

# **Waste picking and reclaiming as social provisioning: constructing a socially restorative and regenerative circular economy**

## **Introduction**

There has been a growing critique of the growth-dependent economic system from both ecological and feminist economics (Daly, 1991, 2019; Nelson & Power, 2018; Perkins, 2007; Waring, 1988). Ecological economics, derived from the initial work by Herman Daly in steady-state economics, has given rise to the development of new economic models that account for Earth's finite resources. One of such models is the transition to a circular economy that intends to maintain the value of materials in closed-loop systems to replace the current linear economy of take-make-dispose (Ellen MacArthur Foundation, 2013; Lieder & Rashid, 2016; Murray, Skene, & Haynes, 2017).

Another framework that has questioned the unlimited growth model is the Doughnut, a model that accounts for both the planetary limits presented by Røckstrom and Steffen (Steffen et al., 2015) and meeting basic social needs for human and ecological welfare (Raworth, 2017). Looking at both the social basis and environmental ceiling in the context of a circular economy; in this analysis, the emphasis is on women leader waste pickers in Ecuador and Colombia. This work is a follow-up of the book 'Recycling without recyclers is trash: The return of the witches' (Soliz, Yepez, Valencia, & Soliz, 2019). The focus of this analysis is to further the inclusion of the recycling sector in the circular economy exploring its relationship with recyclers' dignity represented by the 3Rs of the guild's demands (EIU, 2016): recognition, redistribution and remuneration, the 3Rs of care-work as presented by Elson (2017): recognition, reduction and redistribution, and the 3Rs of environmental justice derived from Rawlsian theory (Fraser, 2013): recognition of damages, redistribution of burdens and benefits and political representation. The combination of these triad of 3Rs represent the 9Rs of a fair inclusion for a socially restorative and regenerative circular economy.

The argument for including the lens of feminist and care economics to connect justice as a tenet of ecological economics has been presented previously (Spencer, Perkins, & Erickson, 2018). Power (2014) introduced the term provisioning, defined as 'the work of securing resources and providing the necessities of life to those for whom one has relationships of responsibility' as a useful category for feminist economics (Power, 2004). Built upon this argument, only when the boundaries of time expended and the responsibility set upon women is recognized, new forms of provisioning can be envisioned (Neysmith & Reitsma-Street, 2005; Segato, 2019). The acknowledgment of the collective over the individual's pecuniary pursuits also constitutes provisioning (Neysmith & Reitsma-Street, 2005; Power, 2004). Segato has documented multiple examples of collective feminism in rural regions of Latin America, where decisions regarding women's wellbeing, when women decide, result in improved wellbeing for the community, not just women (Segato, 2014). For this study, this vision of collective feminism is used for accounting for both the material or resource-based provisioning and the social and justice-based portion provisioning.

Kirchherr's 9R hierarchy for the circular economy provides the physical or material basis applied in this model. The 9Rs are: 0) refuse 1) rethink 2) reduce 3) reuse 4) repair 5) refurbish 6) remanufacture 7) repurpose 8) recycle and 9) recover (Kirchherr et al., 2018). The Ellen MacArthur Foundation, using the concept of cradle to cradle, proposed that in the circular economy, closing loops in the biological portion constitutes a regenerative process, while doing the same in the technical cycles constitutes a restorative process (Ellen MacArthur Foundation, 2013). In this article, we perform an empirical exploration of how provisioning can transform the circular economy into a socially restorative and regenerative circular economy, accounting for the 9Rs of a fair inclusion. In this case, the restorative portion intends to account for the

linear economy's historical and geospatial faults, providing integral reparation. Complementarily, the regenerative portion aims to recognize and redistribute care of people and the planet by strengthening employment in circular jobs.

## Methodology

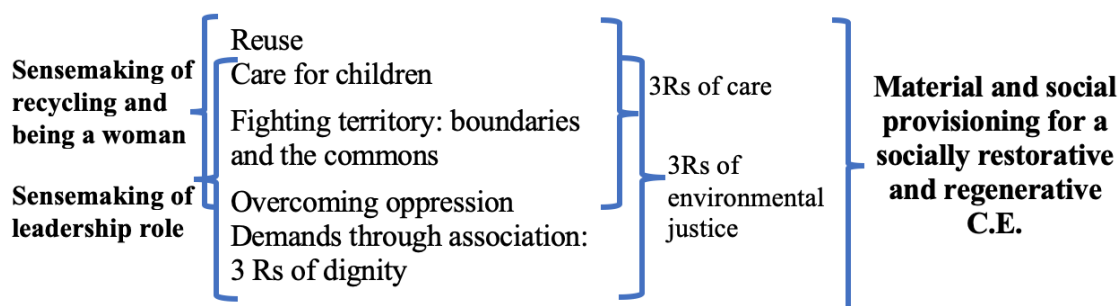
The interviews selected for this analysis were conducted with ten women recycler leaders in their respective cities in Colombia (Bogotá) and Ecuador (Quito, Portoviejo, Cuenca, Coca and Lago Agrio). This inclusion responds to feminist economists' argument to analyze the different identities of women recyclers as black, indigenous, elderly, a leader in the context of small, large, Andean, coastal or Amazonian cities rather than as the homogenous category of women (Neysmith & Reitsma-Street, 2005; Power, 2004). These ten interviews are a subsection of 42 recyclers interviewed for the book 'Reciclaje sin recicladoras es basura: el retorno de las brujas'; in this analysis, only those that held leadership positions at the time of interview were included. The initial intent of the book was to partake in a theory-praxis-theory process (Freire, 2018). For the book, three steps were followed, 1) initial informed consent, 2) unstructured interviews, 3) photo essay. The book is publicly available, including the names and photographs of the recyclers who agreed to have their information published<sup>1</sup>.

In this follow-up, a substantive post-structural critical lens is taken (Agger, 1991) to assess recyclers' embeddedness in their associations, cities, and country in relation to government, citizens, and industry. During the interviews, women were asked about their experience of becoming recyclers and made an inkling on their leadership role. Interviews were conducted in person in Spanish and lasted between 30 minutes and 4 hours between November 2018 and July 2019. Based on the open conversations recorded and transcribed, this study entails a phenomenological analysis (Cresswell, 2013) of women's sensemaking of becoming recyclers and answering the question: How do women recyclers make sense of their involvement in recycling and their roles as leaders?

For this analysis, NVivo® 12.1 was utilized. Codes were created both inductively and deductively (Fereday & Muir-Cochrane, 2006), and memoing was extensively used to interpret the interviews (Maxwell, 2013). Deductive coding was performed based on the 9Rs presented in table 1. For the inductive process, the initial open coding entailed identifying themes within the text to continue with axial coding to evaluate the relationship among all themes.

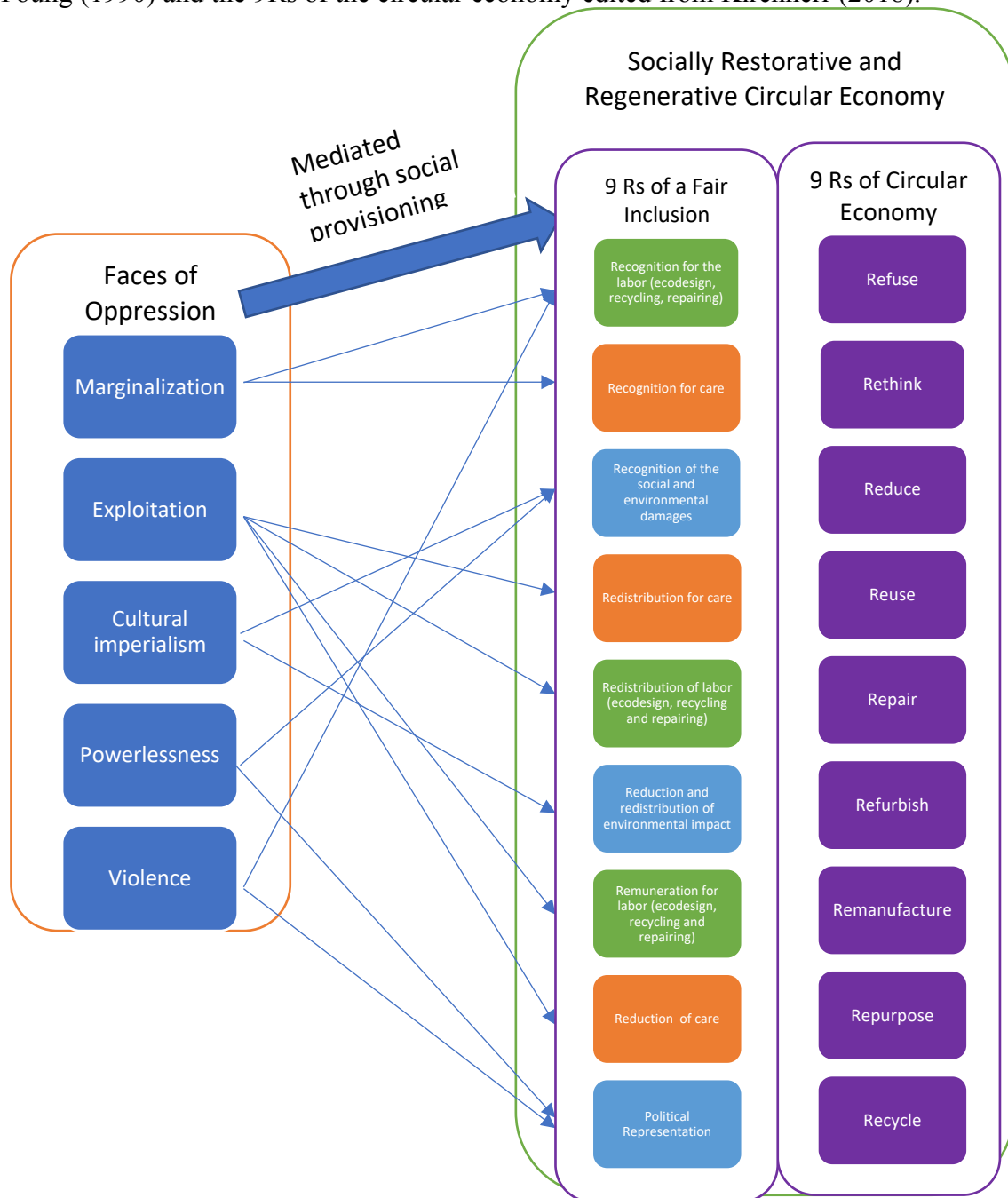
## Results

Figure 1: Summary of thematic results from coding process



<sup>1</sup> Soliz et al. (2019) Reciclaje sin recicladoras es basura. <https://www.no-burn.org/libro-reciclaje-sin-recicladoras-es-basura-el-retorno-de-las-brujas/>

**Figure 2: Framework for a socially restorative and regenerative circular economy.** Transitioning from the oppression and a linear circular economy. Faces of oppression by Young (1990) and the 9Rs of the circular economy edited from Kirchherr (2018).



## Bibliography

- Agger, B. 1991. Critical Theory, Poststructuralism, Postmodernism: Their Sociological Relevance. *Annual Review of Sociology*, 17: 105–131.
- Cresswell, J. W. 2013. *Qualitative Inquiry & Research Design: Choosing Among the Five Approaches*. Thousand Oaks: SAGE Publications.
- Daly, H. 1991. *Steady-state economics*. Island Press.  
[https://books.google.com.ec/books/about/Steady\\_State\\_Economics.html?id=qmp5mPdJ474C&redir\\_esc=y](https://books.google.com.ec/books/about/Steady_State_Economics.html?id=qmp5mPdJ474C&redir_esc=y).

- Daly, H. 2019, October 1. Some overlaps between the first and second thirty years of ecological economics. *Ecological Economics*. Elsevier B.V.
- EIU. 2016. *Progress and Challenges for Inclusive Recycling: An Assessment of 12 Latin American and Caribbean Cities*.  
[https://www.eiu.com/public/topical\\_report.aspx?campaignid=InclusiveRecycling](https://www.eiu.com/public/topical_report.aspx?campaignid=InclusiveRecycling).
- Ellen MacArthur Foundation. 2013. *Towards the Circular Economy: Economic and business rationale for an accelerated transition*.  
<https://www.ellenmacarthurfoundation.org/assets/downloads/publications/Ellen-MacArthur-Foundation-Towards-the-Circular-Economy-vol.1.pdf>.
- Elson, D. 2017. Recognize, Reduce, and Redistribute Unpaid Care Work: How to Close the Gender Gap. *New Labor Forum*, 26(2): 52–61.
- Fereday, J., & Muir-Cochrane, E. 2006. Demonstrating Rigor Using Thematic Analysis: A Hybrid Approach of Inductive and Deductive Coding and Theme Development. *International Journal of Qualitative Methods*, 5(1): 80–92.
- Fraser, N. 2013. Fortunes of Feminism. *From State-Managed Capitalism to Neoliberal Crisis*.
- Freire, P. 2018. Pedagogy of the Oppressed. *50th Anniversary Edition*.  
[https://books.google.com.ec/books?hl=en&lr=&id=OrVLDwAAQBAJ&oi=fnd&pg=PR3&dq=paulo+freire+pedagogy+of+the+oppressed&ots=JArl95ZGZU&sig=Q2rAwfaQpPIR0A05rSUKK9p\\_70A#v=onepage&q=praxis&f=false](https://books.google.com.ec/books?hl=en&lr=&id=OrVLDwAAQBAJ&oi=fnd&pg=PR3&dq=paulo+freire+pedagogy+of+the+oppressed&ots=JArl95ZGZU&sig=Q2rAwfaQpPIR0A05rSUKK9p_70A#v=onepage&q=praxis&f=false).
- Kirchherr, J., Piscicelli, L., Bour, R., Kostense-Smit, E., Muller, J., et al. 2018. Barriers to the Circular Economy: Evidence From the European Union (EU). *Ecological Economics*, 150: 264–272.
- Lieder, M., & Rashid, A. 2016. Towards circular economy implementation: a comprehensive review in context of manufacturing industry. *Journal of Cleaner Production*, 115: 36–51.
- Maxwell, J. A. 2013. *Qualitative Research Design: An Interactive Approach*. Thousand Oaks: SAGE Publications.
- Murray, A., Skene, K., & Haynes, K. 2017. The Circular Economy: An Interdisciplinary Exploration of the Concept and Application in a Global Context. *Journal of Business Ethics*, 140(3): 369–380.
- Nelson, J. A., & Power, M. 2018, July 3. Ecology, Sustainability, and Care: Developments in the Field. *Feminist Economics*. Routledge.
- Neysmith, S. M., & Reitsma-Street, M. 2005. “Provisioning”: Conceptualizing the work of women for 21st century social policy. *Women’s Studies International Forum*, 28(5): 381–391.
- Perkins, P. E. 2007. Feminist Ecological Economics and Sustainability. *Journal of Bioeconomics*, 9: 227–244.
- Power, M. 2004, November. Social provisioning as a starting point for feminist economics. *Feminist Economics*.
- Raworth, K. 2017. *Doughnut economics : seven ways to think like a 21st century economist*. (J. Praded, Ed.). Chelsea Green Publishing.
- Segato, R. 2014. Las nuevas formas de la guerra y el cuerpo de las mujeres. *Sociedade e Estado*. <https://doi.org/10.1590/s0102-69922014000200003>.
- Segato, R. 2019. *El Deseo de Pandora*. Anfibia Podcast.
- Soliz, M. F., Yopez, M., Valencia, M., & Soliz, F. 2019. *Reciclaje Sin RecicladorAs es Basura*. Quito: Ediciones La Tierra.
- Spencer, P., Perkins, P. E., & Erickson, J. D. 2018. Re-establishing Justice as a Pillar of Ecological Economics Through Feminist Perspectives. *Ecological Economics*, 152: 191–198.

Steffen, W., Richardson, K., Rockstrom, J., Cornell, S. E., Fetzer, I., et al. 2015. Planetary boundaries: Guiding human development on a changing planet. *Science*, 347(6223): 1259855–1259855.

Waring, M. 1988. *If Women Counted: A New Feminist Economics*. Harper & Row.  
[https://books.google.com.ec/books/about/If\\_Women\\_Counted.html?id=boVeAAAAIAAJ&redir\\_esc=y](https://books.google.com.ec/books/about/If_Women_Counted.html?id=boVeAAAAIAAJ&redir_esc=y).