



Contesting Consumerism with a Circular Economy?

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Received: 22 November 2021 / Accepted: 24 September 2022
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Abstract

The circular economy (CE) concept has recently entered the public discourse. A CE should contest the reproduction of a so-called linear economy. However, it is largely promoted as a normative top-down fix for business models and waste management. A branch of CE research calls for critical revisions of the concept to support the integration of social aspects. A related shortcoming is the lack of definition of the change that CE can bring about. Two research questions guide the work presented in this article: (1) What should be included in a socio-cultural and institutional framing to study CE? (2) What could leverage an alternative CE? We address the first question by proposing practice-driven institutionalism as a relevant perspective, focusing on studying consumption practices — practical engagements and alternative logics. We further apply a practice-driven institutional framework to an empirical study of cases from sources in a city in Norway, where consumption and production practices are highly embedded in consumerism. For the second question, we describe consumerism and its institutional dimension as the backdrop against which practical engagements are negotiated. Finally, we identify aspects of alternative logics bundled with these practical engagements. In conclusion, the article proposes a practice-driven institutional approach to socio-culturally frame CE and to identify grammars of practice that can leverage change that does not rehearse consumerism. In the specific case of our study, we highlight contextualizing use-value through social relations as a critical part of an alternative CE.

Keywords Circular economy · Practice-driven institutionalism · Consumption · Alternatives · Consumerism

Introduction

The circular economy (CE) concept has recently entered the public discourse. Most CE proponents engage normatively in structural change at the macro-level of society — for example, in Europe through an action plan as part of the European Green Deal [1].

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However, approaching change top-down from institutions disregards complex micro-level dynamics (c.f., [2]). Although CE is an expected transition prescribed as part of public policies and environmental responsibility programs of private companies and non-profit organizations [3, 4], previous literature from social sciences posits that a CE could be “a recalibration of our socio-material lives” [5, p.173]. In its discourse, a CE can serve diverse narratives [6] with space for contestations and controversies [7]. In this article, we take a substantive perspective of the economy (c.f., [8]) to elucidate contestation from the micro-level.

Public discussion about CE has mainly taken an eco-modernist narrative [9] based on promises to strengthen business opportunities [10] through technologies and waste management strategies — enabled through policymaking. These promises are logical expectations within current production and consumption institutions. In these institutions, capitalistic principles of market competition and accumulation signal the potential of waste as a valuable source [11] without questioning the social arrangement that leads to high consumption of resources and waste creation [12] — which could cause more harm than benefits [13, 14]. In this sense, following formal economic objectives would quarrel with the substantive functions of the economy (i.e., the reasons to use materials).

The need for a socio-cultural framing to research CE is at the center of the agenda proposed by Hobson [5, 15, 16]. Such a socio-cultural framing should comprise methods and knowledge to uncover what, how, and why materials are consumed. This agenda is part of an emerging branch of critical CE research. It expands the concept of CE beyond market-based techno-fixes, in the words of Hobson [16, p.112]: “so that our collective ability to participate in called-for transformations is not limited to just the shopping mall or the recycling bin.” Research that critiques limitations of the current implementation of CE complements research that seeks to include social aspects into CE (e.g., [17]) and shares an awareness about the need to consider which type of society a CE requires [18, 19]. Critical research on CE intends to answer some of the concept’s shortcomings and, at the same time, refocus or rethink the goals for CE implementation — for example, looking at temporality, space, and material flows of practices [20] and consumption work [21]. Thus, it calls for an approach to study CE that integrates the micro-level and contextualizes people’s agency in negotiation with the macro or more structural aspects.

A particular shortcoming is the lack of definition of what kind of change a CE brings about. This shortcoming concerns the goals and priorities beyond the incumbent institutions following a formalist economic model. In this regard, Anantharaman [22] argued that CE can only be an ecological and equity win-win if it does not emphasize growth and profit. For this author [22], resistance against hegemonic expertise could be integrated into CE to avoid appropriation or displacement of what people already do — the everyday CEs. Wuyts and Marin [23] also questioned the reliance on particular technical knowledge that “nobodys” CE actors whose aims are incompatible with CE’s mainstream business setup. These “nobodys” are invisible in the core of CE “because the nature of their work is small-scale and they operate in a landscape (city, region) where more technocentric discourse dominates the funding and marketing of CE transitions” [23, p.3]. Furthermore, these everyday circularity experiences may offer access points for alternative institutional forms and means.

Mainstream CE — discourse — sideline consumption or demand-side interventions. According to Isenhour [24, p.28], “[CE] is highly consistent with the technocratic and market-based solutions that have characterised sustainability efforts to date.” Moreover, Welch et al. [25, p.50] argued that a CE presupposes a new consumption model “that embraces... novel norms of consumption and emotional and motivational engagements in

consumption.” In line with these arguments, CE is a spectrum of opportunities for change in institutions and practices (further explained in “[Making Sense of a CE](#)”).

Two research questions guide the work presented here: (1) What should be included in a socio-cultural and institutional framing to study CE? (2) What could leverage an alternative CE? For the first question, this article considers a practice-driven institutional framing (“[Making Sense of a CE](#)”) and a theoretical discussion about consumerism and its logic (“[The Logic of Consumerism](#)”). For the second question, the article studies cases of alternative practical engagements (“[Practical Engagements](#)”) to elucidate the potential for a CE that considers aspects bundled in practices that engage actively with the logics of consumerism (“[Discussion](#)”). Finally, the prospect of alternative logics is discussed as an opportunity to drive institutional change (“[Conclusion](#)”). The following section presents our approach to the socio-cultural framing of a CE.

Making Sense of a CE

A CE considers the interactions between economic activity and ecosystems to reduce or eliminate environmental degradation. In 1990, Pearce and Turner [26] offered one of the first formalizations of the concept. In their definition [26], the environment provides two main functions: (1) a source of resources and (2) a sink for waste — economic activity is situated in the interim between resource extraction and waste sinking. Based on this definition, these authors propose an economy that is a closed-loop system through recycling and renewable resources, avoiding new resource extraction and waste sinking but requiring more energy to transform materials.

More recent definitions of CE make it compatible with a slow economy. These definitions integrate repairing [27], the sharing economy [28], consumption reduction as proposed in de-growth [29], sufficiency [30], and political systems of provision for urban transformation [31]. This integration of CE is often captured in definitions and applications of CE in catalogues of so-called R-strategies, which organize the use of materials according to cycles or loops of consumption based on a waste management hierarchy formulated as principles of reducing, reusing, and recycling [32]. R-strategies that do not destroy the properties of materials are of particular importance to a slow economy, as these extend the lifespan of products while avoiding the tradeoffs of recycling and recovery.

Operationalizing CE

We operationalize the expansion of CE from a closed-loop system to lists of R-strategies under three conceptual assumptions. First, there is not only one CE but multiple alternatives resulting from different political-economic resource use and distribution arrangements, requiring different logics, practices, and institutions [7, 24]. Possible CEs have been identified and classified in alternative discourses [18], governance or technological alternatives [19], or even imaginaries about everyday life and consumption [25] — each alternative is based on different uses of technology, resource distribution, and social arrangements. As Morseletto [32] notes, the targets for a CE depend on R-strategies, but some strategies avoid the need for intensive implementation of others. For example, the higher recycling and recovery targets become obsolete by refusing to have new products or functions. We understand this as the need to first focus on reducing the sources of waste before dealing with waste as a technological problem.

Second, a CE is supposed to organize the material throughput of societies within the constraints of the load and regeneration capacities of environmental systems — what some have called an integration to a safe space of planetary boundaries (c.f., [33–35]). Furthermore, a CE is based on achieving circularity, which requires keeping extracted resources in use for extended periods while preventing their leakage as waste. However, the means to reach circularity is what differentiates each alternative CE (the selected R-strategies and targets). Zotti and Bigano [36] have pointed to a distinction between circularity and strategies to achieve it. Circularity is a goal, but approaching it depends on what is prioritized. For example, from a neoclassical economics perspective, it is seen as a tool for decoupling resource use from economic growth [37] through technological means — not affecting consumption levels and avoiding demand-side interventions, which are included in alternative approaches [9, 20, 38]. We translate this into two modes of organizing the material throughput. In the first one, providing technological innovations is expected to make it easier to deal with waste without requiring changes in consumption. In the second mode, changes in consumption are deemed necessary to reduce the need for technological innovations.

Third, the concept of a CE emerges in parallel and opposition to the concept of a linear economy (LE). Any CE is, first and foremost, an alternative to a LE. Although the LE is simplified as a logic of “take-make-use-dispose” that remains from industrial societies, its foundation in a social arrangement is seldom discussed by CE proponents. An earlier inspiration for CE, by Boulding [39], acknowledged a social structure by referring to it as the “cowboy economy,” but its logics are not framed. In this social arrangement, production and consumption are entwined with the formalist economic imperative of growth; as Jackson [40] describes, the focus on economic growth also drives growth in material usage. Notwithstanding, economic growth — measured as growth in the gross domestic product of countries — has been the core of policies in most of the world in the last century. It has led to both an increase in living standards and overall material consumption, in most cases without considering the bio-physical limits of the planet [40].

This article takes a practice-driven institutional perspective (PDI, hereafter) on change [41–43]. From this perspective, a CE that is driven by institutional forms, norms, and values that thrive in the LE cannot produce the required socio-cultural change. In extension, the logics for a new societal arrangement — and institutional forms — could be met by looking at the logics in practices at the fringe of the mainstream CE discourse.

Practice-driven Institutionalism as a Socio-cultural Framing

We propose a PDI perspective, which borrows characteristics from practice theory [42], for example, a flat ontology that connects the macro and the micro by assuming that institutions are bundles of practices with intrinsic and extrinsic connections to other practices (i.e., larger ontologies). Levels of organization in institutional theory, as individual, organizational, or societal, are considered helpful when analyzing practice bundles but not as a model of reality [41]. At the same time, the origin of institutional change is tracked down to practice change. Thus, it is necessary to look further at social practice theory.

Social practice theory models intend to bridge social structure and individual agency theories by recognizing learning modes and bodily dispositions through which social practices are inculcated (see [44]) — as a cultural theory based on bodily and mental routines [45]. Practice theory can be modeled to explain practice change from the interactions of meanings, competences, and materials (e.g., [46–48]). According to Shove et al. [49],

practices have to be analyzed as a duality. First, practices are entities with specific socially shared routines involving materials, meaning, and competences. Second, practices are performances carried out by people and materials while negotiating mental and physical dispositions. The study of practices as entities and performances facilitates the identification of competing links and elements for recruiting participants to alternative practices.

In Shove et al.'s [49] model, practices are connected in bundles or complexes that organize time and space. Practices are carried within the limits of, at the intersection of, or instead of other practices (including alternatives). Shove et al. [49, p.135] noted that “the emergence, persistence, and disappearance of practices (guided and structured by dominant projects) generates highly uneven landscapes of opportunity and vastly unequal patterns of access.” Similarly, Bourdieu's [50] concept of habitus explains how practices are produced and reproduced within a determined set of conditions that make possible the production of only some thoughts, perceptions, and actions. From a PDI perspective [41], the institutional logics pose an understanding that frames the possibilities for experimentation and improvisation in alternative practical engagements.

PDI [41] presents a framing based on logics. It assumes that logics are a foundational component of both practices and institutions and that they change through practical engagements. Smets et al. [41] propose looking at bundles of practices using grammar as a metaphor, where practices are like sentences, activities as words, and bundles are paragraphs or whole texts. To Smets et al. [41], the grammar of practices is related to what institutionalists refer to as logics, and what Schatzki [51] and other practice theorists [52] call “practical,” “general,” “shared” understanding, or “organization rules.” These are as “ideational elements common to multiple practices” [52, p.184]. For example, it is possible to perform cooking activities inside a toilet. Still, it breaks the grammar of the practice of cooking, making it shocking or unintelligible for others — unless it becomes the norm. An example of grammar breaking is presented by the study of Debnath et al. [53], where qualitative changes in housing (rehabilitation) drive changes in the acquisition of electric appliances and increase electricity consumption.

The extent of the changes that a CE could bring about cannot be understood by focusing only on the material aspects — in loops or efficiencies [5, 54, 55]. Furthermore, a CE requires knowledge and intervention to target what people want and think they can do as part of their everyday lives [16, 56]. The logics necessary to carry out practices in the consumerist social arrangement [12] will influence any given CE. Material circularity could ensure that resources are used within a safe space or closed system. However, the influence of a more extensive politico-economic logic could result in similar forms of environmental and social harm as in the LE [13]. For example, shared micro-mobility services with small electric vehicles (e-scooters) follow a different logic than walking or using a car. These practices are normalized through infrastructure made available in cities and individual mobile devices. These vehicles replace other forms of transport such as non-electric bikes, mass public transportation, or walking while increasing energy use and the replacement rate of e-scooters, sometimes without reducing the use of individually owned cars [57].

Circular Economy in Practice and Institutional Change

As a top-down transition, CE aims at change within the current institutions without replacing said institutions. Anantharaman [22] mentioned that the institutionalized CE discourses make little room for conflict between groups and competing interests. Similarly, Völker et al. [58] pointed to CE as a moral narrative for a future that is not concrete but desired

and expressed in the formulation of indicators. Accordingly, it is necessary to look at CE from a non-normative perspective based on its practical implications, recognizing that current logics and institutions will condition any CE. For example, Casson and Welch [59] argued that some forms of material consumption that could be deemed “circular” existed in the past and were legitimated under logics corresponding to class and distinction, not under ecological imperatives.

Then, why is it necessary to look at practical engagements to study the change in a CE? The LE can be taken as a group of ideas that helps people make sense of their participation in specific modes of production and consumption [60], with grammar for practical engagements that are negotiated against institutional logics. Mainstream versions of CE originate in waste and resource management [61] and are translated into a sustainability program oriented by the logics of market and business organizations [30, 62]. But there is space for reclaiming the concept [22, 23, 63] from alternative logics.

Logics connect practices and institutions as representative concepts of micro and macro-level societal foci, where logics are required to perform practices and sustain institutions (c.f. [41]). Within the LE, the link between production and consumption is determined by the dominant logic of market and mass consumption — consumerism [12]. Furthermore, CE can be assimilated to and conditioned by this prevailing logic. In response, the articulation of alternatives within CE discourse is addressed in previous literature (e.g., [6, 9, 18–20, 22, 37, 60, 63–65]). These include contentions about the narratives and worldviews that a CE serves [6, 37], the need to resist techno-fixations [9, 64], and the incorporation of bottom-up approaches [22, 23, 63, 65]. Holmes et al. [20, p.71] argued that for a consumer discourse on CE to be successful, it must recognize “labour and skills involved-labour which often blurs the boundaries of production and consumption.” Said boundaries remain blurred in modes of CE that focus on providing services that move people from consumers to users of servitization and platforms, an argument raised by Hobson [15]. Although services provide alternative modes of acquiring products, these do not address why, what, and how people consume and could instead rehearse the norms of the LE. From our perspective, the study of alternative logics recognizes people as doers and not just users of a CE [60].

Case Studies of Alternative Logics in Norway

We apply PDI as a socio-cultural framing to research CE by taking consumption as the locus of study. A PDI change perspective is a recent development in social research. From this perspective, institutional change is explained as a result of change in practical engagements [41]. Therefore, we focus on cases of practical engagements that do not rehearse the LE.

This study is a short-term ethnography [66] with a purposive sample of cases of practices of repair and reuse — as part of R-strategies that do not destroy the properties of materials. The sampling included “niche” practices carried on by individuals without profit goals, that negotiate, improvise, or adapt in relation to the grammar of consumerism. The sample emphasizes alternative consumption practices as an opportunity to gain insights into new grammar for consumption. The opportunities for an alternative CE come from the degree of legitimization that the practical engagements make of the institutional logics of consumerism.

The qualitative fieldwork was conducted in Trondheim, a city and municipality in Central Norway. This fieldwork was conducted between August 2020 and April 2021. Trondheim's population presents characteristics of affluence [67] — for example, high disposable income per capita. Norway has a high-income population, occupying position five in disposable income per capita among the 38 OECD [68] countries and a high volume of material consumption per capita — nine in a list of 164 countries [69]. This means that most people in Norway — including Trondheim — can fulfill their material, financial and social needs — as is shown in data by Statistics Norway [70]. Moreover, the population of Trondheim is both highly educated and also removed from production labor — around 85% of the inhabitants work in the service economy, and 46% have completed 3 or more years of university education [71]. The affluence in Trondheim also means that most consumption practices and everyday life are highly embedded in the consumerist grammar shaping the LE. Our interest is to identify and construct aspects bundled with practical engagements, pointing to alternative logics of consumption negotiated within consumerist institutional logics.

A previous study [72] gave the authors an in-depth understanding of private and public actors engaged in CE in Trondheim — where consumption reduction in support of CE is featured against the dominance of the techno-business in discourse. Consumption reduction requires a grammar of practice and logic different from the ones rehearsed in consumerism.

The research method followed four steps:

1. Immersion in the local context. In addition to the previous study [72], the first author did exploratory fieldwork by monitoring events and social media of organizations and activities related to climate change, waste reduction, and circular economy. The exploratory fieldwork was unstructured and conducted from August 2020 to October 2020, mainly aimed at identifying and recruiting sample cases (see Appendix 1.A).
2. Data collection through interviews, and observations. After identifying a range of practical engagements in the city, the researchers contacted the carriers of the identified practices to do observations and interviews. Most of the collected data came from interviews, while some came from observations (see Appendix 1). The participants in interviews and observations were contacted through digital means (viz., e-mail, Facebook pages).
3. Primary data sources. Interview transcriptions (9) and memos from observations (8), and social media monitoring (4) were the main data sources.
4. Data analysis. Analysis was inspired by constructivist grounded theory [73] and informed by previous research and literature, particularly the selection of themes presented in “[Practical Engagements](#)”. The data analysis followed these steps:
 - a The cases were grouped concerning the similarity of the practice.
 - b The logics of each practice were interpreted as part of a practical engagement (a grammar of practice).
 - c The logics in each group were analyzed as a negotiation of practice –against the backdrop of consumerism.

The results of the study are presented in “[Practical Engagements](#)”. First, “[The Logic of Consumerism](#)” builds on consumerism as the backdrop to the practical engagements in the sample.

The Logic of Consumerism

Bauman [12] distinguished between consumption and consumerism. For this author, consumption is ahistorical and necessary to support human life. Unlike it, consumerism is a historical social arrangement, making sense only in capitalist industrial and post-industrial societies based on market freedom. In consumerism, excess is an attribute of society, where a constant increment in volume and intensity of desires prompts a speedy replacement of objects. Bauman [12] argued: "... the advent of consumerism augurs the era of 'inbuilt obsolescence of goods offered on the market and signals a spectacular rise in the waste-disposal industry..." [12, p.31].

Bauman's [12] contention is that consumerism is an economy of excess, waste, and deception, supported by ideas of market freedom — with people as consumers free from the self and free from others based on choice. Furthermore, according to the author, care — or caring for others — is a counterpoint to these freedoms, and because of it, it does not feature in consumerist utopias.

In a critique of the consumer society, Baudrillard [74] conceived consumption as a system of signs that shapes individuals and group relations — in other words, as the site of social struggle. In this critique [74], consumption is a system that creates distance from the reality of production. Products appear like magic for those who cannot control the means of consumption and production. From Baudrillard's [74] perspective, consumption substitutes subsistence needs while atomizing, disorganizing, and alienating individuals. In this way, linearity results from production and consumption as one process of reproduction and control of the productive forces [74].

The evident nature of certain forms of consumption in visible signs [74] led to consumption studies of conspicuous activities, such as subcultures, identity, and self-expression in style. However, not all consumption practices are visible; most consumption is inconspicuous and embedded in practice performance [75]. These two modes of studying consumption can be exemplified, for example, in a person's public appearance vs. what a person does to attain that appearance. The logic dividing consumption — into seen or unseen — is also present in what is considered part of the economy (and not). Toffler [76] had a similar argument about a dominant (visible) economy comprising all production of goods and services for sale or swap through markets and a passive (invisible) consisting of all production for self, familiar, or community consumption.

According to Warde [75], consumption of materials has specific moments of acquisition, appropriation, and appreciation, later complemented by Evans [77] with devaluation, divestment, and disposal. In a LE, these six moments are not cyclical. Moreover, the logics of consumerism described by Bauman [12] and Baudrillard [74] mediate those six moments and play an essential role in the un-cyclability of materials through the influence of consumers [78].

The Institutional Dimension of Consumerism

In the LE, convenience and commodification frame practical engagements. While some people can participate in production, for most consumers, products appear like magic [74]. This is particularly evident because some countries have become production centers, while others do most of the consumption [79, 80]. The material setups for global commercial activity systematically hide the resources' origin. Similarly, as it occurs with electricity

demand, as Shove and Walker [81] argued, demand serves to justify more production. Under this conditioning, “supply creates its own demand,” making consumption a function of production (see [82]).

Many economic metaphors of consumption [83] put people as agents with desires that can be satisfied by rational decisions. Ecological imperatives for preserving resources collide with notions about freedom of choice. Princen [84] raised this point in his proposal about sufficiency based on the self-organization of individuals. However, the institutions supported by consumerism have little to do with organization, freedom, sufficiency, or efficiency and more with monetary transactions and individual satisfaction. Money is part of the things people must obtain to participate in the social world. The competence for buying truncates the competences in dealing with material transformation. Thus, competences for product and service acquisition — buying and selling — become the imperative logic for social participation [85].

The relation between consumption and monetary exchange can be partly explained by what Callon [86] called the agencement model of markets. It is a substantivist model focusing on the practices performed to sell things, not the quantitative balance of offer and demand — the interface model in formalist economics. However, this is not the only way to organize, share, and distribute resources — a point Gibson-Graham [87] made in their framework for alternative economies, including non-market, unpaid, and non-capitalist forms of exchange. Moreover, it recognizes that not every exchange is monetary: e.g., family relations follow at least partly a moral economy. By understanding that monetary transactions are not the only way to structure an economy, consumption can be formulated as more than buying services or products.

The appreciation of materials as resources in everyday life is also a necessity against consumerism. Wieser [88] mentioned that planned obsolescence is an aspect of production that CE may not resolve by focusing only on product longevity through design. Obsolescence is a core aspect of today’s business models, encompassing functional and symbolic obsolescence. For example, Vonk [89] noted how an electronics company uses a CE narrative to obscure their practices for planned high rates of product replacement — introducing circular elements in production while simultaneously presenting the newest version of a gadget as a must-have.

Alternatives to Consumerism for an Alternative CE

Regarding the study of an alternative logic for a CE, it is essential to mention the call by Evans [77] that consumption (studies) should take critical stances on the excesses of consumerism. Evans [77] proposes moving from a proxy on decisions and behaviors as a consumer responsibility when buying things to the critique of overconsumption and its reasons — institutions and practices. The contentions in this critique have previously been raised by the likes of Max-Neef [90] when criticizing development discourses as an economic model that increases the spectrum of available artifacts without satisfying needs. Greene [91] has also noted the importance of contextually situating consumption in particular biographic and socio-technical settings.

Forms of circularity performed at the fringes of consumerism are the basis for what we call alternative consumption. Alternative consumption is a contestation to consumerism in its practices and institutions. Here, we are particularly interested in incompatibilities with consumerism (Table 1). The following section presents the results of our empirical study.

Table 1 Characteristics and institutional logics of consumerism

Consumerism characteristics	Institutional logics of consumerism	Institution examples
Material excess	Obsolescence	Fast fashion industry
Hidden production and waste	Division of production and consumption	Global value chains
Class distinction	Conspicuous consumption	Branding and advertisement industry
Market agencement	Growth of financial transactions (economic growth)	Gross domestic product measurement
Individual (atomization)	Freedom of choice	Consumer responsibility schemes
Renewal of desires	Techno-science innovation	Smart devices

Practical Engagements

A general description of the cases for the study is provided in Table 2 with a categorization of the cases. All participants and specific initiatives or social media groups are anonymized. This sample of practical engagements considered competences in acquisition alternative to the competence of buying and the no-profit goals intended by the carriers as a distinction from the logics of consumerism. The following subsections present themes interpreted as logics for alternative consumption.

Clubs for Repair

This category includes three cases: (1) An online club for clothes repair. (2) An organization sharing tools and knowledge about bike repair. (3) An organization promoting local and traditional hand-craft techniques. Their common attribute is knowledge sharing in a group with no other bonds than an interest in the practice. The people initiating these clubs take a role similar to entrepreneurs in traditional institutionalism (c.f., [92]). However, from a PDI perspective, their role emerges from their practical engagements.

For instance, the initiator of the online clothes repair club took the initiative by observing a lack of others with similar interests and skills for clothes repair in her community. First, however, the kind of organization is negotiated as a viable small business. Furthermore, the kind of organization is related to the professional background of the initiator person (in marketing) and a recognition of the high prices in available repair services — higher in comparison to the acquisition of new clothes.

... when I created my Instagram account, you get this online community, but in the real world, it is not normal [to repair]... I wanted to create a place where I can gather all of them, all my community so that people can learn from each other... people pay a monthly amount, but it is cheaper than paying for repair. (Online repair club initiator)

The other two cases are membership organizations; people join as volunteers or paying members, getting some service in return, including access to basic tools and help from others. However, unlike in commercial services, the members are not customers, and most are required to be active in the knowledge-making, thus gaining skills through direct interaction with others in a Do-It-Yourself fashion:

So, we're all getting better, and we're getting better together, and we're sharing the things that we do know. And then if there's a question, we just ask each other and find ways to deal with it. (Bike repair organizer)

Regarding repair practices, the three cases promote knowledge sharing and skills development. However, this depends on the access that the members have to tools. For instance, in the Online repair club, the lack of physical sharing of tools is replaced by tutorials about what kind of tools to get. However, the acquisition of tools is a practical challenge — for example, a sewing machine:

... I always encourage them to check things out. And if they haven't been sewing before, I want them to rent a sewing machine before buying it. So, they can see if

Table 2 Categories of practice and sources

Category label	Practice-category	Data sources
A	Clubs for repair	<ul style="list-style-type: none"> - Three interviews (with the initiators of two repairing clubs and one with two workers from a group promoting hand-crafts) - Website (for subscribed paying users) - Social media of the group - A small workshop to use a sewing machine - Two online meetings organized by a local NGO - One physical event organized by a local NGO - Observation in one meeting of one repair cafe
B	Individual repair	<ul style="list-style-type: none"> - Two interviews with people repairing products for their own, friends, or family use
C	Communal spaces	<ul style="list-style-type: none"> - Three interviews (one with a housing project inhabitant, one with a worker from the same project, and one with a person managing a public tool shed with tools for a neighborhood) - One guided field visit to the housing project
D	Recovery from waste and waste avoidance	<ul style="list-style-type: none"> - Content from two groups, available on social media - Observations around containers (for waste)
E	Secondhand offerings	<ul style="list-style-type: none"> - Four field visits to three local flea markets and a pop-up store by the local waste management company - Field visit to the warehouse of a project for furniture circulation among students - One physical event organized by a local NGO

there is something they enjoy. Because I don't want this to become another hobby, where you have many accessories you don't use. (Online repair club initiator)

For the other two cases, the physical encounters represent an opportunity to get acquainted with tools and formalize knowledge sharing. For the local hand-craft technique organization, it is about meetings where people share beyond techniques:

... [project name] is about learning or trying to share knowledge about fibers and materials. Not only textiles but also in wood, for example... But I also think people need a lot more knowledge to know and recognize what the local produce is... (Organizer of the organization promoting local and traditional hand-craft techniques)

In this sense, the practices of repair function in a bundle with practices of socialization and knowledge creation:

... ideally, we would want it to be that you don't have to be so interested in repairing bikes to go there, you just enjoy being there. And maybe you get into repairing bikes while you hang out. (Bike repair organizer)

The bike repair group meets weekly at a café, where their tools are kept and shared. The online clothing repair club did not — initially — have physical meetings, but online platforms replaced the physical space to accomplish a similar role in allowing social interactions. Finally, the hand-crafts promotion organization relies on local meetings and space for tool sharing. Using spaces for physical or online encounters is a requirement for practical engagement as a social endeavor.

It becomes clear that repair practices are bundled with knowledge sharing and socialization. However, the initiators also show they had access to the practice through previous experiences. For example, the initiators of the online clothes' repair club mentioned their relation to sewing from a younger age and the education they received. But there is also an element of exposure to the practice through their family:

I think my dad is always making repairs, so, they don't have to buy anything new... Because my dad is repairing, I have the same values... my kids, if their toys get broken. They come and ask: can you repair this? (Online repair club initiator)

In the three cases, the initiators intend to recruit more people to repair through exposure to skills. Although skill acquisition is part of the personal career with the practice, it also gives the practitioner the understanding necessary to identify which products or materials to use in repair and where to seek advice:

So, I think we are quite open about not being experts. But we try to guide through the things we do know. And then as a community kind of trying to put out different ideas and thoughts. (Bike repair organizer)

The logics to enter these practices also include ideas about gender roles, the sustainability of repairing, and money-saving — for example, the stewardship of clothes for the family as a women's activity. These logics are not restricted to these practices but play a role in their grammar. For example, making sense of who participates:

... the situation now is that our members are like de facto women and they're more than 40 [years old]. For them it is a leisure activity. Now that's kind of how it's been for quite some years. (Organizer from organization promoting hand-craft techniques)

The following category presents two instances of repair practitioners who make sense of their participation with different logics.

Individual Repairers

This category includes two repair practitioners who participate in repair inconspicuously and individually. These are not easily identifiable practitioners, mainly because they are carriers of the practice in a private setting (i.e., non-visible signs of consumption). However, in both cases, technical skills were previously acquired through formal education — short and longer courses:

I went to this one year where I studied music. And one of these extra activities was costume making. And then we were making costumes for this big show. Yeah, so I guess I was also like, oh, I can make clothes. (Pastime repairer)

The practitioners took the example of family members with technical skills for repairing and transforming materials. The exemplary nature disrupts the “magic” of consumption and opens the way to the knowledge of production:

I liked going to the recycling station with my dad; we took things that people threw away and saw what was functioning...my dad works as an electronic engineer, he draws circuits. (Electric device repairer)

The first case is a person who repairs clothes and other products at home — during her free time. For her, repair represents a way to enact some “hands-smart” abilities that can be shown to family and friends — enabled by social media. However, she mentions a lack of interest in participating in a repair group or similar — as it would imply teaching others instead of simply experimenting. Yet, this person is also interested in repairing to connect to her daughter and form her skills:

Of course, it depends on what you think about a community... No, I think that everyone who knows me knows that I like to make stuff and pick stuff ... She's my daughter. I think she's kind of used to getting her stuff fixed. She thinks this is positive. (Pastime repairer).

The second person became interested in repairing through his relationship with his father and his engineering education. He started repairing out of convenience while being exposed to a diverse set of electronic and electric goods that were supposed to be wasted. His motivation for recovery is based on the use-value that products have for him. In this case, exposure to wasted electronics resulted in recovering and repairing fully functional products in the electronic shop where he used to work. However, under current laws in Norway, electronic shops are not supposed to repair or reuse products that are given for waste treatment — unless they are donated for this purpose. This situation represented a complication for how this repairer engaged in the practice — he was eventually removed from his job:

Things are fully functional; people don't know they still work when they bring them to waste. I started taking them, but my boss did not know...others in the store don't do it, because they are stupid... I had to show them, sometimes it is just the reset button... my boss told me, he was not going to call the police if I quit. (Electric device repairer)

For these practitioners, a motivation to repair is bundled with previously acquired technical skills. However, the skills are not enough to become carriers of the practice. The practice results from the situation to which the carriers are exposed. For example, one is exposed to a stream of functional products about to become waste; and the other has accumulated materials at home from previous projects. By repairing, the practitioners can also show their expertise — or smartness — to a close group of friends, family, or co-workers. Thus, their practical engagement is also social, but it plays a role in their distinction from the others.

Regarding the logics, the identity of the practitioners plays a role in sustaining the engagement with the practice. In this case, having skills and knowledge to repair — and transform materials — allows the carriers to engage in other forms of socialization:

I made these reusable fruit nets. You know, when you buy fruits? And I made a bunch. And they are made of an old curtain from IKEA... So now, I have this experiment when I give it to people I believe are capable of using them, then they send me pictures. But I think some people are too embarrassed to use it. (Pastime repairer)

As mentioned earlier, the exposure to material streams is also an opportunity to engage in repairing. For instance, the same two individuals exposed to different material arrays — exposure to products and social media — could have resulted in the absence of the practice. Thus, the hidden aspects of production/consumption are in tension with the technical skills and the material arrays the practitioner is exposed to — for example, obscured in the institutional arrangement by laws or made visible through social media:

... the information about the products in the container is sent to the Miljødirektoratet [Norwegian Environmental Agency] in kilos, but they don't know what is in the container or if it works or not... It doesn't matter if there are cellphones, ovens, or T.V.s; it is only kilos.

I see a product, and I don't know if it works. So, I use YouTube to see what could be wrong; most of the time, I don't need to repair it; I just change the battery or reset it ... People don't know it works. (Electric device repairer)

Exposure to an arrangement of materials and meanings may have resulted in the individual acquisition of competences to participate in repair. However, their practical engagement is also influenced by their distinction as experts in the practice. The next category focuses on material arrangements for organized communal repair.

Communal Spaces

The cases in this category are: (1) A housing project (or neighborhood) started from the organization and protest by a social group in the 1990s. The project has evolved to incorporate aspects of conviviality and mutuality. (2) A tool shed for tool sharing in another city neighborhood. One person administers this tool shed and other communal spaces, such as a publicly accessible fridge and a public bench. Collective socialization is at the center of this category, directly influencing how the physical spaces are arranged. Here, the practice is bundled to the proximity of the dwellings and not a personal interest:

So it's most of electric and hand tools you need for houses ... I'm going to have my tools borrowed by the neighbors... But it was like, it's nice. It's, it's easy and nice... to share things in your neighborhood... Then you think, this is a different way of living than most Norwegian neighbors or towns have. (Tool sharing organizer)

The neighbors' autonomy in making changes to their houses characterizes the first source. In one instance — of an interviewed inhabitant — even the construction of the house was a project that represented autonomy, particularly in the use of recovered construction materials, and only limited by safety regulations. The local municipality and an association of neighbors own the housing project. However, the inhabitants share responsibility for maintenance, collaborating with a dedicated technical professional, and sharing tools:

If they want to paint everything pink, from ceiling to floor, they can do that, if they want to put up an extra wall, they can do that. If they want to change the kitchen, they can do that. So they have a lot of freedom... If it's electricity, or if it's a pipe, like where we need professionals, we need to get in professionals. (Worker in the housing project)

The second source is *sui generis*, in a neighborhood where one neighbor decided to take socialization into his own hands by providing access to tools in his tool shed and the eventual collection of tools from other neighbors. Here, the other communal spaces are part of the person's house, which becomes a sort of public space:

... people always ask someone for a printer: I need to print something. And why can't one person or one cafe or maybe the food store up here, buy a nice one and you can go there?... We can have it close by, but we don't have to own it ourselves. And that's also with the tools here. So, it is better that I own a really good machine, then everyone in the neighborhood shouldn't buy one for 200 Kroners that doesn't work. (Tool sharing organizer)

The two instances here are practices of sharing. These practices include sharing tools or products and people sharing time when interacting. Another common aspect is the need for spaces that allow collaboration as part of everyday life, overriding the need to make money and supporting people from different backgrounds — in a more just or inclusive way. The practice of sharing is also bundled to material limitations:

It's also what you use those tools for. If you have a perfect flat, what do you need all those tools for? It has to be a bit shabby. You need all that maintenance? So you need all those tools. (Housing project inhabitant)

They don't have room for having ten winter coats; they don't have room or space to have five pairs of skis or having all these things. So, they have to find ways of borrowing and exchanging things. (Worker in the housing project)

In this category, the carriers of sharing practices hinted at technical skills as an essential aspect of community integration based on repair and sharing — knowing how to use the tools. However, the relations supported by the material arrangement appear to be more important. For example, the housing project inhabitant hinted at the importance of knowing others in the community:

...we have met very many people during construction, and we know all the people who use the tool shed and whom we share the tools with now as neighbors. (Inhabitant in the housing project)

These arrangements would not function in communities with more dispersed inhabitants. In the tool shed case, sharing material and tools is seen as necessary to community building — as a point for encounters. Thus, the collectivization of material means is bundled with the strengthening of social bonds:

... this is a really nice street, of course. But that, like a bench, is really nice if more people have a bench outside, just connecting with the neighbors... People are sitting here. And it's people coming by, and it's life all day on this bench when the weather is nice. (Tool sharing organizer)

Sharing works as a social function in the two practices — for interaction. It represents a disruption to consumerism because it means caring for others through the options available in the communal space, which is also bundled with notions of trust. More about this is found in the following category.

Recovery From Waste and Waste Avoidance

There are two cases in this category; the first one is dumpster diving, which in Trondheim is practiced mainly to recover food from the waste containers of supermarkets. However, the practice is viable for recovering durable commodities (appliances, furniture, means of transport, clothes, among others). The second practice is limited to food recovery through infrastructure in the public space (a refrigerator).

The first practice, dumpster diving, is mapped from a local group found on social media. There are three core aspects in the messages of group members: (1) Openness to welcome others to the practice, without offering strict guidelines or rigorous practical advice; other than loosely looking for the waste containers near big stores, companies, and construction sites, emphasizing containers that are not locked — otherwise the waste is privately owned. (2) Sharing information and pictures about the location and qualities of batches of products found publicly (food or materials) — mainly when found in large amounts or if the finder is not collecting it for their own consumption. (3) Information sharing regarding safety issues, such as warnings about contaminated food, public and store policies, and rules for those getting things from waste containers on private grounds.

The second practice, around a free fridge, is one of the longest-running free fridges found in Trondheim. It is provided by the person who started the tool shed (mentioned in “[Communal Spaces](#)”). The fridge owner keeps the fridge connected to his house and does some maintenance — “keeps an eye” on its cleanliness. The fridge users have appropriated it by filling it, keeping it clean, and communicating — through social media — when large batches of food have arrived. The idea behind the fridge is to promote social inclusion, without distinction of class. The idea is now replicated in other parts of the city, and it is increasingly bounded to the value of food and no longer about access to the less disadvantaged:

I feel really good, especially with the fridge, because when it started, people were really skeptical; it was mostly very poor people coming. But now, the richest people in the neighborhood are coming here and getting some sweet cakes and bread, fresh fruit and everything... So, it is the sharing and the idea of not throwing things. (Tool sharing organizer)

The carriers of these two practices must transgress one or more conventions to perform their practical engagement. Engagement in direct recovery from waste containers and acquiring things from public spaces requires the practitioner to look at places and objects that most others would immediately ignore — such as waste containers and abandoned items. For example, a chair on the street could be treated as waste or as something to be collected by a rightful owner. For an abandoned chair to become recoverable, someone must assume that it still has value and belongs to no one. One of the individual repairers

in subsection “**Individual Repairers**” faced a similar situation. In that case, the recovery of materials was from a place that was not public — and the former owners had given the items as waste — not for recovery — which meant the practitioner had to transgress what is considered legal to bring back the value of the product:

It is illegal because people give it to the store for waste management, and the owner is [waste collection company]... If someone takes it from the container, my boss says I'm stealing it. (Electric device repairer)

Here, there is a tension between the logics of recovery — the meaning of waste — and the institutional frameworks for waste and recovery — which include a lack of proper channels for material circulation and favor private ownership of waste as resources. While these practices help in circulating some materials, most recoverable ones get out of consumption and are removed as forms of waste — a profitable waste collection industry.

Finally, we decided not to include the product recirculation category in secondhand offerings — used products that are sold, given, or handed down to new users. Still, we highlight a tension between use-value and exchange-value. This tension regards people's practical doings in reappreciating and reappropriating the value of products. Following a market logic, a reappropriation of value results in flea markets and secondhand stores. However, charitable action and riddance convenience are also an element of circulation (e.g., donating or handing down furniture among students). This tension between value types is bundled with available channels facilitating peer-to-peer circulation of products — supported by social media and mobile payment apps.

Discussion

The main contention developed in the article is that the baseline for CE research should not straightforwardly focus on business opportunities but on a socio-cultural framing of CE, looking at the how, why, and what of consumption practices. To advance this framing, we have introduced a PDI perspective, and taken it as a starting point for a study describing grammars of practice that make sense of what a CE can be without normative expectations from the top-down. Table 3 presents some of the aspects bundled with the practical engagements from the cases in our study.

We have gained insights from the practical engagements that do not follow consumerism's institutional logics and could leverage an alternative CE. Our study took a PDI approach [41] and the concept of logics to cover the shared or general understandings bundled into the practices — as a kind of a priori knowledge that facilitates practical engagement. With this approach, we look at the grammar negotiated by legitimizing or contesting consumerism as the backdrop to any CE. In other words, consumption grammar that may not rehearse the norms of the LE is an issue that has been problematized by others [15, 22–24].

As shown in Table 3, an aspect featured in all these practical engagements is the use of digital means for communication. We interpret this bundling as an effect of the current structuration of communications — particularly in Norway, where access and use of the internet are high (94% of males and 92% of females, aged 9–79) [93]. Digital platforms such as YouTube and Facebook are used as means for information sharing. The use of digital communication becomes a prerequisite for practical engagement when, for example, used to communicate skills through social media (as done by repairers and recoverers) and when it serves the function of gaining expert knowledge through videos and tutorials

Table 3 Summary of aspects bundled to the practical engagements

Aspect bundled to the practice	Present in categories (refer to Table 2)
Knowledge sharing in a community of practice (regular encounters)	A, E
Adopting market forms of distribution and sustainment	A, D
Focused on individual identity (expert vs. inexpert)	A, B
Exposure to similar experiences when growing up	A, B, C
Previously acquired technical skills	A, B, C
Disabled by the current institutions (laws, policies, taxes)	A, B, D
Openly available tools and materials	B, C, D
Transgression of the norm	A, B, C, D
Savings and less disposable income (an economic reason)	A, B, D, E
Appreciation of products through use-value	A, B, D, E
Appreciation of products through socialization (with peers)	A, B, C, D
Particular spaces for practical engagement	A, C, D, E
Use of digital communication channels as part of the practice	A, B, C, D, E
Bounded on normative identities (gender, socio-economic status, profession, children)	A, B, C, D, E

online (as done by repairers). None of the practical engagements in the sample rely on digital trading or rental platforms [94], as these align better with CE initiatives with profit as a goal.

Internet is also a means for material acquisition. In Norway, secondhand products can be acquired through platforms such as Facebook market and finn.no — and other bartering options — which describe an alternative acquisition mode without reconnecting production and consumption. For example, in the repairing clubs, advice given to the participants is to acquire secondhand tools before spending money on expensive new equipment.

The sampled practical engagements are bundled into some normative roles given by identity, ranging from the individual identity (such as being a hand's smart person) to the professional identity (being a marketer or an engineer). Identities also play a role in the intersubjective dynamic of the practice. For example, being a mother or a father, or being a woman of a certain age versus being the smart person of a group of workers. All these identities describe different access points to the practice.

The practices are also bundled with moments of reappreciation of materials, which change consumption from its usual acquisition and discarding modes. The reappreciation of materials is not straightforwardly linked to economic incentives (such as saving money). Instead, it is related to the recognition of use-value in combination with modes of socialization, where skills and knowledge play a role in breaking the institutional logics of consumerism. For instance, by having acquaintances who can perform the practice of repairing a product that is still appreciated and can be reappropriated.

Another access point to these practices is situational exposure, skill acquisition from previous experiences, materials, and products to experiment with, and examples offered by people in a familiar environment. These are aspects that the clubs for repair intend to replicate in their organization arrangements. However, it is challenging to emulate them when there are no other bonds between the participants than just an interest in the practice. We interpret this as another access point to practical engagement — having strong bonds with

others, by and for whom the practices are performed. Examples of these bonds range from individual skill demonstration to family and friends, to acts of caring for their children and neighbors, and to caring for fellow peers — e.g., saving them money or giving them the chance to procure furniture or electronic devices for free.

A final aspect that is bundled with all practices is the institutional framework provided by laws and policies. One particular to Norway is the tax and wage system, which makes professional repair expensive compared to acquiring new and cheap products — many of lower quality. This situation gives reason to engage in repair; however, it is counteracted by most people having enough disposable income for consumption (i.e., to buy things). In addition, in some cases in the sample, the practices are linked to forms of social justice and environmental sustainability.

Norm transgression is significant for practices such as dumpster diving or, in the case of the individual repairer that took products supposed to be waste — committing an illegal act. But it also features in, for example, wearing clothes that are not perfect or adding materials that make the imperfections more noticeable — as in the case of the clothes repairer, who mentioned that all clothes have an opportunity. The transgression of norms quarrels with what is socially accepted and bundles the practices to negative aspects in the institutional logic.

Normalizing practical engagements at the fringes of the mainstream CE requires logics that contest consumerism. These are logics that transgress norms and change the practice grammar, which would drive another institutional framework. Our main contention is that the bundle of logics present in this sample is an access point to an alternative CE that is not coopted by consumerism but must negotiate it to gain legitimacy.

The sample approached here emerges against the backdrop of consumerism, rearranging the grammars of consumption. In particular, the creative nature of repair and reuse reconnects production and consumption in one place — reorganizing time and space — while centering the use-value of products and materials as part of substantive objectives. The use-value that we refer to not only encompasses the functions provided by products — beyond the servitization of a performance economy — but also includes value sustained by the social relations of the practitioners. Building on this, further work is needed to identify transformational paths for the institutional logics that would support a use-value based on more than momentary access to products and rather on sustaining these contextualized social relations.

Conclusion

To conclude, we address the two research questions in the “[Introduction](#).” For the first one: What should be included in a socio-cultural and institutional framing to study CE? We engaged in the description of consumerism [12, 73] as a contemporary arrangement that rehearses the norms of the LE. This way, we put consumption as our locus of study, consumption as a set of practical grammars and institutional logics that should be studied in specific contexts. Furthermore, we conduct a study of CE from a PDI perspective [41], looking to integrate the aspects of logic that could open up for new practices and necessitate new institutions — forms and means. Thus, this means three inclusions: (1) The contestation of consumerism. (2) The focus on consumption as a locus of study. (3) The attention to the logic and grammar of practice and their consequent negotiation of consumerism. With these inclusions, we propose PDI and the contestation of consumerism as a viable socio-cultural framing to study CE.

For the second question about what could leverage an alternative CE, we conducted an empirical study of “niche” consumption practices alternative to consumerism. The grammar in these practices is negotiated against the institutional logics of consumerism. Therefore, these practices are not fully detached from consumerism but offer aspects that could help rearrange the grammars of consumption and its logics. This could leverage an alternative CE based on use-value that considers social relations — as part of an access model. Although we identified aspects particular to the case of Trondheim and Norway, we contend that consumerism is not an inescapable arrangement. However, a CE that does not look to change the institutions — by contesting consumerism — risks repeating a “nobodization” of actors in favor of incumbent expert knowledge [22, 23]; or, worse yet, rehearsing the norms of the LE [15].

In our empirical study, we have integrated practice-driven institutionalism to study alternative practices that contest consumerism as a social arrangement specific to the cases in Trondheim (Norway). We use this study to show the viability of learning from alternative CEs that potentially can be leveraged from other grammars of practice and logics. From a PDI [41] perspective, change should focus on improvisation and experimentation in practical engagements. In this specific case, the practical engagements contextualize use-value through social relations. For the context of this study, practical engagements supported by appropriate institutional arrangements — from the public sector or the organized civil society — could leverage a CE that contests consumerism by highlighting those social relations.

Supplementary Information The online version contains supplementary material available at <https://doi.org/10.1007/s43615-022-00218-1>.

Acknowledgements We are grateful for the time, knowledge, and experience that the participants shared in the interviews and observations.

Author Contribution The first author conducted the fieldwork and wrote the initial manuscript draft. All the three co-authors contributed with conceptualization of the research, editing of the manuscript, verification, and approval.

Funding Open access funding provided by NTNU Norwegian University of Science and Technology (incl St. Olavs Hospital - Trondheim University Hospital) This work was supported by NTNU–Norwegian University of Science and Technology. No funding by external agencies or grants was provided.

Data Availability All the necessary data are enclosed in the text.

Declarations

Consent to Participate Informed consent was obtained from all the individual participants included in the study.

Consent for Publication Informed consent was obtained from the participants for the anonymous use of the information provided during interviews (quoted text) in publications for research purposes.

Competing Interests The authors declare no competing interests.

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