-
sonalfinance/money-saving-
tips/9066072/What-is-the-point-of-local-
currency.html">https://www.telegraph.co.uk/finance/per- sonalfinance/money-saving- tips/9066072/What-is-the-point-of-local- currency.html
News article	DN12	Bristol launches city's local currency	<a href="https://www.telegraph.co.uk/finance/cur-
rency/9552347/Bristol-launches-citys-
local-currency.html">https://www.telegraph.co.uk/finance/cur- rency/9552347/Bristol-launches-citys- local-currency.html
News article	DN13	Bristol to lose 75p of every £1 of government funding by 2020	<a href="https://www.bristolpost.co.uk/news/bris-
tol-news/bristol-lose-75p-every-1-
1255966">https://www.bristolpost.co.uk/news/bris- tol-news/bristol-lose-75p-every-1- 1255966
News article	DN14	BRISTOL POUND WELCOMES THE INDEPENDENT MONEY ALLIANCE	<a href="https://www.bristol247.com/business/ne-
ws-business/bristol-pound-welcomes-
independent-money-alliance/">https://www.bristol247.com/business/ne- ws-business/bristol-pound-welcomes- independent-money-alliance/
News article	DN15	BRISTOL POUND LAUNCHES NEW APP	<a href="https://www.bristol247.com/news-and-
features/news/bristol-pound-launches-
new-app/">https://www.bristol247.com/news-and- features/news/bristol-pound-launches- new-app/
News article	DN16	YOUR CHANCE TO DESIGN THE NEW BRISTOL POUND NOTES	<a href="https://www.bristol247.com/news-and-
features/news/chance-design-new-
bristol-pound-notes/">https://www.bristol247.com/news-and- features/news/chance-design-new- bristol-pound-notes/
News article	DN17	Bristol pound counts in local economy	<a href="https://www.ft.com/content/4fe13c82-
31e8-11e5-91ac-a5e17d9b4cff">https://www.ft.com/content/4fe13c82- 31e8-11e5-91ac-a5e17d9b4cff

News article	DN18	Bitcoin, enforcement and the men in black suits	https://www.ft.com/content/afbf4640-e0c2-11e7-8f9f-de1c2175f5ce
News article	DN19	Bristol to Barcelona: “Be as ambitious as possible with new local currency”	https://cat.elpais.com/cat/2016/11/22/internacional/1479854618_869834.html
News article	DN20	Making money: How to start your own currency	https://www.cnn.com/2014/08/01/business/making-money-start-your-own-currency/index.html
News article	DN21	The Bristol Pound: A city paying the mayor in its local currency	http://businessadvice.co.uk/business-development/sales-marketing/the-bristol-pound-a-city-paying-the-mayor-in-its-local-currency/
News article	DN22	Opinion: Bristol Pound ‘looks like Monopoly money’, but is quite the opposite	https://thebristolcable.org/2017/12/opinion-bristol-pound-looks-like-monopoly-money-but-is-quite-the-opposite/
News article	DN23	Bristol Pound: the local money-go-round	https://www.thephone.coop/business/bristol-pound/
News article	DN24	The Bristol Pound is launched to help independent retailers	https://www.independent.co.uk/news/uk/home-news/the-bristol-pound-is-launched-to-help-independent-retailers-8157379.html
News article	DN25	The Story of the Bristol Pound	http://www.resilience.org/stories/2014-02-21/the-story-of-the-bristol-pound/
News article	DN26	5 years on and 5 million Bristol Pounds spent	https://bristolpound.org/5-years-on-and-5-million-bristol-pounds-spent/
News article	DN27	Can Bristol Pound bridge the Divide?	https://bristolpound.org/can-bristol-pound-bridge-the-divide/
News article	DN28	From Panama to Paradise: break the cycle and change	https://bristolpound.org/from-panama-to-paradise-break-the-cycle-and-change-the-system-with-bristol-pounds/

		the system with Bristol Pounds	
News article	DN29	Local Currencies: the Rebellious Act as it happened	https://bristolpound.org/local-currencies-the-rebellious-act-as-it-happened/
News article	DN30	May Member Meetup: Re-imagining Bristol Pound	https://bristolpound.org/may-member-meetup-re-imagining-bristol-pound/
Organization Document	OD01	Scheme Rules for Individual Members and Trader Members	https://bristolpound.org/wp-content/uploads/Bristol-Pound-Scheme-Rules-2018.pdf
Organization Document	OD02	Bristol Pound Director's Report 2015	https://beta.companieshouse.gov.uk/company/07346360/filing-history
Organization Document	OD03	Member's Survey 2017	(provided by e-mail)
Organization Document	OD04	The Bristol Method	https://www.bristol2015.co.uk/method/
Organization Document	OD05	Bristol Pound Directory (of business)	https://bristolpound.org/wp-content/uploads/Directory.pdf
Organization Video	OV01	Why Use the Bristol Pound?	https://www.youtube.com/watch?v=cj3Bp13hLiE
Organization Website	OW01	Bristol Credit Union	http://www.bristolcreditunion.org/bristol-pound
Organization Website	OW02	Transition Bristol	http://transitionbristol.net/transition-bristol-timeline/
Organization Website	OW03	Bristol Pound	https://bristolpound.org/
Organization Website	OW04	RealEconomy	https://www.realeconomy.co.uk/

Organization	OW5	Independent Money Alliance	https://independentmoney.org.uk/
Website			

Appendix 3 – Interview Protocol

Businesses:

- Tell me about the experience your business has had with the Bristol Pound.
- Can you tell me what makes you support the Bristol Pound?
- Can you describe Bristol before and after the Bristol Pound?
- Can you describe your business before and after the Bristol Pound?
- In your opinion, is there a relation between sustainability and the Bristol Pound?

Users:

- Tell me about your personal experience with the Bristol Pound.
- Can you tell me what makes you support the Bristol Pound?
- Can you describe Bristol before and after the Bristol Pound?
- In your opinion, is there a relation between sustainability and the Bristol Pound?

Bristol City Council:

- Tell me about Bristol’s Resilience Strategy and the connection to the Bristol Pound.
- Can you describe Bristol before and after the Bristol Pound? Is it more resilient with it?
- In your opinion, is there a relation between sustainability and the Bristol Pound?
- Can you describe me your future vision for Bristol and the role the Bristol Pound plays in it?
- Are there any plans to work directly with the Bristol Pound through Bristol Resilient City?

Bristol Pound CIC:

- I’ve been asking people to describe me Bristol before and after the Bristol Pound and the common answer I always hear is “I don’t think it’s changed a lot”. Most people seem to think the Bristol Pound just added to the already existent idea of supporting independent business. Can you describe Bristol before and after the Bristol Pound?
- Recently the Bristol Pound stopped receiving funding from the City Council. How does the Bristol Pound measure the benefits it brings to the city?
- Who is the Bristol Pound supposed to empower and who does it empower at the moment?
- Some people seem to think the Bristol Pound is a white, middle-upper class project and that it doesn’t appeal to or affect people in marginalized areas. Tell me what you think about this claim.
 - Most people associate the Bristol Pound to the distinctive character of Bristol. Tell me about the relation between the identity of the city and its citizens and the Bristol Pound.

- Do you think that the business support the Bristol Pound for the same reasons that their clients do?
- What is your future vision for Bristol and what role does the Bristol Pound play in it?
- In your opinion, is there a relation between sustainability and the Bristol Pound?
- The business I talked to said they were not sure if the Bristol Pound reduced the environmental impact of the economy. Tell me about the environmental objectives of the Bristol Pound.
- I heard from some business that localization is not a factor when choosing a supplier. Why the Bristol Pound doesn't have strict supply chain localization requirements for the business that join? Isn't reducing the carbon footprint of the economy one of your objectives?
- Tell me about the relation between economic growth and the Bristol Pound.
- Tell me about the relation between consumerism and the Bristol Pound.
- Is the Bristol Pound a way of limiting or restricting purchasing power?
- Some people see it more like a voucher, some others see it as a proxy for a certification scheme, and some see it as a symbolic act against globalization. Tell me about the main objectives of the Bristol Pound nowadays.
- I heard from most business that their revenue in Bristol Pounds is very small. What current challenges does the Bristol Pound face?
- Tell me about the plans to expand the Bristol Pound so that it can better meet its objectives.
- Some people that I interviewed were very excited about the Bristol Pound, while some others were doubtful. Some business said it was easy to work with it, while others claimed it wasn't easy to implement and that its functionality didn't appeal to their clients. What are the plans to make the Bristol Pound grow?

Appendix 4 – Example of coding spreadsheet.

Topic (Deductive coding)	Question	Quote / Note	Interview / Document	Inductive Coding
Awareness	Does the transition experiment involve participants that are aware of the need for transformational change pursued through the experiment?	"Big business often has very poor sort of human rights"	UI3	Big Corporations
Awareness	Does the transition experiment involve participants that are aware of the need for transformational change pursued through the experiment?	"A move away from corporate, big, global business."	UI3	Big Corporations
Awareness	Does the transition experiment involve participants that are aware of the need for transformational change pursued through the experiment?	The main reason to joining the scheme is the local economy, according to her. She emphasized how the Bristol Pounds stay in Bristol and don't go anywhere else — she kept saying that it is about "the journey of money".	BI1	Banking System
Awareness	Does the transition experiment involve participants that are aware of the need for transformational change pursued through the experiment?	Sometimes people come and ask what are the benefits of using it, looking for a discount or something, but people often see the value in supporting the community.	BI1	Consumer behavior
Awareness	Does the transition experiment involve participants that are aware of the need for transformational change pursued through the experiment?	The Bristol Pound and sustainability are about "seeing the bigger picture" and "become part of the solution"	BI1	Consumer behavior
Awareness	Does the transition experiment involve participants that are aware of the need for transformational change pursued through the experiment?	"It is like a common ethos around Bristol's independents, to want to be supporting other local businesses and local suppliers and organic produce."	BI4	Int. Supply Chains
	Does the transition experiment			

Appendix 5 – Consent form

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2018



LUNDS
UNIVERSITET

Master Thesis on the Bristol Pound - Informed Consent Form

At any point of this interview you can ask questions or decide to withdraw from the interview. You can demand that certain statements are not published. Furthermore, you can demand to remain anonymous throughout the entire research project. When the research is done, the results of the research can be shared with you at your request.

The interview should last between 15 and 45 minutes.

- Do you agree to be recorded for this interview?

YES NO

- Do you as an individual wish to remain anonymous?

YES NO

Date:

Name:

Signature:

Appendix 6 – Analysis of Inputs and Processes

These dimensions of the EF do not pertain any of the RQs in this thesis, but have been covered to advance the effort of testing the framework.

Inputs — What was invested?

Awareness — Does the transition experiment involve participants that are aware of the need for transformational change pursued through the experiment?

Short answer: Yes. Most participants are aware that the BP is a currency aiming to create a different kind of economy, one that values local businesses over big corporations and banks. The environmental component of this transition doesn't seem to be always clear, though.

The people involved with the BP have different levels of awareness regarding the multi-level configuration, but my interviews show most actors are aware that the transformation is about valuing local businesses over big firms. They attribute many of the problems faced by the actors in the local economy to the banking system.

“The big banks have brought us austerity and the spread of very large companies brings inequality and often low-paid, repetitive work. [...] Banking and money should act to support people, not exploit them.”

BP Co-founder (OV01)

“The more at risk you are with the smaller loans [...] [the more] interest [you have] on the loan, that's why for small business is so hard of getting small loans from a bank.”

(BPT)

“The move towards globalization has meant that local communities are no longer empowered. And if you're looking for genuine social change the most important element of social change is how financial systems run. Currently the financial system that we have was created by the rich to work for the rich.”

(BI5)

This resonates with the opinions of local business owners. One of my interviewees emphasized how BPs stay in Bristol and don't go to offshore banks, and how they mistrusted that money leaving Bristol could

go anywhere and avoid taxes (BI1). Another interviewee said that their drive to support the BP comes from their personal interest in supporting the local economy against big business (BI3).

"It is like a common ethos around Bristol's independents, to want to be supporting other local businesses and local suppliers and organic produce."

(BI4)

"There is a strong growing group trying to get rid of corporate advertising in this city. This is part of the same struggle. As the growth of the Bristol Pound is, it is about having some kind of control over your city."

(BI5)

They also mentioned the BP is about "the journey of money" and supporting the local community, and not about giving discounts (BI1). Another interviewee reinforced this last point, saying that the BP resonates with their clients' personal values (BI2). These values relate to "seeing the bigger picture" and "becoming part of the solution" (BI1). According to a survey with the users of the currency, 53% use BPs because of their "dislike of current financial system and corporate power" (Appendix 1). I confirmed this when I talked to users of the currency who told me they believe "big business often have very poor sort of human rights" (UI3).

"[The Bristol Pound is] a move away from corporate, big, global business"

(UI3)

*"[The users] heard about bankers and they heard about the financial crisis and they want to do something about that because that makes them f*** angry. [...] I would say [that is the main reason for] the majority of people who are using it, and actually actively using it, coming to meetings and things."*

(BPT)

One business owner I interview showed a very holistic awareness of what the BP is facing:

"The Bristol Pound is an attempt to respond to the clear problems that conventional financial markets have offered because money is made up and money is a concept [...] the reason for financial

*collapse [...] was a mental f*** construct gone completely mad and nuts, which leads to enormous problems in the real world. There is a disconnect between the philosophical underpinning of our ideas and the effect on real, physical things. That is the problem.”*

(B15)

Although not often, sometimes users and business owners associate this transformation proposed by the BP with “sustainability”. One person told me that the BP is about “economy and sustainability” (U12), and a business owner affirmed that “most people using [the BP] have an interest in sustainability and environmental issues” (B13). The organizers of the scheme and one business owner articulate this point as well:

“[...] The BP is trying to [...] change the economic system in a way that [...] kind of, extends into the future without depleting the resources of the environment.”

(BPT)

The City Council also has an understanding that the BP is proposing a change that requires rethinking how resources are managed.

“[...] we need to have ways to use our own resources, both human and physical and socio-economic, effective at local scale.”

(BCC)

Some actors are also aware the transition effort requires being more inclusive. The BP organizers believe this is a problem that concerns the whole transition environment in Bristol:

“I would say that's probably similar for a lot of these green organizations that grew out of Green Capital partnership, because you go to these like green mingling events and again you see the same faces, it's all white middle-class people trying to do something good, but somehow failing at involving the real community. As long as it stays that way it is just kind of masquerading as, you know, it is a core group of people trying to do something good without actually really understanding the appetite of the city and what people want.”

(BPT)

Commitment — Does the transition experiment involve participants committed to carrying out the experiment?

Short answer: Somewhat. Many people involved seem to be completely committed, but the actual benefits of the scheme for businesses might be too low to guarantee further commitment.

The BP manages to engage committed actors in the scheme, from businesses that volunteer to become cash points (B15) to users that do their groceries solely with BPs (U13). Most people excited about the scheme proud themselves on using it since launch, and others are using it since their business started operating. One business owner told me that “the ones [clients] that use it, use it every time” and are interested in the idea of supporting local business (B13).

“We supported the Bristol Pound since the start. [...] I asked if we could be a cash point.”
(B15)

“We’ve been using it since it first started. [...] We use both TXT to pay and paper money.”
(U12)

“I believe in local economy, I believe in small businesses, and I am really passionate about seeing them stay open.”
(U14)

This reflects not only in the actors’ opinions, but also in their involvement with the LC scheme. One of my interviewees showed me their wallet, filled only with BPs, and affirmed that they take half their salary in BPs (U12).

“We received more than two hundred entries from professional designers, keen amateurs, and many school children”
BP’s Founding Director (DN25)

But this commitment is not shielded from the scheme's shortcomings. The BP organizers are afraid that business' commitment depends too much on perceiving a financial or marketing benefit from using the currency. One of my six refused attempts to interview a business owner might illustrate that:

"We receive requests [for interviews] all the time, but we're not interested, it is just such a small part of our income."

Business owner (failed interview attempt)

"Most of the business, I'd say, buy into the scheme because they see that it is famous and popular in the city, people recognize the brand, and they can see some projects, like apps and maps and directories that they will be listed into, it is free, so seemly they think it is win win [...] it puts them on a platform of people who care about green, local issues it enters them into a market where two thousand members want to spend locally."

"Certain business in particular, signing up and thinking of it as like of a project that they are buying into, like a service provider [...]"

"If you would, for example, say 'oh, it is now 50 pounds membership per year', I think a lot of business would be like 'well, I don't know'."

(BPT)

Expertise — Does the transition experiment involve participants who possess the necessary skills and knowledge to carry out the experiment?

Short answer: Yes. The participants have diverse backgrounds and positions, which can be useful to generate transformation.

The BP has six fixed members in its staff, covering the following positions: CEO, Finance Director, Head of Compliance, CTO, Finance Officer and Membership Manager (Bristol Pound, n.d.). Apart from that, the scheme also has a Board of Directors (Bristol Pound, n.d.). These people have different backgrounds and experiences and some of them have experience with other local currency schemes. Furthermore, the scheme involves people to spread the word out and represent the BP, which they call Currency Champions.

"I'm a mentor for Princes's Trust, which is a foundation that supports young businesses [...] and I became a currency champion."

(UI4)

One of the business owners is “an economist and a philosopher” (BI5). One of the users I interviewed was part of the sustainability team at the City Council, and the City Council participates in the Member Meet Ups (BCC).

Trust — Does the transition experiment involve participants who trust each other?

Short answer: Yes. Even though there are some grievances, there is enough trust to maintain the BP operating.

There is a lot of trust among the actors, specially emanating from the users. I heard that the BP helps create a connection with the people running the businesses and that business that accept BPs are part of a “sustainability group, instead of a bastard” (UI2). Some users said they believe the BP helps reduce environmental impacts because they think local business are more responsible with their supply chains (UI2, UI3, UI4).

“a lot of the local traders say they will source locally, they will be local makers, and actually I feel it is a really good thing.”

(UI3)

People also seem to believe in the organizers to make the scheme stronger and correct its shortcomings. The City Council believes the BP can generate changes in the city (BCC).

“I think it has to grow more, and I think it will do.”

(UI4)

“They are absolutely trying to tackle that [the lack of diversity among users of the scheme], and I participated in some round table research where they were trying [to come up with solutions].”

“One of the things they're trying to drive is so that the restaurants and cafes source locally, so it could really shift that kind of food growing and production, which is already big in Bristol, but it could mainstream that.”

“They have had to try and evolve without that funding, and they are doing well.”

(BCC)

"I know that they're thinking of ways of making it more modern and more accessible for younger people to use it."

(BI4)

However, at least one business owner does not think the City Council has the same transformational interests at heart, even considering the funding provided by the Council in the past. The City Council itself is not always positive about the scheme as well.

"I don't think it's been a wild success. [...] [I think it is] probably barely standing."

(BI2)

"Government doesn't like it [the BP]. Corporations don't like it. [...] [The City Council] regard it as a sideshow and pay it lip service. [...] Bristol's government is establishment, and it is corrupt, it's always been corrupt and remains corrupt, and it is not really interested into what the people think."

(BI5)

"They've got a bit of a kind of credibility gap, I think, to cross [due to the scheme's lack of demographic diversity]."

(BCC)

Even though there is some mistrust among actors, people are still involved with the scheme and the majority of opinions about it are positive. Apart from that one business (BI2), most people seem confident that the BP is there to stay. The scheme didn't lose strength after losing City Council funding, which seems to have sent a positive message regarding the soundness of the currency. Besides, the BP organizers themselves understand said to understand why they lost the funding.

"They have had to try and evolve without that funding, and they are doing well."

(BCC)

"We were happy to stop receiving funding from the Council, because austerity in this country is so bad and it is crippling local authorities [...] you have to prioritize in these dire times."

(BPT)

Support — Does the transition experiment secure sufficient support for the experimentation?

Short answer: Yes. The Bristol Pound could benefit from more funding so that it could develop new features and metrics to track its impacts, but the Bristol Pound CIC is a financially sound organization and has the support of the participants.

One of the most difficult tasks of transitions, and of LCs in specific, is maintaining a consistent stream of funding (BPT). This means that the scheme runs the risk of not being able to operate if appropriate funding is not secured. As put by the organizers:

“There's a lot of risk involved. You know, the public turning against us [...] let's say, the Council coming out and saying they're not funding us anymore, what if business suddenly say ‘that sounds like they are not very sustainable and I don't really wanna have my money involved in that project, I'm gonna pull out’. There's an enormous amount of risk that mean we could just go down.”

(BPT)

It also means that improvements to the BP platform are hard to develop and the scheme might have to pass its maintenance cost to users. This creates sort of a negative feedback loop, as the features they can't pursue prevent them from providing data that would guarantee funding streams, and new fees need to be charged that might further reduce engagement.

“[lack of proper impact-measurement mechanisms] concerns to us being, you know, underfunded, and not having enough staff in the office to sit down and really crunch the numbers [...] you actually need like a data expert to find out [some of the metrics]. These people are expensive, and we can't afford that.”

“if it's gonna survive, then they probably do need to start charging membership fees.”

(BPT)

“The Council did support the BP originally and actually put money into it. The economic development team saw the value of it, and for a number of years [...] they gave them free property, free office space in the center, and also put money in to match European funding. With the cuts in the public sector, decision was taken not to keep subsidizing it and there was a kind of debate [...] how do we articulate the value of public money going into support of the BP?”

(BCC)

Also, the internal strength of the innovation is jeopardized when funding is compromised.

“It is difficult for every local currency to sustain itself as well as an organization [...] And that comes with all kinds of internal issues [...] if you haven't got funding in the past six months, how can you maintain your staff, for example? If everybody in your office knows that in eight months time you may not have any money left, how do you make sure that people carry on working for the project?”

(BPT)

The organizers understand that supporting the stakeholders is necessary to keep the scheme growing.

“it is not their [businesses involved in the scheme] priority right now [to find new, local suppliers], and without quite a huge amount of support from us, it won't be.”

(BPT)

Regardless, a new app to use the BP was recently released and the organizers have plan to set up a new feature that could further integrate businesses using the currency (BPT). Furthermore, a recent Director's Report of the Bristol Pound CIC presented what looks like a financially sound company (Bristol Pound CIC, 2015). So, although funding seems to be a concern for the improvement and continuation of the scheme, the organization behind the BP seems to have enough financial and non-financial support for now.

Processes — How was it completed?

Sequence of Actions — Is the transition experiment structured into a meaningful sequence of actions?

Short answer: Yes. The Bristol Pound made strategic decisions in the beginning that guaranteed its growth and stability.

The BP was able to grow, attract international attention and become sort of a “role model” for LC schemes because it followed a specific strategy in the beginning. The first challenges were conquering public confidence, achieving scale, and recruiting traders (OD04), which the organizers overcame by guaranteeing Council support from the start (with the City Council offering staff the option to receive their salaries in BPs) and establishing a partnership with Bristol's Credit Union (DN07). A feature that was essential to the success of the scheme was online banking, only possible due to this partnership with the

Credit Union (DN07). The currency has been pegged to the Sterling since the beginning as well, which helped create faith in the scheme (DN25).

Furthermore, engaging the city with the design competition was important to draw people's attention (OD04) and in the beginning there was a financial incentive to get people to open accounts (for every £100 exchanged for BPs, people would receive an extra £B5) (DN12). Technical partnerships with other firms in Europe were also important (DN25), and the scheme also managed to receive a lot of media attention during its launch.

"The practical vision was to get something which would connect local communities with their businesses in a way which kept money building up in their local communities [...] I was looking for a technological and cultural innovation which allows people to conduct themselves in a way which is more sustainable."

Co-founder (DN25)

"Russian TV, even people from China, I talked to people from the BBC."

(BI1)

The project had different funding streams prior to its launch, which enabled them to implement the above-mentioned strategies and also to create a partner organization that would tackle another sustainability problem (lack of affordable and accessible good quality produce in certain areas of the city).

"The Bristol Pound kind of came about with a lot of funding from the Green Capital partnership [...] that was 2010."

"The Bristol Pound made a sort of sister organization in the early days called the Real Economy [...] designed to focus on parts of city where there are what you'd call 'food deserts'."

(BPT)

But not all the decisions made in the beginning were aligned with the transformation the BP wants to promote.

“In the beginning, it was more about getting the BP to scale. [...] A good example of that is maybe First Bus [the main bus service provider in Bristol], who are kind of a controversial member. It was decided in the early days to have it on the buses for loads of reasons, you know, it is transport, everybody can spend it, poor people take the bus [...] and it means that the BP will be extended out into all parts of the city. [...] They putting on adverts on the city was hugely beneficial to us. [...] Maybe that's some of the reason that the Bristol Pound has been seen globally as this massive success, because [in the beginning] we just said 'get them in, make it big'.”

“The foundation is out there now, and maybe that was the right way to do it, maybe it was just, go out there, make it big, make sure people know who we are and what we do and then start putting the pressure that they need to actually do something with it.”

(BPT)

Sound Methodology — Does the transition experiment adopt a sound methodology to conduct the experiment?

Short answer: Somewhat. Although the LC scheme has many clear rules for membership, there are no clear, specific mechanisms to guarantee the scheme will deliver “a fairer and greener economy that improves community life” (Bristol Pound CIC, 2015).

The functioning of the scheme is clearly defined: businesses need to circulate more than £1000 per month to be eligible, as well as create local jobs, provide a useful service, be mostly owned by people living in Bristol and recognize that a strong local economy is important (OD01). Users also need to reside within a designated area to open an account (OD01). Paper notes cannot be exchanged back to Sterling by users, only by businesses (OD01). Paper notes sold as souvenirs (out of the trading area) also can't be exchanged back (OD01). Furthermore, mechanisms exist to strive for a self-sufficiency of the currency itself.

“Transaction fees are charged to the recipient of electronic Bristol Pound payments. The transactions fees paid by the recipient are:

2% of transaction amount for TXT2PAY payments (minimum fee 10p)

1 % of transaction amount for online payments (capped at maximum 95p)”

(OW01)

However, the scheme has not always followed a method that guarantees it is promoting the change it claims to promote. This is understandable, given the complexities of social innovations — as put by Frantzeskaki, Loorbach and Meadowcroft (2012), “there is an inherent tension between the aspiration for long-term, radical, but quite-uncertain change, on the one hand, and practical and short-term needs for specificity, compromise and small steps, on the other” (p. 20).

“There was no agreement drawn up to say that they [First Bus] have to spend the BPs, so they're getting all of the benefit of being seen as a green company that is doing cool things and supporting the local economy, but actually behind the scenes they're not being pushed to spend it out. I personally think that was a mistake. [...] [in the beginning] we just said 'get them in, make it big'. And now it is time to rethink that, I think.”

(BPT)

A method on how to move forward is also not internally defined among organizers, even though the City Council seems to have an opinion on that.

“I think that the BP [...] [should adopt a structure where] the members themselves feel empowered to take the currency in whichever way they want and make big decisions about who can accept it and where it should be [...]”

“I feel that we're in a bit of a fork on the road [...] you've got like the tech side and the community side, and actually those two things don't always gel together very well, because people with the skills to make these things happen are probably gonna have completely different skill sets. But they're both absolutely essential to make it work.”

(BPT)

“it is not that easy to sign up to and it would have to be incentivized, you know, discounts, rewards for using it, so I think it needs to be a little bit smarter and access the kind of mainstreams. If you think of your innovation [...], the adapters were on board, but the rest were like ‘why would we do that’ and that [getting more people on board] could be the tipping point I think for the city.”

(BCC)

Collaboration — Does the transition experiment facilitate collaboration among relevant stakeholders in the experimentation process?

Short answer: Somewhat. Some stakeholders are involved, but the scheme needs to engage more with disadvantaged communities. Furthermore, the transition could also benefit from further activism from businesses.

The transition has initiatives to engage members in its decision-making process, and members also have voluntarily engaged in marketing efforts (DN30).

“I set up kind of a regular member meeting, so once a month we get the members together and, over time, [I] switched up the format a little bit a try to make them less formal.”

“My personal feeling is that we need to create that community first and that's a really long process and we're in the middle of that.”

(BPT)

“We used their designs and made them into mugs [...] We produce, we sold, and they sold on their website.”

(BI5)

Local businesses are involved in improving the features of the scheme as well — by consequence, the BP gets involved with other transitions and game-changing developments, such as the open source trend.

“As a personal user of The Bristol pound, I have always endorsed the concept but I could see how the existing technology presented users with unnecessary hurdles and would prevent the currency from reaching its full potential [...] Scott Logic specializes in providing bespoke software applications for the financial sector so creating an app such as this was second nature to us and allowed us to use our expertise whilst trialling some cutting edge, open source technology.”

(DN15)

However, there is a lack of training so that employees know how to proceed with BP accounting (BI3), or even how to incentivize clients to start using the currency (BPT).

"We need to paint a different narrative where they're signing up to a community currency, and that means that they will get out what they put in. [...] [The Bristol Pound] is a tiny drop in the ocean in Bristol's economy and you [as a business accepting BPs] need to make it happen as much as we need to make it happen. [...] We have to shift to that, and that's why I'm talking about community [engagement as being a crucial focus for the BPs future]."

(BPT)

Even though instructions for setting everything up seem to be very clear on their website (Bristol Pound, n.d.), not everybody thinks the process is easy. One interviewee told me that making the BP work was "kind of a hassle" (BI2), and the City Council mentioned "local businesses might see it as just a bit of a headache, just too complicated" (BCC). The Council has no plans to work directly with the BP (BCC), even though the scheme is mentioned as part of its Resilience Strategy (Bristol City Council, 2017). In addition to that, the BP is having difficulties to engage all stakeholders of the local economy, especially people in disadvantaged positions (BPT, OD04). The organizers see it as a problem that is shared by many sustainability transition experiments.

"Us as an organization, but also the whole sustainability movement hasn't done enough to incorporate all of those people into the movement. [...] unfortunately, but not for lack of trying have we failed to engage with the demographics in the city. So, you know, minority, ethnic communities, or people on lower pay skills, because I think what we're doing is recruiting independent businesses who naturally [have higher prices]. [...] Naturally our membership is gonna be made up of people who can afford to pay a bit more for something that's, a product that's more ethical. That is just a logistical problem that we have. But I wouldn't say that we haven't tried to reach to the communities."

"That sort of feels like it's outside of our control."

(BPT)

"[some people are like] 'don't be stupid, none of the shops I shop in will take the BP. It is alright for you rich people to go 'oh, I'm gonna get paid in Bristol Pounds and just buy everything at the farmers market', well, I shop in Lidl, and they don't take Bristol Pounds.' [So there is] a socio-economic divide I think in terms of who is using it at the moment. [...] many people that picked it up that are the people that can afford to use the novelty of the Bristol Pound."

(BCC)

Reflexivity and Learning — Does the transition experiment foster reflexivity and learning throughout the process?

Short answer: Yes. The nature of transitions prevents the insights gained to be readily implemented, but the experiment does have venues for incentivizing reflexivity and learning.

New features, such as the BP App (DN15), represent a focus in making the scheme more effective, as well as the recent update to their website and to the directory (which lists all businesses involved, by categories). Member surveys also provide the scheme with valuable information as to what would lead to more engagement. These are examples of first order learning (changes in processes to become more productive). My interviews revealed that the scheme also inspires this sort of reflexivity among its participants:

“I think [...] working on the supply chain side is really important, how can they drive down the cost of being a trader in the city. Can they get better deals? Can they get affordable?”

(BCC)

“I think that having like an app is the way to getting [young] people [to use the scheme], or having an actual card.”

(BI5)

As already explained, my talk with the organizers also reveals they are concerned with the direction the scheme should go. Regular member meet-ups, new year meetings to decide future steps (DN29) and an online forum guarantee interaction among members and fosters the exchange of ideas regarding the scheme (BPT). The organizers are clearly looking into how to get the currency to work for disadvantaged people and thinking of new ideas on how to provide businesses with better credit mechanisms than banks (BPT). This relates to second order learning (processes development and reinterpretation of the transition effort).

Transparency — Does the transition experiment ensure transparency throughout the process?

Short answer: Yes. The experiment organizers inform participants of their current activities on a regular basis and ensure openly state their intentions.

The member meet-ups are readily reported on the Bristol Pound Blog, as well as any changes in how the platforms supporting the scheme work. On their website it is possible to find all the terms and conditions related to the scheme, as well as contact details, both e-mails and telephone numbers (Bristol Pound, n.d.). Their social media accounts (Facebook and Twitter) update users on any technical issues with the features, such as when text-to-pay is temporarily not working. If you sign up to the scheme's e-mail newsletter, you can receive constant updates on what the organizers have been working on and when new members join or leave their team. It would be interesting to see financial statements of the Bristol Pound CIC available on the BP website, if possible, but it is possible to find them on the Companies House website (a governmental registry of company information).