# THE ECOCATHEDRAL PROCESS

An ongoing utopian tool for reimagining and reconstructing local worlds from socionatural configurations and matristic emotioning

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"Perhaps counterintuitively, slowing down to listen to the world – empirically and imaginatively at the same time – seems our only hope in a moment of crisis and urgency."

—Tsing, Bubandt, Gan, and Swanson, Arts of Living on a Damaged Planet

Artist, art teacher, and cultural philosopher Louis Guillaume Le Roy (1924-2012) starts his 1973 book *Natuur uitschakelen*, *natuur inschakelen* with the epigraph "Je suis incapable d'exister dans un univers qui a détruit la nature" by François Mauriac. In this book, Le Roy sets out a comprehensive utopian theory which he illustrates through two projects he worked on at the time: his proving ground, the Ecocathedral Mildam (1965-at least until 3018) and the public green project, the Ecocathedral/Le Roy garden Heerenveen (1966-1973/2005-at least until 2105), both located in Friesland, the Netherlands. Le Roy's theory and projects are not only in line with the first Club of Rome report, Limits to Growth (1972), the Paris Agreement (2015), and the latest IPCC report (2021). Additionally, they coincide with the political philosophy theory from the book *Designs for the Pluriverse* by anthropologist Arturo Escobar (1952). This paper will explore the Ecocathedral process through the concepts of *transition activism* and *relationality*, *interconnectedness*, and *radical interdependence* by Escobar from their common concern related to the ecological and social crisis and search for a sustainable and ongoing response. It will narrate the Ecocathedral process through ontological design and our deeply entrenched ways of being, knowing, and doing as an ongoing utopian tool for reimagining and reconstructing local worlds from socionatural configurations and matristic emotioning.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> Louis Guillaume Le Roy, *Natuur uitschakelen, natuur inschakelen* (Deventer: Ankh-Hermes BV, 1973), n.p.; Author Jan Woudstra translated the book title into Switch off nature, switch on nature.

<sup>&</sup>lt;sup>2</sup> Arturo Escobar, *Designs for the Pluriverse: Radical Interdependence, Autonomy and the Making of Worlds* (Durham; London: Duke University Press, 2018).

<sup>&</sup>lt;sup>3</sup> "Ontological design stems from a seemingly simple observation: that in designing tools (objects structures, policies, expert systems, discourses, even narratives) we are creating ways of being," Escobar, *Designs for the Pluriverse*, 4.

Designs for the Plusiverse by Escobar was published in 2018 and received good but critical reviews. One of the reviews mentions that for several years, an unpublished version of the manuscript circulated among anthropologists and design researchers, who forwarded it along to one another like a digital sacred text.<sup>4</sup> Another, "if all that sounds utopian, that is partly the point." The book also received criticism for being too credulous, almost too hopeful. One review mentioned the book as provoking but unnecessary complex and wondered if those who would benefit most from the insights, such as designers, would find it unapproachable.<sup>6</sup> Combined with the work of Le Roy, it becomes more insightful through his explanation, photographs, drawings and practice. Although much coincides with the Ecocathedral process, there are differences; as work in progress. For example, Escobar writes from Latin American and European feminists and treats patriarchy as the root of all forms of subordination, including racial, colonial, and imperial. He sees a clear responsibility from the Global North. Le Roy does not treat these themes and writes in 1973 from the environmental deterioration that no one goes unpunished; we all contribute in one form or another. The same review that mentioned the book was unnecessary complex notes, "How do we explain the destructive behaviours to the environment and one another that existed before the Enlightenment and outside European cultures?"8 Only Le Roy and professor of design Wood, as will be treated further in this paper, mention the developed agricultural areas of the Mesolithic and Neolithic periods. Escobar gives a comprehensive and inspiring overview, also called a "working hypothesis", based on many other scholars, and this paper treats some of them. 10 There are many coincides between their work, although some go deeper into sub-topics, such as professor in design theory Willis and professor of design studies Tonkinwise concerning design. Escobar mentioned by introducing one of his chapters that the sources used are diverse literature for diverse audiences; combined with the Ecocathedral process, they narrate a broader story.

The work initiated by Le Roy is described from different disciplines and angles, from architecture, garden and landscape architecture, and art history, with some authors mainly focusing on the theoretical side. The latter is done, for example, by engineer Rosenheinrich, art historian Mous, and landscape architect, horticulturist and associate professor Raxworthy. Raxworthy treats, among other things, the theory's definitions, such as thermodynamics, economics, labour and productivity, artefacts and practices, the gaps and microclimate, and growth and spontaneous vegetation. Several authors touch the subject of utopia. For example, writer, visual artist and architectural historian Van Gerve asserts that Le Roy had an almost utopian vision of 'a new' human. Mous and architect and critic Vollaard place the work in the context of the project *New Babylon* (1956-1974) by Constant (Constant Anton Nieuwenhuys 1920-2005). Vollaard indicates that Le Roy and Constant shared the conviction that human creative potential is unlimited and that these powers can be released in an interactive

<sup>&</sup>lt;sup>4</sup> Keith M. Murphy, review of *Designs for the Pluriverse: Radical Interdependence, Autonomy and the Making of Worlds* by Arturo Escobar, *Anthropological Quarterly* 92, no. 3 (Summer 2019): 949.

<sup>&</sup>lt;sup>5</sup> Joe Bryan, and Diego Melo, review of *Designs for the Pluriverse: Radical Interdependence, Autonomy and the Making of Worlds* by Arturo Escobar, *Journal of Latin American Geography* 19, no. 3 (July 2020): 354.

<sup>&</sup>lt;sup>6</sup> J. Montgomery Roper, review of *Designs for the Pluriverse: Radical Interdependence, Autonomy and the Making of Worlds* by Arturo Escobar. *American Ethnologist* 47, no. 3 (August 2020): 349. https://doi-org.vu-nl.idm.oclc.org/10.1111/amet.12951.

<sup>&</sup>lt;sup>7</sup> Le Roy, Natuur uitschakelen, natuur inschakelen, 145.

<sup>&</sup>lt;sup>8</sup> Roper, review of *Designs for the Pluriverse*, 350.

<sup>&</sup>lt;sup>9</sup> Le Roy, *Natuur uitschakelen, natuur inschakelen*, 44; Wood refers to: ".... early adopters of monocultural farming methods, in Iran 11,000 years ago," in John Wood, *Design for Micro-utopias: Making the Unthinkable Possible* (Abingdon, Oxon; New York, NY: Routledge, 2016), 11.

<sup>&</sup>lt;sup>10</sup> Keith M. Murphy, review of *Designs for the Pluriverse*, 950.

<sup>&</sup>lt;sup>11</sup> Julian Raxworthy, "Building a Wilderness with Louis Le Roy," in *Slow Reader: A Resource for Design Thinking and Practice*, edited by Carolyn F. Strauss, Ana Paula Pais (Amsterdam: Valiz, 2016), 104-107.

<sup>&</sup>lt;sup>12</sup> Anna van Gerve, "Een nieuwe dialoog met de natuur: De positie van Louis Le Roy in ontwikkeling van natuurlijker openbaar groen in de jaren zeventig," *Stadsgeschiedenis* 9, no. 2 (2014): 137.

environment.<sup>13</sup> Le Roy called himself an artist and an 'ecotect' and noted in one of his publications in the urban planning magazine *Plan* that some like to portray him as an 'art teacher' who is so nicely busy with plants.<sup>14</sup> Le Roy received several distinctions for his work: the Zilveren Anjer Award of the Prince Bernhard Foundation (1972), granted the freedom of the city of Heerenveen (1972), honorary member Fédération Européenne des Architectes Paysagistes, and the Oeuvre Award of the Netherlands Foundation for Visual Arts, Design, and Architecture (2000).

In combination with Le Roy's publications, three authors narrate the broadest story about the work: van Gerve, architect and teacher Hendriks and reader in landscape history and theory Woudstra. Van Gerve shows how Le Roy's ideas and practice related to thinking about and dealing with nature in the urban environment at the time. Whereby she treats criticism of the work of ecologists, biologists and landscape architects concerning plant knowledge and the 'correct' application of ecological principles. On the latter, Le Roy himself remarks: no one can know all the habitat factors so well that they can predict whether a species will survive in a particular place for the next half-century without humans' help. Hendriks and Woudstra write more biographically, Hendriks about the public green project, the Ecocathedral/Le Roy garden Heerenveen, where he was a master builder, and Woudstra about the life of Le Roy himself, thereby answering questions that other articles raised. Both van Gerve and Woudstra deal with the context of the time and mention 1970, which was declared the European Nature Conservation Year, among others. Woudstra deals most extensively with the relevance of the work and is the only author who relates the duration of the work to his writing. In one of his papers, he writes that it might be worth trying "....to attempt a preliminary assessment..."

#### Being

The Ecocathedral process started in Le Roy's private garden in Oranjewoud in 1955, expanded with his proving ground in Mildam in 1965, and his first public green project in Heerenveen in 1966; from this practice or tool, he developed and continued to test his theory. His first public green project in Heerenveen generated a stream of articles, interviews, debates, and television documentaries. As a result, more projects followed in Groningen, Eindhoven, Leeuwarden, Delft, and Belgium, Germany, France. All these projects, except in Mildam, Heerenveen and Groningen, have been ended prematurely, and only Mildam has been able to continue developing without interference. Le Roy published, lectured and continued to develop his theory. He was a member of the Netherlands Young People's Nature Study Society (NJN) and the Royal Dutch Society for Study of Wildlife (KNNV) and combined the science and humanities; basing his theory on ecology, biology, chaos science, and scientists such as physical chemist and philosopher of science Ilya Prigogine (1917-2003) and critical social books such as La Société de Spectacle by Guy Debord (1931-1994). Le Roy never started his projects tabula rasa but built on what was there. To increase diversity, he started planting and sowing randomly, after which nature would become the teacher and teach those who work there. Recycled bricks and stones are stacked

<sup>&</sup>lt;sup>13</sup> Piet Vollaard, "Time-based architecture in Mildam. De Ecokathedraal van Louis Le Roy (ca.1970-3000)," in *Louis G. Le Roy: Natuur, cultuur, fusie*, edited by Esther Boukema, Philippe Vélez McIntyre (Rotterdam: NAi Uitgevers, 2002), 21.

<sup>&</sup>lt;sup>14</sup> Louis G. Le Roy, "Natuur uitschakelen, natuur inschakelen," *Plan* 7 (1973): 46.

<sup>&</sup>lt;sup>15</sup> Louis G. Le Roy, "Quotations." In *Louis G. Le Roy: Natuur, cultuur, fusie*, edited by Esther Boukema, Philippe Vélez McIntyre (Rotterdam: NAi Uitgevers, 2002), 36.

<sup>&</sup>lt;sup>16</sup> Gerve, "Een nieuwe dialoog met de natuur," 132; Jan Woudstra, "The Eco-cathedral: Louis Le Roy's Expression of a 'Free Landscape Architecture'," *Die Gartenkunst* 20, no. 1 (2008): 188.

<sup>&</sup>lt;sup>17</sup> Jan Woudstra, "From Counter Culture to Eco-cathedral: The Continuing Legacy of Louis Guillaume Le Roy," *Dutch Crossing* 27, no. 2 (2003): 276, https://doi.org/10.1080/03096564.2003.11730837.

<sup>&</sup>lt;sup>18</sup> Rob Hendriks, "Architectuur als proces," in *Leven en werken in ruimte en tijd*, Louis Guillaume Le Roy, Piet Vollaard, Wim van der Kaaden, Rob Hendriks, and Tineke Schoenmaker (Heerenveen: Stichting TIJD, 2006), 129.

<sup>&</sup>lt;sup>19</sup> Le Roy, Natuur uitschakelen, natuur inschakelen, 113.

together without mortar or machines to create architectural forms corresponding to the growth of the whole. Mildam started as a couple of hectares of over-fertilized pasture with a small piece of production forest and developed into the Ecocathedral process built on a layer and with building waste.<sup>20</sup> The TIME Foundation continues the Ecocathedral process in practice and theory, founded by Le Roy and his wife Inge in 2001.<sup>21</sup> Accordingly, the Ecocathedral process remains a tool and can only be described in its temporal appearance (fig. 1).



**Figure 1.** The Ecocathedral Mildam by Louis Guillaume Le Roy, 1965-at least until 3018. Photograph by Peter Wouda, the master-builder of the Ecocathedral/Le Roy Garden Heerenveen, 28 September 2002.

"Living in a time of planetary catastrophe thus begins with a practice at once humble and difficult: noticing the world around us." Raxworthy described Mildam as "a whole lot of piles of bricks in a forest" with the overall "appearance of a ruin or an archaeological site set in a forest." In the oldest part, symbiogenesis is visible, the co-making of living things which creates a double meaning. On the one hand, a beautiful unknown and consciously chosen entanglement of nature and temporal architectural forms changing in daylight and seasons and, on the other, a form of decay, both part of the cyclic renovation of life and work in progress. Nature pushes the architectural forms upwards and sideways, and stones become undulating or fall, creating a confronting 'feel'. This 'feel' differs from the adjacent forest, which evokes tranquillity and relaxation, possibly due to recognition. Escobar writes that once in the modern world, the world comes to be increasingly built without attachment to

<sup>&</sup>lt;sup>20</sup> The area of the Ecocathedral Mildam differs between consulted sources from 1.4 to 4 hectares.

<sup>&</sup>lt;sup>21</sup> Rob Hendriks, "Leren van de Kennedylaan," in *Leven en werken in ruimte en tijd*, Louis G. Le Roy, Piet Vollaard, Wim van der Kaaden, Rob Hendriks, and Tineke Schoenmaker (Heerenveen: Stichting TIJD, 2006), 154.

<sup>&</sup>lt;sup>22</sup> Anna Tsing, Nils Bubandt, Elaine Gan, and Heather Anne Swanson, eds., *Arts of Living on a Damaged Planet: Ghosts and Monsters of the Anthropocene* (Minneapolis: University of Minnesota Press, 2017), M7.

<sup>&</sup>lt;sup>23</sup> Raxworthy, "Building a Wilderness with Louis Le Roy," 100.

<sup>&</sup>lt;sup>24</sup> Describing the 'feel' is inspired by Gillian Rose, *Visual Methodologies: An Introduction to the Interpretation of Visual Materials*, 2<sup>nd</sup> ed. (Los Angeles: Sage, 2010 [2001]), 48-49.

<sup>&</sup>lt;sup>25</sup> The Federal Forest Service (Staatsbosbeheer) manages the adjacent forest.

place, nature, landscape, space and time.<sup>26</sup> To demonstrate the confronting reality of his words, a botanical expert needs to explain which plants and trees I see, what causes the difference in the undergrowth, and why the small teasel occurs in an otherwise acid environment; the leaching of lime mortar.<sup>27</sup> The confrontational decay and unattachment could be part of the failure of the projects underlying the reason Hendriks asserts: that the projects cannot tolerate the contemporary reality of manageability and control.<sup>28</sup> As Le Roy indicates, we are forced to Sisyphus labour. We need to repeat it endlessly to make things look orderly and healthy.<sup>29</sup> We hinder a development that nature would choose by our entrenched and unsustainable ways of being, knowing, and doing instead of working or moving with.<sup>30</sup> Therefore, the Ecocathedral process is not only a form of architecture but also education, research and politics, a tool for reimaging and reconstructing, and transition activism.<sup>31</sup>

### **Knowing**

The Ecocathedral process coincides with two concepts Escobar indicates as part of transition activism; the first concept is design for transitions.<sup>32</sup> Escobar treats design as an ethical praxis of world-making.<sup>33</sup> In his book, *Designs for the Pluriverse*, pluriverse refers to a world where many worlds fit.<sup>34</sup> In his 1973 book, Le Roy demonstrates the strength of a pluriverse or, as he describes it, a system of small elements through a photograph of broken window panes (fig. 2). This system of small elements or his double culture will be outlined in the following paragraphs. Design for transitions is about social innovation and transition to a new civilization with a broad view on transitions being "the great transition," as Escobar explains. Le Roy's ideas are in line. He felt that a thorough and essential change of mentality was necessary, a change of mentality in theory, but above all in practice. Design for transitions corresponds with the word eco within the Ecocathedral process. Le Roy indicates eco as ecological or natural dynamic processes in space and time.<sup>35</sup> He posits that the time factor is important in writing "Nature is not to be hasted!" As a result, he suggests development possibilities of society should accept the organizational form of nature as a starting point in response to the short-termism of politics. Architect Hendriks notes that these processes will always cause friction with the prevailing political systems.<sup>37</sup> For them, what can be achieved within a policy term is more interesting than in a hundred years. Vollaard agrees when he indicates that Le Roy's public green projects often failed because it was thought that spontaneous growth could also be realized at an accelerated pace.<sup>38</sup> As a result, transition activism through design for transitions is in the time factor of the work, which Le Roy emphasized in addition to the desired duration of his projects by founding the TIME foundation.

<sup>26</sup> Escobar, *Designs for the Pluriverse*, 12.

<sup>&</sup>lt;sup>27</sup> The botanical expert is Victor van Pieterson, an ecological landscape gardener who works on projects such as "The herbarium of the Schilderswijk," a district in the centre of The Hague: https://hetherbariumvandeschilderswijk.com/.

<sup>&</sup>lt;sup>28</sup> Hendriks, "Architectuur als proces," 125.

<sup>&</sup>lt;sup>29</sup> Le Roy, Natuur uitschakelen, natuur inschakelen, 20, 91, 95.

<sup>&</sup>lt;sup>30</sup> Haraway uses the concept of sympoiesis or making-with in: Donna Jeanne Haraway, *Staying with the Trouble: Making Kin in the Chthulucene* (Durham: Duke University Press, 2016), 5.

<sup>&</sup>lt;sup>31</sup> Education, research, and politics is based on a sentence from an interview with Bruno Latour in Florentijn van Rootselaar, *Filosofisch veldwerk. Grote filosofen van nu over leven in barre tijden* (Utrecht: Klement, 2018), 75.

<sup>&</sup>lt;sup>32</sup> Escobar, *Designs for the Pluriverse*, 20.

<sup>&</sup>lt;sup>33</sup> Escobar, *Designs for the Pluriverse*, 21.

<sup>&</sup>lt;sup>34</sup> Escobar, *Designs for the Pluriverse*, 4.

<sup>&</sup>lt;sup>35</sup> Ben J. Veld, "Gesprekken met Louis Le Roy, deel I," *Oase* 6, no. 2 (1996): 7.

<sup>&</sup>lt;sup>36</sup> Translated quote: "De natuur laat zich niet haasten," Le Roy, *Natuur uitschakelen, natuur inschakelen*, 14.

<sup>&</sup>lt;sup>37</sup> Hendriks, "Architectuur als proces," 124.

<sup>&</sup>lt;sup>38</sup> Piet Vollaard, "Time-based architecture in Mildam," 22.



**Figure 2.** Translation of a part of the original caption: "Children have learned through play that a system made up of small elements is difficult to destroy. The smaller the segments (small scale) and the more varied the steel system is enclosing these segments, the greater the resistance to destructive forces. If this small-scale system is replaced by a large-scale one (one pane without tracing), one stone by one child is enough to destroy the entire system." Photograph by an unnamed photographer. Louis G. Le Roy, *Natuur uitschakelen*, *natuur inschakelen* (Deventer: Ankh-Hermes BV, 1973), 179.

Design for autonomy is the second concept that coincides with the Ecocathedral process from Escobar's concept of transition activism. Escobar indicates that autonomous design is the relation between design, politics, and life and autonomy is the key to autopoiesis or the self-creation of living systems.<sup>39</sup> Every community practices the design of itself, with and within communities.<sup>40</sup> Design for autonomy corresponds with the word cathedral, which Le Roy used as a metaphor for human's creative potential development processes from his desire for a humane society. 41 He translated this into resident participation and self-organising open-plan processes, ultimately authorless.<sup>42</sup> Le Roy mentions that hundreds of people live in cities who know and can do a lot but do not get the chance to do something with their acquired knowledge, which means a loss for the ecosystem. 43 Suppose these people would get the opportunity to be productive in their spare time within an Ecocathedral process. In that case, the energy loss from the ecosystem could be reduced, creativity could be stimulated, diversity could be increased, and the living environment improved. 44 Le Roy starts from the homo ludens, the playing man, who should adopt a modest and accompanying attitude towards nature.<sup>45</sup> The expertise of the inexpert is the clumsy, the capricious, the intuitive, the instinctive, and the emotional.<sup>46</sup> According to Le Roy, everyone could participate. Van Gerve indicates that by letting nature and man take their course and forgoing design and control, a dynamic instead of a static approach, Le Roy foresaw a complex system would develop in which different processes were intertwined; a self-regulating system.<sup>47</sup> As with the

<sup>&</sup>lt;sup>39</sup> Escobar, Designs for the Pluriverse, 5, 6.

<sup>&</sup>lt;sup>40</sup> Escobar, *Designs for the Pluriverse*, 5, 16.

<sup>&</sup>lt;sup>41</sup> Veld, "Gesprekken met Louis Le Roy," 7; Gerve, "Een nieuwe dialoog met de natuur," 136.

<sup>&</sup>lt;sup>42</sup> Hendriks, "Architectuur als proces," 130, 132.

<sup>&</sup>lt;sup>43</sup> Le Roy, "Natuur uitschakelen, natuur inschakelen," 45.

<sup>&</sup>lt;sup>44</sup> Le Roy, Natuur uitschakelen, natuur inschakelen, 143.

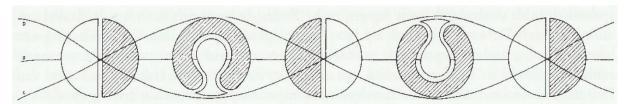
<sup>&</sup>lt;sup>45</sup> Le Roy, *Natuur uitschakelen, natuur inschakelen,* 7; Le Roy, "*Natuur uitschakelen*, natuur inschakelen," 64.

<sup>&</sup>lt;sup>46</sup> Le Roy, Natuur uitschakelen, natuur inschakelen, 140.

<sup>&</sup>lt;sup>47</sup> Gerve, "Een nieuwe dialoog met de natuur," 147.

time factor, participation was not always understood. Residents in the vicinity of his public green projects gave little response, and the municipal park service was often deployed. Transition activism from autonomous design is in the self-organisation and self-regulation processes of creativity, whereby Escobar adds that autonomy is an expression of radical interdependence, not its negation.

In addition to the concept of transition activism, the Ecocathedral process coincides with Escobar's concepts of relationality, interconnectedness and radical interdependence. Escobar treats interconnectedness and respect for the relational fabric of all life from feminist perspectives and matriarchy. He refers to processes of "matriarchalization," the "defending and re/creating relational and cooperative modes of living with humans and nature."48 Whereby he indicates that the notion of interconnectedness of all life, in terms of relationality, is central to ecology and emphasises that the notion of relationality goes beyond dualisms such as nature and culture, offering a different way of re/conceiving the world. 49 Both Escobar and Le Roy are critical of technology. Le Roy wanted to initiate a process from free energy, the energy with which nature builds itself, without technology.<sup>50</sup> He aimed to create integrated networks of artificial ecosystems - a double culture - in search of a balanced relationship between monoculture and nature, based on restoring the relationship between humans and nature.<sup>51</sup> Within these artificial ecosystems, natural processes and human intervention could work together as a symbiosis between nature and culture.<sup>52</sup> Le Roy strove for a balance between plants, animals, soil, climate and human influences, between all the elements in an ecosystem while striving for climax vegetation.<sup>53</sup> Consequently, the Ecocathedral process ties in with the words Escobar describes as characteristic of matristic cultures, such as participation, collaboration, inclusion and the alwaysrecurrent cyclic renovation of life.<sup>54</sup> Simultaneously it represents the decay of control, the consequence of the actions that characterise patriarchal culture, including control of the natural world.<sup>55</sup> Instead of matristic and patriarchal cultures, Le Roy used the terms culture and double culture, which are involved in pendulum movements in his view of history (fig. 3). There are transitions from dominant and stable cultures to unstable transition phases in the cyclical renovation of life.<sup>56</sup>



**Figure 3.** Drawing by Le Roy. Pendulum movements of culture and double culture (or counterculture). Huub Mous, "Het organisch universum: Over tijd en tegencultuur bij Louis G. Le Roy," in *Het technicum en de mondiale contraculturen*, Huub Mous, Louis G. Le Roy, and Bert Dalmolen (Heerenveen: Stichting TIJD, 2007), 36.

Additionally, Escobar's concepts of *relationality*, *interconnectedness* and *radical interdependence* connect to the relationship with the earth within the Ecocathedral process. In his theory,

<sup>&</sup>lt;sup>48</sup> Escobar, *Designs for the Pluriverse*, 10, 16-17.

<sup>&</sup>lt;sup>49</sup> Escobar, Designs for the Pluriverse, 3, 12, 20.

<sup>&</sup>lt;sup>50</sup> Veld, "Gesprekken met Louis Le Roy," 7.

<sup>&</sup>lt;sup>51</sup> Le Roy, *Natuur uitschakelen, natuur inschakelen*, 5, 11, 50, 58, 142; Le Roy, "Natuur uitschakelen, natuur inschakelen," 40; Le Roy uses the word monocultures for cities and the countryside as a production area for our food; Jan Woudstra, "The Eco-cathedral," 187; Although Escobar writes about going beyond dualism, this paper describes terms such as nature, culture, human and ecology as described in the consulted sources.

<sup>&</sup>lt;sup>52</sup> Hendriks, "Architectuur als proces," 126.

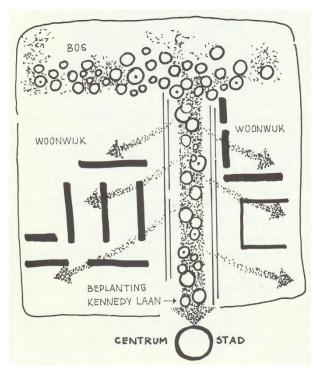
<sup>&</sup>lt;sup>53</sup> Gerve, "Een nieuwe dialoog met de natuur," 141.

<sup>&</sup>lt;sup>54</sup> In a patriarchal culture, both women and men are patriarchal, and in matristic culture, both men and women are matristic. A citation from the work of Humberto Maturana and Gerda Verden-Zöller, Escobar, *Designs for the Pluriverse*, 12.

<sup>&</sup>lt;sup>55</sup> Escobar, *Designs for the Pluriverse*, 13.

<sup>&</sup>lt;sup>56</sup> Huub Mous, "Het organisch universum: Over tijd en tegencultuur bij Louis G. Le Roy," in *Het technicum en de mondiale contraculturen*, Huub Mous, Louis G. Le Roy, and Bert Dalmolen (Heerenveen: Stichting TIJD, 2007), 36.

Le Roy indicates the earth as the endpoint. He argues that if all life forms are and remain dependent in their existence on the continued existence of an earth layer, we should manage the earth as a food source optimally.<sup>57</sup> It is noteworthy that the authors consulted as a secondary source do not mention this relationship, as Le Roy indicates it several times in his 1973 book, as does his publisher in the preface.<sup>58</sup> The epigraph by Mauriac also refers to this relationship.<sup>59</sup> In order to guarantee this relationship, Le Roy's theory encompasses more than the artificial ecosystems of Ecocathedrals. His double culture consisted of networks that could connect buffer zones to nature reserves. As a result, flora and fauna of nature reserves would be able to penetrate the city via the buffer zones and the Ecocathedrals (fig. 4). The buffer zones would consist of varied ramparts, small-scale agricultural cultures, allotment complexes and small-scale architecture, responding to a human scale, the distance between producer and consumer, and the prevailing housing shortage (fig. 5).<sup>60</sup> In his 1973 book, Le Roy also focuses on gardens in a way understandable to a layperson in ecology. He treats concepts such as humus formation, microclimate, soil bacteria, cycles, and the loss of organic substances utilizing a toad, earthworm and snail, a celandine, elder and nettle, a farmer, a shepherd, and like Escobar, indigenous cultures. In addition to the earth as a food source, Le Roy treats water based on the example of Tantalus, a son of Zeus, to show that thirst and hunger are unbearable, emphasizing our relationship with the earth and our radical dependence.<sup>61</sup>



**Figure 4.** Drawing by Le Roy. Louis G. Le Roy, *Natuur uitschakelen, natuur* inschakelen (Deventer: Ankh-Hermes BV, 1973), 190. Translation: stad/city; centrum/centre; woonwijk/residential area; bos/forest.

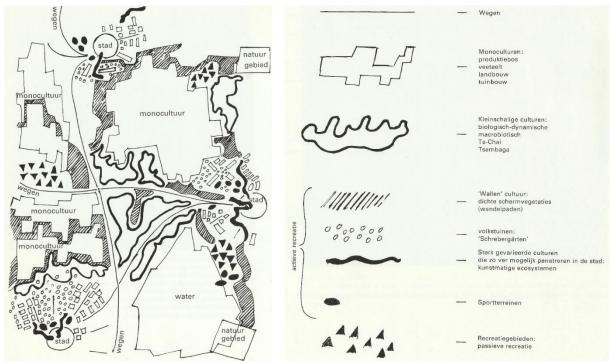
<sup>&</sup>lt;sup>57</sup> Le Roy, Natuur uitschakelen, natuur inschakelen, 31.

<sup>&</sup>lt;sup>58</sup> Le Roy, Natuur uitschakelen, natuur inschakelen, 31, 44, 158.

<sup>&</sup>lt;sup>59</sup> Le Roy, Natuur uitschakelen, natuur inschakelen, n.p.

<sup>&</sup>lt;sup>60</sup> Le Roy, Natuur uitschakelen, natuur inschakelen, 134.

<sup>&</sup>lt;sup>61</sup> Le Roy, Natuur uitschakelen, natuur inschakelen, 158.



**Figure 5.** Drawing by Le Roy. Louis G. Le Roy, *Natuur uitschakelen, natuur* inschakelen (Deventer: Ankh-Hermes BV, 1973), 184-185. Translation left drawing: stad/city; wegen/roads; water/water; monocultuur/monoculture; natuur gebied/nature reserve. Translation right drawing, from the top down: Roads; Monoculture: production forest, animal husbandry, agriculture, horticulture; Small-scale agricultural cultures: biodynamic, macrobiotic, Ta-Chai, Tsembaga; Varied ramparts: dense screen vegetation (walking paths); Allotment complexes: 'Schrebergärten'; Highly varied cultures that penetrate the city: artificial ecosystems; Sports fields; Recreation areas: passive recreation.

#### **Doing**

"Where did it all begin ....? What are the stakes? Can "they" be stopped?" Solely Le Roy and Wood refer to the Mesolithic and Neolithic periods, as mentioned earlier. By merging primary and secondary sources, a gradual progression can be seen roughly from monotheistic religions, the Reformation, Enlightenment Europe, rationalism, humanism, individualisation, the harnessing of energy, the progressive elimination of space and time, the Industrial Revolution, the dominance of the machine (fig. 6), Taylorism, Fordism, the Great Accelerations of the post-World War II era, including of human numbers, neoliberalism, globalisation, the ideas of continuous progress, growth, and profit to mass production and mass consumption. Tonkinwise argues that dominant forms of consumerist living depend on design. Escobar agrees that "design is central to the structures that hold in place the contemporary so-called modern world" and sees patriarchal capitalist modernity broadly as the cultural-philosophical armature from which design emerges. He emphasises, "much of what goes on under the guise of design at present involves intensive resource use and vast material destruction." Willis summarises that if "everything is designed," and "the designed goes on designing," design "predominantly continues to drive unsustainability forward into defuturing," or as Le Roy noted: the switching off of humans, the switching off of nature.

<sup>&</sup>lt;sup>62</sup> Escobar, *Designs for the Pluriverse*, 7.

 $<sup>^{63}</sup>$  Cameron Tonkinwise, "Design for Transitions – for and to what,"  $Design\ Philosophy\ Papers\ 13$ , no. 1 (2015): 2, https://doi.org/10.1080/14487136.2015.1085686.

<sup>&</sup>lt;sup>64</sup> Escobar, Designs for the Pluriverse, 1, 3.

<sup>&</sup>lt;sup>65</sup> Anne-Marie Willis, ed., *The Design Philosophy Reader* (London; New York: Bloomsbury Visual Arts, 2019), 3; Le Roy, *Natuur uitschakelen, natuur inschakelen*, 111.



Figure 6. Book cover by Le Roy. Louis G. Le Roy, Natuur uitschakelen, natuur inschakelen (Deventer: Ankh-Hermes BV, 1973). Translation title: Switch off nature, Switch on nature.

Escobar begins his introduction of *Designs for the Pluriverse* with design activist Victor Papanek (1923-1998). In his last book, in 1995, Papanek shares that he feels "very strongly that the present [worldwide] concern for the environment cannot now be dismissed as a fashion as it was during the early 1970s ...."66 In his 1973 book, Le Roy writes more than once and with exclamation marks that he finds it unimaginable that although we are increasingly confronted with the adverse consequences of our actions, we keep going.<sup>67</sup> Escobar sees the cause underlying their concerns in patriarchal alchemy. He indicates that "patriarchal alchemy engulfs most aspects of life; as individuals, we see ourselves in terms of self-realization that is also process of self-alchemization, of the always re/making ourselves through production and self-improvement."68 Consequently, patriarchal alchemy resonates with the confronting 'feel' of decay related to manageability and control and connects to emotioning. According to Escobar "it is emotioning that constitutes human history .... because it is our desires that determine the kinds of worlds we create."69 Tonkinwise shares a different view that can coexist. He indicates "whilst our societies are in crisis, these crises are not being, and never will be, experienced in sufficient motivating ways."70 "These are slow-motion crashes with which humans, especially while still moderately wealthy, are adept at coping."71

"Can "they" be stopped?" Tonkinwise, Irwin, and Kossoff emphasize in their 2020 paper that the "core challenge of the current era is the transition towards sustainability." They write, "it is a project that is at once political, social, economic, cultural, scientifical and technological: every

<sup>&</sup>lt;sup>66</sup> Victor Papanek, The Green Imperative: Ecology and Ethics in Design and Architecture (London: Thames and Hudson, 1995), 9.

<sup>&</sup>lt;sup>67</sup> Le Roy, Natuur uitschakelen, natuur inschakelen, 40, 100.

<sup>&</sup>lt;sup>68</sup> Escobar, Designs for the Pluriverse, 11.

<sup>&</sup>lt;sup>69</sup> Escobar, Designs for the Pluriverse, 13.

<sup>&</sup>lt;sup>70</sup> Tonkinwise, "Design for Transitions," 1.<sup>71</sup> Tonkinwise, "Design for Transitions," 2.

<sup>&</sup>lt;sup>72</sup> Terry Irwin, Cameron Tonkinwise, and Gideon Kossoff, "Transition Design: The Importance of Everyday Life and Lifestyles as a Leverage Point for Sustainability Transitions," Cuadernos del Centro de Estudios en Diseño y Comunicación 105 (2020): 67.

dimension of human affairs is challenged by the need for transition, and, as various issues reach critical points (climate, inequity, resource depletion, biodiversity, etc.) the urgency with which this needs to happen increases."<sup>73</sup> There is more that coincides with the Ecocathedral process and Le Roy's writings, such as Haraway's mentioning of population control. Moreover, Escobar's mentioned reversing the devaluation of emotioning in relation to reason relating to the confronting 'feel' of decay from the temporal architectural forms and unattachment. Furthermore, most of the consulted sources coincide with the Ecocathedral process in their relation to time as ongoing as the core challenge requires 'to stay with the trouble.' Additionally, they coincide in moving beyond the disciplinary and recovering future imagining or utopian capacity as Tsing, Bubandt, Gan, and Swanson suggest "co-species survival requires arts of imagination as much as scientific specifications."

#### Utopia

The word utopia was first used by Sir Thomas More (1478-1535) in his 1561 novel *Utopia*. The word contains two senses that together establish a paradox. Reader in history and theory of architecture, Coleman explains that utopia refers to the Greek *ou* (no) and *eu* (good) combined with *topos* (place). Utopia connotes both "a good place" and a "no place," a good no place that seems to inscribe within itself the most common criticism of it: an impossibility as a placeless place, or a daydream, a romantic and unreachable fantasy. Professor emeritus of political science Sargent defines the standard usage of utopia as follows:

A non-existing society described in considerable detail and normally located in time and space that the author intended a contemporary reader to view as considerably better than the society in which the reader lived.<sup>79</sup>

Scientist de Geus examined ecological utopias. He indicates that the history of political theories has a long tradition of utopia thinking, a tradition that goes back to Plato (427-347 BCE). According to Wood, some see Plato's Atlantis as a template for urban and social planning. De Geus indicates that ecological utopias endeavour to produce a coherent and 'holistic' approach to environmental problems, which he describes as a creative and innovative 'counter-image' of an alternative society. He mentions the work of Henry David Thoreau (1817-1862) and William Morris (1834-1896) as good examples of ecological utopias. According to de Geus, in their time, both already had an eye for 'modern' problems such as environmental pollution, wastage of raw materials, and the urbanization process, and Morris directly connected political theory, art and ecology.

<sup>&</sup>lt;sup>73</sup> Irwin, Tonkinwise, and Kossoff, "Transition Design," 67.

<sup>&</sup>lt;sup>74</sup> Haraway, Staying with the Trouble, 6; Le Roy, Natuur uitschakelen, natuur inschakelen, 117, 120.

<sup>&</sup>lt;sup>75</sup> Escobar, *Designs for the Pluriverse*, 14.

<sup>&</sup>lt;sup>76</sup> Tsing, Bubandt, Gan, and Swanson, Arts of Living on a Damaged Planet, M8.

<sup>&</sup>lt;sup>77</sup> Nathaniel Coleman, "The Problematic of Architecture and Utopia," *Utopian Studies* 25, no. 1 (2014): 13, https://doi-org.vu-nl.idm.oclc.org/10.5325/utopianstudies.25.1.0001.

<sup>&</sup>lt;sup>78</sup> Coleman, "The Problematic of Architecture and Utopia," 13; Marius de Geus, "Chapter 4 Utopian Sustainability: Ecological Utopianism," in *The Transition to Sustainable Living and Practice (Advances in Ecopolitics, Vol. 4*), eds. Leonard, L. and Barry, J. (Bingley: Emerald Group Publishing Limited, 2009), 78, https://doi-org.vu-nl.idm.oclc.org/10.1108/S2041-806X(2009)0000004007.

<sup>&</sup>lt;sup>79</sup> Lyman Tower Sargent, "The Necessity of Utopian Thinking: A Cross-National Perspective," in *Thinking Utopia: Steps into Other Worlds*, edited by Jörn Rüsen, Michael Fehr, and Thomas W. Rieger (New York: Berghahn Books, 2005), 11.

<sup>&</sup>lt;sup>80</sup> Marius de Geus, *Ecologische Utopieën: Ecotopia's en het Milieudebat* (Utrecht: Van Arkel, 1996), 13.

<sup>&</sup>lt;sup>81</sup> Wood, Design for Micro-utopias, 3.

<sup>82</sup> Geus, "Chapter 4 Utopian Sustainability," 78, 96.

<sup>83</sup> Geus, Ecologische Utopieën, 78, 82.

In his 1984 book, Le Roy notes that although he fantasizes and wants to be utopian, his utopia is not at the limit of our society as most utopias.84 Instead, he believes every city should emerge as a product of the creative potential of all its inhabitants. According to Le Roy, contemporary society is a preformed milieu by a few for millions where humans are spectators instead of participants decoupled from space and time. 85 He saw urban design as mass production, creating ways of living where it has been made impossible for citizens to close any part of their house to be able to contemplate what needs to be done. 86 Next to urban design, Le Roy saw a cause in the mechanized work process, increasingly replacing humans' natural energy input and in which humans often function as part of an assembly line system. 87 Le Roy's cause and effect coincide with Escobar and Wood. Escobar indicates that technology not only became profoundly destructive in material and cultural terms but finally disabled personal and collective autonomy, and progressively, humans experience a distancing from all life.<sup>88</sup> In his 2007 book, Wood notes that, fortunately, many people have begun to notice how fragmented, dysfunctional, alienated and disconnected our society has become.<sup>89</sup> Continuing on the utopian ideas of le Roy, the TIME Foundation website mentions that one of the objectives is to give substance to the idea of creating a planning-free zone of one per cent of the municipal territory with the Ecocathedral process as its destination.90

Sargent argues that continued utopian thinking is essential to overcoming the dystopian reality and, at the same time, is problematic. It is problematic because utopia thinking is time-bound and place-bound; one utopia does not fit all. Escobar agrees when he writes that it is "important to recover our future imagination capacity" to "counter the ontology of defuturing" from matristic futuring. Matristic futuring is futuring from ".... relational visions that highlight the re/creation of worlds based on the horizontal relation with all forms of life [and] respecting human embeddedness in the natural world. Hatristic futuring opposes patriarchal futuring from technology, creating a posthuman world. De Geus describes several ways in which utopias could contribute: they can give inspiration, provoke imagination and stimulate creative ideas; raise awareness, disturb and set in motion; supply meaningful questions, points of reference, and perspectives; help determine one's position and orientate oneself; enable to reflect, and allow to observe the world in completely different ways, through trial and error. Accordingly, utopias can help to notice the world around us, lay bare the confrontational 'feel' of unattachment and decay, and provide an interpretive framework that enables us to recognise our deeply entrenched ways of being, knowing, and doing.

In conclusion, this paper explored the Ecocathedral process through ontological design as a utopian tool for reimagining and reconstructing local worlds from socionatural configurations. The concepts of design for transitions and design for autonomy were related to the words eco and cathedral; the former represents natural processes in space and time. The latter is a metaphor for humans' creative potential development processes. The word Ecocathedral corresponds with a duration of ongoingness and participation, self-organizing open-plan processes. The concepts of relationality, interconnectedness and radical interdependence are related to restoring the relationship between humans and nature in a

<sup>84</sup> Louis G. Le Roy, *Uilenspiegeltjes* (Deventer: Ankh-Hermes BV, 1984), 10.

<sup>85</sup> Louis Le Roy, *Ecokathedraal* (Leeuwarden: Friese Pers Boekerij, 2000), 85.

<sup>&</sup>lt;sup>86</sup> Le Roy, Natuur uitschakelen, natuur inschakelen, 110, 117.

<sup>87</sup> Le Roy, Natuur uitschakelen, natuur inschakelen, 10-11.

<sup>&</sup>lt;sup>88</sup> Escobar, *Designs for the Pluriverse*, 7, 12.

<sup>&</sup>lt;sup>89</sup> Wood, Design for Micro-utopias, 12.

<sup>&</sup>lt;sup>90</sup> Stichting TIJD, "Doelstelling," accessed August 16, 2022, https://www.stichtingtijd.nl/doelstelling.

<sup>&</sup>lt;sup>91</sup> Sargent, "The Necessity of Utopian Thinking," 6, 9.

<sup>&</sup>lt;sup>92</sup> Sargent, "The Necessity of Utopian Thinking," 4.

<sup>93</sup> Escobar, Designs for the Pluriverse, 16-17.

<sup>&</sup>lt;sup>94</sup> Escobar, *Designs for the Pluriverse*, 17.

recurrent cyclic renovation of life and our relationship with the earth from radical dependence. It argued by summarizing what coincides between the consulted sources and the Ecocathdreal process: that design is crucial in moving towards sustainability; the devaluation of emotioning in relation to reason should be reversed; the time perspective should be ongoing; moving beyond the disciplinary is required, as recovering future imagination or utopian capacity. Le Roy initiated a process in theory and practice in the 1960s out of urgency, which has become only more urgent ever since. As this paper only touches on emotioning and moving beyond the disciplinary, it would be interesting and of personal interest to connect design to psychology and not only begin with a practice at once humble and difficult: noticing the world around us. Alongside perhaps counterintuitively, by slowing down, work on countercultures by counter-images.

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