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ECON-2

JUST2CE: CROSS-BORDER SCIENTIFIC COOPERATION FOR A JUST TRANSITION TO CIRCULAR ECONOMY

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INTRODUZIONI

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CONTRIBUTI

Geographies of Circular Economy: towards a just transition

M. Ripa, Businness Department, Autonomous University of Barcelona; M. Pansera, Post-growth InnovationLab, University of Vigo

Genere ed Economia Circolare (EC). Contributi della Economia Ecologica Femminista

S. Barca, Universidade de Santiago de Compostela

Decolonising JUST2CE: a tentative manifesto

E. Girei, A. Jimenez, University of Sheffield

The role of universities in developing just and circular supply chains

R. Passaro, P. Ghisellini, I. Quinto, Dipartimento di Ingegneria, Università degli Studi di Napoli "Parthenope";
M. Casazza, Dipartimento di Medicina, Chirurgia e Odontoiatria, "Scuola Medica Salernitana" Università di Salerno; S. Ulgiati, Dipartimento di Scienze e Tecnologia, Università degli Studi di Napoli "Parthenope",
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ABSTRACTS

GEOGRAPHIES OF CIRCULAR ECONOMY: TOWARDS A JUST TRANSITION

M. Ripa, Businness Department, Autonomous University of Barcelona; M. Pansera, Post-growth InnovationLab, University of Vigo

Circular Economy (CE), a pillar of the European Green Deal, is an increasingly recognized approach that has much to contribute towards addressing challenges of the Anthropocene. CE promises to close the circle of economy-society-nature interactions, replacing the current linear economic model with a new one that is restorative and regenerative by intention and design, i.e., capable of turning waste into valuable resources. Despite its growing popularity among politicians, businesses leaders and academics, the concept of circular economy and its underlying principles are not without critics and challenges. The lack of consideration of socioethical issues is a major criticism of the CE and it is the main focus of the H2020 Project "JUST2CE" (A JUst TransitionTO the Circular Economy). The point of departure of our criticism relies on the fact that the current visions of CE are narrowly focused on the economy and on the technology, with a patent lack of a reflection on the political and socio-cultural dimensions as well as on the unintended (global) consequences that a transition to circularity wouldentail. The problem with this approach is that, once framed as a technical imperative, the CE comes to be seen as a public goal that may compete, be combined with or balanced against other public priorities, such as social justice, inclusivity, etc. Tackling these challenges requires directing efforts towards extending the repertoire of social scientific theories and conceptual frameworks that may inform the analysis of CE practices. The conviction underpinning the JUST2CE projectis that the success of a transition towards a sustainable and just CE does not merely depend on the development of new technologies- artefacts or processes-but also in the reconfiguration of the governance of productive processes into more democratic and participatory mechanisms of designing and managing technology.For these reasons, JUST2CE aims at understanding, in critical and thoughtful way, under which conditions a responsible, inclusive and social just transition to a CE is possible and desirable, what technical, political and social factors can enable or hamper such transformation and how these aspects can contribute to the development of transitional policy measures. First of all,JUST2CE project,started in September 2021 and involving 14 partners including European and African universities, focuses on providing a rigorous and comprehensive overview and analysis of the current state-of-the-art in the field of CE in order to highlight uneven developments, differences in theorisations and implementations between different geographical, ideological, political and economic contexts.Specifically, on one side, the project will develop a conceptual topology of the CE paradigm, highlighting the role of different ideological perspectives, vested agendas and power relations in its framing.On the other side, the project will map CE practices and initiatives by means of a Global Atlas of CE(that will be freely accessible online during and after the end of the project). Secondly, drawing upon empirical and conceptual elements from a variety of fields (such as Feminist Ecological Economics, Political Ecology, Environmental Justice, Decolonial studies), our project provides an epistemological, theoretical and methodological scaffolding for the ethical questions we should be asking about the future of CE. "Whose voices and interests are heard and whose voices and interests are neglected? How are costs, benefits and opportunities of CE distributed at different scales and among different social realities?" These leading questions will guide the analyses of ten cases of organisations engaged at different stages of transition towards CE, in Europe and Africa, to understand the main global risks and barriers (from both a technological and relational/economic/social points of view) to the implementation of

CE initiatives. The cases are heterogeneous in many respects: they into account different geographical contexts (Italy, Spain, Portugal, United Kingdom, Morocco, Ghana, Zimbabwe, Ethiopia, South Africa), different value chains (plastics, food, critical raw materials, etc.), different scale of analysis (from local to global initiatives) and different types of institutional settings (formal/informal). The results of this comparative analysis will be used to develop a decision support system and macroeconomics analytical tools to design new or improve existing CE practices. Last, but not least, JUST2CE proposes an overall engagement strategy seeking to understand how actors, at multiple geographical scales, conceive the benefits and challenges of CE in relation to community-based goals, and how they mobilize these imaginaries in their own visions of the future. Inspired by RRI (Responsible Research and Innovation) principles, JUST2CE promotes the central idea of 'working with rather than on people' and emphasizes the non-neutrality of innovation/transition and theneedfor bottom-up processes through mechanisms of deliberation and inclusion.

GENERE ED ECONOMIA CIRCOLARE (EC). CONTRIBUTI DELLA ECONOMIA ECOLOGICA FEMMINISTA

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Il genere è una dimensione chiave per una transizione giusta verso l'economia circolare. Piuttosto che un approccio di "pari opportunità", tuttavia -che tende a ridurre il genere al mainstreaming delle donne nei modelli preesistenti -questo intervento parla della necessitá di espandere la cassetta degli attrezzi teorici della ricerca in EC includendo l'economia ecologica femminista (EEF). Emersa nei primi anni '90 al crocevia tra economia ecologica ed economia femminista, la EEF è un campo specializzato di ricerca teorica ed empirica che mira ad affrontare la sostenibilità della produzione all'interno di un approccio socio/eco-sistemico che includa (piuttosto che tralasciare) il lavoro riproduttivo e di cura.I concetti chiave della FEE sono "approvvigionamento sostenibile" e "produzione sostenibile","economia della cura", "ri/produttività", "economia del benessere". Questi concetti chiave della EEF possono contribuire a una sostanziale riformulazione della EC.

DECOLONISING JUST2CE, A TENTATIVE MANIFESTO

E. Girei, A. Jimenez, University of Sheffield

The Circular Economy (CE) is gaining popularity as an alternative to the current linear economic model, which has resulted in significant environmental degradation (Kirchher et al., 2017).Instead, the CE aims for a full circle of interactions between economy, society and nature. The CE has been studied for its potential impact, primarily in high-income countries and the global north. Nonetheless, there has been little research into how the CE can be materialised in low-income contexts/the Global South (Muchangos 2021).The goal of this contribution is to look at the challenges and opportunities of applying a decolonial lens to a more inclusive and

socially just transition to a circular economy as part of the project 'A Just Transition to Circular Economy (JUST2CE), which is funded by the EuropeanUnion's H2020 programme (Pansera, Genovese and Ripa, 2021). The JUST2CE project was created with the goal of understanding under what conditions a responsible, inclusive, and socially just transition to a circular economy is possible and desirable, what technical, political, and social factors enable or impede such transformation, and how these factors can contribute to the development of transitional policy measures. The Project involves fourteen partners (universities, companies, civil society organisations and public institutions) based in Europe and Africa. It also includes a comparison of ten case studies, namely organisations involved in CE initiatives (half of are in Africa and half in Europe),to identify and explore enablers and barriers to CE, including those shaped by South-Northrelations and the broader geopolitical context. This contribution seeks to answer the following questions 'Why Just2CE needs decolonial thinking?' And how can we embed decolonial thinking into Just2ce? The importance of decolonial thinking within JUST2CE stems from different issues, some of which are highlighted below.Firstly, while CE is proposed as a solution to issues of climate degradation and social inequality, little is known about how CE may affect class relations, power asymmetries, and nonhuman nature (Genovese and Pansera 2020). One reason for this omission is the lack of conceptual clarity (Kirchher et al., 2017; Mies and Gold 2021), resulting in vague ideas that can be articulated in different agendas.In addition, while CE is frequently depicted as an interdisciplinary field, the literature reveals that it is primarily defined by technocratic discussions in which science, technology, and innovation all play a role in how CE will be carried out (Pansera et al. 2021). This techno managerial dominance typically presents science, technology, and innovation as neutral dimensions that contribute to progress and development, embedding and reproducing Western-centric perspectives (albeit elevated as universal), the limitations of which have been widely acknowledged in a variety of disciplines ranging from development studies to sociology. {Amin, 2004; Ferguson, 2007; Zeleza, 2002), management and organisational studies {Dar,2008; Girei, 2016), and more (Connell 2007).Because of its techno-centric solutions to socially complex problems, perspectives on CE often neglect social dimensions and power asymmetries (Pansera & Jimenez 2021). Ignoring the ideological baggage that innovation brings has resulted in a slew of unintended consequences, ranging from reinforcing a discourse of economic growth (Pansera & Owen 2018) to exacerbating gender inequalities (Jimenez 2018). Furthermore, it promotes the subordination of indigenous knowledge and unsustainable innovation models (Jimenez and Roberts 2019). Starting from this background, we acknowledge the relevance of debates around decolonisation to the Just2Ce project, and, as members actively involved in its planning and implementation, we aim to explore how can we embed a decolonial lens to contribute to producing knowledge at the service of more just, responsible and sustainable futures. This contribution represents our tentative manifesto, based on individual and collective reflections on how we plan to navigate the dilemmas, questions, and opportunities emerging from decolonising knowledge and research practice debates. Its main contribution is to share methodological insights and reflections on how decolonial thinking can be embedded in large projects and by a heterogeneous group of researchers.

THE ROLE OF UNIVERSITIES IN DEVELOPING JUST AND CIRCULAR SUPPLY CHAINS

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M. Casazza, Dipartimento di Medicina, Chirurgia e Odontoiatria, "Scuola Medica Salernitana" Università di Salerno;
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The adoption of Circular Economy Initiatives and policy measures is expected to provide an important contribution to the achievement of UN Sustainable Development Goals of 2030 Agenda for the Sustainable Development, and other commonly agreed international targets such as the ParisAgreement, the Convention on Biological Diversity, and the United Nations Convention to Combat Desertification (European Commission, 2020). In this view, the transition to a circular economy at the global level should proceed thoroughly by improving the cooperative efforts among countries and areas in sharing knowledge, technologies, best practices (European Commission, 2020).In contrast to the 'take-make-waste' linear model, a circular economy is regenerative by design and aims to gradually decouple growth from the consumption as well as aims to adopt a holistic approach that encourages citizens, companies, consumers, policymakers to look beyond their individual actions made at the local level(Ghisellini, Cialani and Ulgiati, 2016) and think of the effects at the global levels in agree with what suggested byPatrickGeddes"think globally, act locally" at the beginning of the last century. In the case of products, the circular economy framework focuses the attention at their whole life cycle and their impacts both environmental and social. The adoption of this approach leads to an increasing transparency of the processes,upstream and downstream of the production stages widening the opportunities for improvement towards the pillars of sustainable development and the goals of a just and circular economy(Petti, 2021).By expanding the scale of investigation of a product from the local process to the other processes in the whole supply chain, it is possible to realize that each flow of matter supplied to a process has been extracted and processed elsewhere. Additional matter is moved from place to place, processed and then disposed of to supply each input to the process(Ulgiati et al., 2011). Sometimes a huge amount of rock must be excavated per unit of metal. Most of this rock is then returned to the mine site and the site reclaimed, but its stability is lost and several chemical compounds become soluble with rainwater and may affect the environment in unexpected ways (Schmidt-Bleek, 1993; Hinterbergerand Stiller, 1998; Bargigli et al., 2005). This has also tremendous social impacts for the local population who support the negative effects of such activities and should rethink and displace their locallife andjobs. On the other hand, looking downstream of the production processes and to the amount of waste generated, the circular economy increase the knowledge and traceability of all the end-of-life stages for the creation of reverse cycle based on cleaner and just production processes. This is critical for particular waste streams such as the waste of electronic and electrical equipments (WEEE) a large part of which is first generated in developed countries and then again shipped to developing countries where they it is recycled by informal workers who are most of the time children (ILO, 2012). This contribution summarizes the activities of our research group in the Just2CE project aimed to improve the knowledge and traceability of WEEE generated in Campania Region in the stages of collection and recycling and evaluate their environmental and social impacts as well as the drivers and barriers towards the adoption of a just and circular economy. In that, our activities highlight the important role of universities in contributing to the creation of more sustainable supply chains(Passaro, et al, 2018, Bruno et al. 2021; Van Langen et al 2021) by linking all the stakeholders to develop

attention, to build awareness disseminating the knowledge of a just and circular economy transition and the importance of its adoption.