

# The Circular Economy: Societal Transformation or Economic Fairytale?

INTERVIEW WITH MARTIN CALISTO FRIANT

**In recent years, the concept of the ‘Circular Economy’ has moved to the center of political and academic discourse on sustainability, industrial innovation, eco-efficiency and socio-ecological change. But what do people really mean when they talk about the Circular Economy? There are very few studies that compare and clearly differentiate the multitude of different circular economy discourses and visions. Martin Calisto Friant, PhD researcher at the University of Utrecht in the Netherlands, addressed this key knowledge gap by developing the first typology of Circular Economy discourses, which reviews and conceptually classifies over 70 circularity concepts from the early 1950s to the present day. REVOLVE Circular sat down with him to learn more.**

## What were the origins of the Circular Economy, and how did it gain popularity?

The Circular Economy is nothing new. For the greatest part of humanity’s presence on Earth, we lived in circular societies where material and energy flows circulated sustainably, in harmony with the natural cycles of the earth. It is only during the industrial revolution that we broke this balance, through the creation of growth-dependent economic structures and the increasing use of fossil fuels. A new set of literature thus started to investigate the consequences of industrial capitalism for the Earth and

its human and natural ecosystems. This is when the modern precursors to the Circular Economy concepts emerged, with key publications from the 1940s to the 1970s including “the Economy of Permanence” by J.C. Kumarappa (1945), “Tools for Conviviality” by Ivan Illich (1973) or “Ecology as Politics” by André Gorz (1979) and many others. “The Closing Circle” by Barry Commoner in 1971, is perhaps the first book to use the metaphor of a circle to illustrate a society, where material and resource flows circulate sustainably, and are democratically redistributed to ensure social fairness and equity.

Another key historical period was from 1990 to the early 2000s; during

which the field of “industrial ecology” emerged, and other new Circular Economy concepts were developed, such as “Biomimicry” by Janine Benyus, “Extended Producer Responsibility” by Thomas Lindhqvist or “Industrial metabolism” by Robert Ayres and Udo Simonis. This literature emerged at the same time as neoliberal economic thinking; therefore, these concepts have market-driven approaches, which did not give much attention to considerations of social justice and equity. Nonetheless, they brought important insights on new technologies and innovations to recover industrial and household wastes, and to improve the environmental performance of products and services.

## Key concepts and schools of thought at the origin of the Circular Economy

### 1940s TO 1970s

#### Modern precursors

- The economy of permanence
- Tools for conviviality
- Degrowth / Decroissance
- Post-scarcity anarchism / Social ecology
- Small is beautiful
- The closing circle
- The economics of the coming spaceship earth
- The limits to growth
- Ecological design
- Permaculture
- Ecofeminism
- Steady state economics

### 1990s TO EARLY 2000s

#### Concepts with market-driven approaches

- Industrial ecology
- Biomimicry
- Extended producer responsibility
- The biosphere rules
- Industrial metabolism
- Reverse logistics
- Cleaner production
- Product service systems
- Bioeconomy
- Industrial symbiosis
- Eco-industrial parks
- Closed-loop supply chain

### 2000s ONWARDS

#### Concepts with a holistic and socially inclusive approach to consumption and production

- Cradle to cradle
- Post-growth
- Performance economy
- Blue economy
- Doughnut economics
- The transition movement
- Economy for the common good
- Convivialism
- Symbiotic economy
- Permacircular economy
- Simple living
- The natural step

### RE-EMERGING SINCE THE 2000's

#### Transformative concepts from the global South

- Buen vivir / Latin America
- "Ecological swaraj" / India
- Ubuntu / South Africa
- Ecological civilization / Chinese eco-socialist, Taoist and Confucian philosophy



Last but not least, in the 2000s new Circular Economy concepts – with a more holistic and socially inclusive approach to consumption and production – were developed. Amongst the most prominent ones are Cradle to Cradle by William McDonough and Michael Braungart, the Performance Economy by Walter Stahel, doughnut economics by Kate Raworth and post-growth by Tim Jackson. In addition, a number of transformative concepts from the Global South re-emerged during this time such as “Buen vivir” by Latin American indigenous movements, “Ecological swaraj” by Ashish Kothari in India or “Ubuntu” from South African philosophy.

Considering the diverse history and the variety of concepts related to the circular economy, it can be best understood as an “umbrella concept” which combines and embraces many key elements of sustainability thinking.

## Your research has resulted in the identification of four main “circularity discourse types” – what are they and what circular vision do they propose?

My research led to the development of a 2 × 2 circularity discourse typology to help navigate the rich history and diversity of Circular Economy concepts and ideas. This typology divides circularity discourses in two main criteria: first, it distinguishes **segmented** discourses, which focus on the technical

and business components of circularity, from **holistic** discourses, which include social justice and political empowerment. Second, it divides **optimist** and **skeptical** perspectives regarding the possibility of decoupling environmental degradation from economic growth, so-called eco-economic decoupling. Different combinations of these two criteria lead to four main circularity discourse types.

**There is a key contrast between the way that academics understand circularity and how businesses and governments are implementing it.**

**Reformist Circular Society** – optimist and holistic – discourses seek to create a sustainable circular future through a combination of innovative business models, social policies and technological breakthroughs. **Technocentric Circular Economy** – optimist and segmented – discourses seek to reconcile economic development with ecological sustainability through innovative business models and technologies. **Transformational Circular Society** – skeptical and holistic – discourses seek to re-localize, democratize, and redistribute power, wealth and knowledge to create a sustainable post-capitalist future where humanity and nature live in mutual harmony. **Fortress Circular Economy** – skeptical and segmented discourses seek to ensure biophysical stability and geostrategic resource

security through top-down migration controls, technological innovations and economic rationalism.

## Which is the most prominent circular discourse? Who uses which?

By far the most prominent discourse type is Technocentric Circular Economy. Our analysis of 120 Circular Economy definitions has found that 84% fall in this discourse type. Technocentric Circular Economy discourses are particularly widespread in government policies as well as in business consultancies and corporate circular economy strategies. For instance, in our recent academic analysis of the EU’s implementation of the circular economy, we have found

that the Commission’s policies follow a Technocentric Circular Economy approach, which focuses on technical solutions and market innovations while disregarding social justice and equity. Their focus on technocentric approaches to circularity is at odds with the academic background, history and diversity of circularity thinking. In fact, our research has found that the majority of circularity concepts from the literature fall in the Transformational or Reformist Circular Society discourse types. There is therefore a key contrast between the way that academics understand circularity and how businesses and governments are implementing it.

As a response to the dominance of technocentric propositions, there is a rising movement promoting a holistic Circular

# FOUR CIRCULAR ECONOMY DISCOURSES

## Optimist Circular Discourses

Environmental degradation CAN be decoupled from economic growth

### Holistic Circular Discourses

Include social justice and political empowerment

#### REFORMIST CIRCULAR SOCIETY

##### Goals

Human prosperity and well-being within the biophysical boundaries of the earth.

##### Means

Technological breakthroughs and social policies that benefit humanity and natural ecosystems.

##### Proponents

International organizations, large foundations and some governments.

##### Example concepts

Natural Capitalism, Cradle to Cradle, The Performance Economy, The Natural Step, The Blue Economy, Eco-system economy, Regenerative Design.

### Segmented Circular Discourses

Focus on technical and business components

#### TECHNOCENTRIC CIRCULAR ECONOMY

##### Goals

Economic prosperity and development without negative environmental externalities.

##### Means

Economic innovations, new business models and unprecedented breakthroughs in green technologies.

##### Proponents

Corporations, some national and city governments, and international organizations.

##### Example concepts

Industrial Ecology, Reverse Logistics, Biomimicry, Industrial Symbiosis, Cleaner Production, Bioeconomy.

### TRANSFORMATIONAL CIRCULAR SOCIETY

##### Goals

A world of conviviality and frugal abundance for all, while fairly distributing the biophysical resources of the earth.

##### Means

Complete reconfiguration of the current socio-political system and a shift away from productivism and anthropocentric worldviews.

##### Proponents

Social movements, bottom-up circular initiatives, and indigenous movements.

##### Example concepts

Convivialism, Steady-state economics, Permacircular Economy, Degrowth, Social Ecology, Buddhist Economics, Buen Vivir, Ubuntu.

### FORTRESS CIRCULAR ECONOMY

##### Goals

Maintain geostrategic resource security in global conditions where widespread resource scarcity and human overpopulation cannot provide for all.

##### Means

innovative technologies and business models combined with rationalized resource use and migration and population controls.

##### Proponents

Geostrategic think tanks and state policies.

##### Example concepts

The tragedy of the Commons, The Population Bomb, Overshoot, Disaster Capitalism, Capitalist Catastrophism.

## Skeptical Circular Discourses

Environmental degradation CANNOT be decoupled from economic growth

Society vision, especially in European civil society sectors. Utrecht University and the Dutch Degrowth Platform have organized a Circular Society Symposium in May 2020; and two Circular Society Forums have been organized by the Hans Sauer Foundation and TU Berlin in 2020 and 2021. These Circular Society visions are gaining greater support, especially from those which have criticized mainstream Circular Economy propositions for focusing too much on economic growth and competitiveness and too little on social and environmental justice. Indeed, many see hegemonic circular economy propositions as forms of greenwashing, which create the illusion that “green technologies” will allow us to overcome biophysical limits of the Earth and continue growing our economies forever. Yet, there is now a clear academic consensus showing that the decoupling of economic growth from environmental degradation is impossible and this technocentric approach to the ecological crisis is thus nothing more than a Circular Economy “fairy tale”.

## **As we are learning from you how different stakeholders use and convey substantially different “Circular Economies”: is that good news or bad news?**

Conceptual diversity is, in itself, not a problem. The issue is if one discourse dominates the others and does not allow for a plural democratic debate to occur on the topic. We now see a situation where governments and businesses only listen to a depoliticized and uncontroversial Circular Economy discourse, that does not address fundamental issues regarding social equity, political empowerment, and the biophysical limits

to economic growth. This influences the debate and prevents a plural, open and fair discussion to occur regarding what circular future we want and how we want to get there. It means that we are not openly talking about key issues such as who pays for the transition, who owns the technologies and innovations and who governs and directs this transformation. This lack of open discussion can easily lead to the imposition of a technocentric circular future – against the wishes and needs of most people. Research on citizen perspectives on circularity has indeed found that most people and civil society organizations have a more holistic and socially inclusive vision than what governments and companies are implementing. A recent survey in France, for example, found that 54% of French citizens prefer a degrowth-oriented ecological transition than a green-growth one; another survey found similar results with 55% of French people preferring a “sufficiency oriented” rather than a “techno-liberal” (15%) or a “traditionalist” (30%) ecological transition. Thus, while technocentric circular economy discourses are a key part of the transition, as they can envision innovative technological solutions, they should not dominate the debate, especially when many other discourses with wide-spread social support exist.

## **How do you see the future development of the Circular Economy concept?**

The Circular Economy is in what some researchers call a “validity challenge” period – this means that it must confront its key challenges and limitations to remain relevant, or it might be rejected as a new form of corporate greenwashing. To prevent this, we must shift our debate from visions of a Circular Economy to those of a holistic Circular Society. A Circular Society not only circulates

material and energy resources, but also circulates wealth, power, knowledge, and technology in radically democratic and redistributive manners.

If the circular economy debate remains stuck in “fairy tales” of “green growth” and doesn’t embrace a strong social justice agenda, it will lose its social appeal and systemic validity, especially considering the rising inequalities and social injustices brought by over thirty years of neoliberal globalization. As we continue to overshoot the ecological limits of the biosphere, and the impacts of climate change rise year after year, it will become harder and harder to argue for failed technocentric solutions. Systemic socio-political change will be necessary, whether we like it or not. Yet, faced with an impending socio-ecological collapse, visions of a Fortress Circular Economy will also become more and more appealing. Indeed, as we confront stronger natural disasters and shortages of key natural resources, many conservative voices will start arguing for greater nationalism and top-down control over resources and populations. As an alternative to this, we must build alliances amongst social movements, academics and civil-society organizations across the world to propose an appealing alternative: a fair, democratic, de-colonial and sustainable Circular Society where nature and humans live in mutual harmony. ●

**If the circular economy debate remains stuck in “fairy tales” of “green growth” and doesn’t embrace a strong social justice agenda, it will lose its social appeal and systemic validity, especially considering the rising inequalities and social injustices brought by over thirty years of neoliberal globalization.**