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Stories of Transformation: A Cross-Country Focus Group Study on Sustainable Development and Societal Change

Victoria Wibeck ^{1,*}, Björn-Ola Linnér ¹ , Melisa Alves ², Therese Asplund ¹ , Anna Bohman ¹, Maxwell T. Boykoff ³, Pamela M. Feetham ⁴, Yi Huang ⁵, Januario Nascimento ², Jessica Rich ⁶, Charles Yvon Rocha ², Franco Vaccarino ⁴ and Shi Xian ⁷

¹ Department of Thematic Studies—Environmental Change, Centre for Climate Science and Policy Research, Linköping University, 58183 Linköping, Sweden; bjorn-ola.linner@liu.se (B.-O.L.); therese.asplund@liu.se (T.A.); anna.bohman@liu.se (A.B.)

² ADAD—Associação para a Defesa do Ambiente e Desenvolvimento (Association for the Defense of the Environment and Development), 7600 Praia, Cabo Verde; melisa.l.alves@gmail.com (M.A.); januariorafa@gmail.com (J.N.); cyrochacv@gmail.com (C.Y.R.)

³ Center for Science and Technology Policy Research, Cooperative Institute for Research in Environmental Sciences, University of Colorado-Boulder, Boulder, CO 80309, USA; boykoff@colorado.edu

⁴ School of Communication, Journalism and Marketing, Massey University, 4410 Palmerston North, New Zealand; P.M.Feetham@massey.ac.nz (P.M.F.); F.A.Vaccarino@massey.ac.nz (F.V.)

⁵ School of Environmental Science & Engineering, Guangzhou University, Guangzhou 510006, China; huangyi@gzhu.edu.cn

⁶ Department of Communication and Media, Merrimack College, North Andover, MA 01845, USA; richj@merrimack.edu

⁷ School of Geographical Sciences, Guangzhou University, Guangzhou 510006, China; geoshixian@gzhu.edu.cn

* Correspondence: victoria.wibeck@liu.se

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Abstract: Societal transformation is one of the most topical concepts in sustainability research and policy-making. Used in many ways, it indicates that nonlinear systematic changes are needed in order to fully address global environmental and human development challenges. This paper explores what sustainability transformations mean for lay focus group participants in Cabo Verde, China, Fiji, Sweden, and the USA. Key findings include: (a) Tightly linked to interpersonal relationships, sustainability was seen as going beyond the Sustainable Development Goals to include a sense of belonging; (b) transformations were framed as fundamental changes from today's society, but most participants stated that transformation pathways need to splice new structures into the old; (c) new technologies are key engines of change. Yet, the most common drivers were awareness, education, and knowledge sharing; and (d) regardless of whether state-centric or decentralized governance was preferred, personal action was seen as essential. The focus groups displayed a shared understanding across the geographical settings; a common realization of profound sustainability predicaments facing societies across the world; and a desire for fundamental change towards a more sustainable way of life.

Keywords: societal transformation; sustainability; sense-making; focus groups; climate change; sustainable development goals; UN 2030 Agenda

1. Introduction

Societal transformation towards sustainability is currently one of the most topical concepts in sustainable development research and policy-making, [1–12], as it becomes increasingly clear that incremental change will not suffice to address global challenges such as climate change [4,5,8], rapid urbanization, increasing energy demands, and the pressing need for poverty reduction [12]. A growing number of studies are focusing on the need to conceptualize transformations [2,3,5,6,10], exploring governance aspects [11] or looking into the justice dimensions of transformations [1].

Societal transformations typically refer to profound and enduring nonlinear systemic changes, involving social, cultural, technological, political, economic, and/or environmental processes [4,6,11,13–16]. However, we note large variations in how the concept is understood across the world, among experts as well as among lay publics [1,13]. Even though the discussions have so far mostly involved experts and policy-makers, by definition, societal transformation involves political, social and cultural dimensions that concern citizens around the world [13].

So, what do transformations towards sustainability actually mean for people living in regions where these concepts feature prominently in policy and action, and in regions which are particularly vulnerable to global changes? Exploring transformation by analyzing how laypeople make sense of problems, goals, and action alternatives adds important voices to global policy debates and increases our understanding of the processes through which transformations could take place in different settings. Such analysis also sheds light on the multiple meanings of sustainability and sustainable development as goals of transformative change [17,18]. Previous research into societal transformations towards sustainability has predominantly been conducted in the global North [13]. Yet, with the global transformative aspirations of Agenda 2030, there is a need to enhance our understanding of what such transformations entail for citizens around the world.

This paper offers a novel contribution to the emerging literature on sustainability transformations, by focusing specifically on lay sense-making and by providing empirical data from sites with different vulnerabilities to climate change and other sustainability challenges, as well as different socioeconomic and political preconditions: Praia in Cabo Verde, Guangzhou in China, the city of Nadi and a village in the Yasawas in Fiji, the Östergötland region in Sweden, and Boulder, Colorado in the USA. The analysis primarily concerns transformation in the personal sphere, a precondition for changes to occur in the political and practical spheres [19,20] but an area where cross-country research to date is largely lacking.

The paper examines the ways in which laypeople make sense of societal transformations towards sustainability. We do this through a qualitative approach that analyzes variations and commonalities in lay sense-making of the problems facing contemporary societies, desired goals, and the pathways for change through focus groups in five distinct geographical, socioeconomic, political, and cultural locations across the globe. Three research questions guide the analysis:

- How is transformation towards sustainability framed in terms of problems to be solved, goals, and recommendations for action?
- How do participants view societal change, and what drives such shifts?
- To which key conditions for transformation and agents of change do the participants refer?

The following section comprises a conceptual exploration on societal transformations, followed by a methods section. Empirical exploration can be found in Section 4, followed by a discussion on the study findings in relation to conceptual and empirical literature (Section 5), and concluding remarks (Section 6).

2. Theoretical Perspectives on Societal Transformations

Theories of societal transformation distinguish between the scope of transformation in terms of what system is going to be changed under what time frame [6,13,21,22] as well as explain how transformative change is enabled in terms of drivers and agency [5,6,13,23,24].

Scope. The system level referred to in transformation literature ranges from civilization-scale changes to particular segments of socioeconomic or sociotechnical systems. Civilization-scale transformations refer to profound changes in the features that characterize a culture, such as the styles of art, architecture, social and political organization, philosophy, belief systems, modes of production and consumption, and ecological conditions and practices [25]. Particular transformations refer to profound socioeconomic changes within subsystems of society; for example, the energy sector, as is the case with the transformational aspirations of the German Energiewende. Furthermore, transformations can take the form of rapid, quantum-leap changes or more protracted changes [11,13,22].

In addition, transformation literature addresses either practical, political or personal transformations or a combination thereof [20,26]. The practical sphere refers to tangible applications such as behavioral changes or applied innovations in technology and management. The political sphere concerns institutional aspects (rules, standards, regulations, and agreements) as well as interests and power aspects [27–29]. The personal sphere involves changes in sense-making, worldviews, values, and preferences. O'Brien and Sygna [30] argue that these three spheres are intrinsically linked.

Drivers. The literature suggests that numerous forces drive societal transformation; for example, the invention of agriculture [31], population growth [32], economic exchange [33,34], governance and institutions [11,28], social and technological innovations [24], environmental change, and subjugating new natural resources [17,35], or a combination of such factors.

Others see collapse as an essential component of transformation [36,37]. In this view, a root cause of transformation is that societies' economic and social complexity collapses and reverts to a more disorderly social organization. The collapse thesis, that the destruction and disintegration of old structures is an inherent feature of transformation, has been challenged by scholars who see transformations as amalgamations of old and new social orders [31]. Here, transformations are seen as gradually evolving and driven by multilinear and multicausal factors caused by constant tension between societies and heightened by social and technological innovations [38,39].

Agency involves both the capacity of actors and structural conditions to shape and perform social action [40]. A core issue in the literature is whether, and to what extent, agents can deliberately instigate transformational change, or whether it is the result of an emergent, incidental series of events [6,11]. Most analysts agree that transformation processes combine both of these. Although transformations cannot be precisely managed, governance can set conditions that allow them to take certain paths [41]. As systemic innovation strategies cannot be deliberately planned, agency becomes pivotal in transformation processes by providing leadership and supplying visions [23,24].

The remainder of this paper analyzes how lay focus-group participants made sense of the abovementioned aspects of societal transformations. In this study, we conceptualize sense-making as an interactive process by which meaning is created in dialogue between people, and shaped by interactions between various arguments and ideas and in relation to socioculturally influenced discourses [13,42,43]. Linguistic resources, such as analogies [43], framing [44,45] and narratives [46], commonly contribute to sense-making. These sense-making resources help researchers to grapple with complex, unfamiliar, uncertain, fuzzy, and/or contested issues by highlighting and thereby ascribing importance to particular aspects of meaning-making [13,47].

3. Materials and Methods

3.1. Methodological Approach

In acknowledging the dialogical and contextual features of human discourse and thinking [42,43,48], we opted for semistructured moderator-led focus group conversations [49–51]. This method is designed to explore not only individual participants' views on different topics but also how sense-making occurs in action [50,52]. Jovchelovitch [53] argues that focus groups can be seen as miniature versions of thinking societies and, consequently, they provide methodologically well-established sites for studies of how social representations are shaped [43].

3.2. Selection of Case Study Sites

This study included 20 focus group interviews with 136 lay participants (see Table 1). We set up focus groups at sites where we expected participants to have reasons to reflect on sustainability transformations, due to national or local policy attention, and/or significant vulnerability to climate and other environmental changes. We also sought to include focus groups from heterogeneous sites, to enable the participants to generate a broad map of views and perspectives from diverse sociocultural contexts.

Table 1. Focus groups included in the study.

Case Study Country	Focus Group No.	Group Characteristics	Female:Male
Cabo Verde	1	Mixed-aged citizens (aged 30–60)	4:7
Cabo Verde	2	Mixed-aged citizens (aged 20–60)	4:5
Cabo Verde	3	Mixed-aged citizens (aged 30–70)	1:4
Cabo Verde	4	Mixed-aged citizens (aged 18–55)	4:2
China	1	College students (aged 18–25)	5:4
China	2	Young adults (aged 26–35)	1:5
China	3	Middle-aged and seniors (aged 36–65)	2:3
China	4	Senior citizens (most aged 65+)	5:3
Fiji	1	Villagers aged 30–55 years	7:8
Fiji	2	City university students aged 20–25 years	5:3
Fiji	3	City residents aged 25–35 years	5:4
Fiji	4	City residents aged 26–50 years	1:2
Sweden	1	Mixed-aged citizens (aged 30–70)	2:2
Sweden	2	Senior citizens (aged 60–80)	3:3
Sweden	3	Middle-aged citizens (aged 40–60)	2:2
Sweden	4	Young and younger middle-aged citizens (aged 20–40)	2:3
USA	1	Middle-aged and senior citizens (over age 35)	3:3
USA	2	Middle-aged and senior citizens (over age 35)	3:0
USA	3	University students and young adults (aged 18–34)	2:5
USA	4	University students and young adults (aged 18–34)	5:2

While official policy documents in the focus group locations frequently mention the concept of societal transformation, they make use of this concept in varying ways. Through a policy literature review and an initial analysis of nationally determined contributions (NDCs) to the Paris Agreement, we identified several low- and middle-income countries that exemplify interesting differences in how sustainability transformations are described. From this list of countries, we selected Cabo Verde, Fiji, and China, specifically the city of Guangzhou in the Pearl River Delta, as examples of areas: (1) That have seen recent rapid societal and economic changes, (2) that are highly vulnerable to environmental change, and (3) where influential policy documents highlight the need for societal transformation towards sustainability. These case study sites display large differences in terms of geography, socioeconomic factors, history, and culture. The USA and Sweden exemplify high-income countries where societal transformation is also in the spotlight for political attention and debate, nationally and/or locally, although there are large differences in political cultures and public attention to sustainability issues as well as geopolitical positioning between these two. Our research design aligns with the focus group methodological principles of homogeneity within one group and heterogeneity between the groups [54]. This is to allow fruitful discussions within the groups while simultaneously guaranteeing a manifold of perspectives to inform the research aim and questions.

Cabo Verde is an archipelago made up of 10 islands off the West African coast. A former Portuguese colony, the country gained independence in 1975. Cabo Verde has a rich European and African blended culture. Its economy is mainly based on tourism. The country struggles with problems related to the

isolation of rural communities, immigration from the rural population to urban areas, unemployment, and drought. The focus groups took place in the capital city of Praia but included participants from all 10 islands.

Guangzhou, China, is located in the Guangdong Province, in the southern coastal area of mainland China. The Guangdong Province has a large-scale economy and population and is highly vulnerable to climate change [55]. China as a nation has rapidly developed from a low-income to middle-income status, and the central Government is presently making heavy investments to turn the province into a low-carbon economy. In 2010, the Guangdong Province was listed as one of the first five low-carbon development pilot provinces in China [56]. The focus group interviews were held in Guangzhou, the capital city of the Guangdong Province, and part of the mega-city region in the Pearl River Delta, which is one of the most rapidly urbanizing areas in the world.

Fiji, an independent Small Island Developing State in the South Pacific, is vulnerable to the climate-change impacts of rising sea levels, storm surges, increased temperatures, and altered rainfall patterns. These impacts pose significant risks for the people of Fiji and threaten their economic survival [57]. The Fijian focus groups were conducted in the city of Nadi, and in a village on Naviti Island, part of the Yasawa archipelago chain of about 20 volcanic islands on the western side of Fiji.

Sweden exemplifies a high-income country with political ambitions of being one of the world's first fossil-free welfare states, engaging nonstate actors and inspiring other countries to follow its example [58]. Sweden also displays a high degree of public concern about environmental degradation and climate change [59,60]. The region in which the focus groups were undertaken, the county of Östergötland, markets itself as a hub for industrial ecology and the circular economy and has invested heavily in facilities for biogas production.

The USA is a high-income country with strong capitalist traditions. Public concern about climate change and other environmental issues is somewhat variable across this diverse country [61]. In Boulder, Colorado, where these focus groups were conducted, there are consistently much higher levels of concern and support for action regarding climate change. For instance, 79% of Boulder County residents agree that climate change is happening, relative to 71% in the state of Colorado overall and 70% nationally. In terms of risk perception, 68% of Boulder County residents report that they are worried about global warming, relative to 58% at both the Colorado State and US national levels [62]. This community is also viewed as a traditionally left-of-centre political location.

It is important to bear in mind that focus group studies do not aspire to provide statistical generalizable information about how widespread different opinions may be among different segments of the public in the case study countries. Rather, the strength of the focus group interview lies in its ability to capture particular audiences' sense-making processes. Thus, what this study offers is an in-depth exploration of how laypeople in different settings envision societal change towards sustainable development. Therefore, we selected sites where discussion on sustainability transformations is on the agenda, and where one could expect the participants to have at least some level of awareness and interest in sustainability issues.

3.3. Data Collection and Analysis

In each of the five countries, we conducted four focus group interviews among laypeople, enabling a broad 'map of opinions' from diverse sociocultural contexts. We used a similar semistructured interview guide for each country's focus groups, following the same basic structure and covering the same topics while also, for contextual reasons, taking into account the context and culturally specific needs for clarification or slight reformulation of some questions. The interview guide started with open-ended questions about preferred future societies, opened up the concept of societal transformation, explored participants' views on goals, pathways, and actions for sustainable societies, elaborated upon ways to tackle climate change, and scrutinized participants' views on the accessibility of information on sustainability issues and the credibility of different information sources.

Each focus group discussion lasted between 1.5 and 3 h. Each group met once and was moderated by researchers well acquainted with the national and local contexts of the respective set of focus groups. All focus group discussions were audio-recorded and transcribed in their entirety. Bilingual partners translated the conversations into English transcripts where needed.

The analysis used a standardized coding template to identify recurrent themes. We distinguished between the following elements: The sense-making resources used in the discussion, and how these are used (e.g., metaphors, analogies, distinctions, narratives); distinction between timeframes, types of change (e.g., incremental, profound systemic shifts, disruptive changes); problem descriptions, goal evaluations, recommendations for action, and actors that are in focus; arguments used, the explicit and implicit premises from which they stem, and how arguments overlap.

We organized the results around participants' views on the following questions: Why, if at all, is transformation needed? How do societies change? How could transformations come about?

4. Results

4.1. *Why, If at All, Is Transformation Needed?*

4.1.1. Goals for Future Societies

When discussing what societies should transform towards, the focus groups framed future change in terms of social sustainability, cultural sustainability, and environmental sustainability.

The social sustainability framing came across in two different versions in the focus groups. Peaceful societies were an important goal, both in terms of international world peace, as discussed in the Swedish and Chinese focus groups, and peaceful developments within countries, manifesting, for instance, in the absence of racial conflict and police brutality (Fiji), or corruption and criminality (China). A second and more narrow goal for societal transformation within the social sustainability frame focused on domestic welfare, such as Swedish participants discussing housing, employment, medical care, and health, or Chinese participants depicting a future ideal society in which people do not need to worry about pensions or elderly care, where living standards are improved, and where housing is affordable for everyone. These two types of goals were mentioned in parallel throughout our focus group data.

In the cultural sustainability framing, participants listed a range of keywords characterizing their preferred future societies' system of values, attitudes, beliefs, and norms. Examples include equality (Sweden, China, Cabo Verde), justice (China), fairness (Sweden, USA), friendliness (Fiji), and respect (Sweden, Cabo Verde, USA). Many of the groups expressed a desire to build sustainable relationships between people in general and between generations. For instance, in the words of one Chinese participant (China FG 1), "in the future, people will live with a warm heart". Another example comes from the US groups, where some participants identified indigenous cultures, such as Native Americans and Inuit, as exemplifying sustainable values, describing American culture as "short-sighted" in comparison to cultures that look "[seven] generations ahead" (USA FG 1). Along similar lines, village participants in the Fiji groups talked about the importance of preserving their culture, communities, and traditions as a means of maintaining social and cultural sustainability for the future and described a way of life in the villages that avoids many of the environmental problems seen in the cities:

The place I am living is in the interior of Fiji, that is in the highlands, the island of Viti Levu, the largest island in Fiji. Right now, we are experiencing no pollution; for example, in my village there is no electricity [. . .] Only solar power. [. . .] Water, we drink from the river, the river is from a source in the mountain. (Fiji FG 2A)

The environmental sustainability framing highlighted participants' wish for pollution-free and clean societies, as expressed by participants in the Fiji, Cabo Verde, and China focus groups. Another recurring topic within this frame, which came across in the Swedish and Chinese groups, related to the need for resource efficiency and the development of low-carbon energy technologies, such as solar

and wind power. In addition, participants in the Cabo Verde, China, and Sweden groups argued for the interrelatedness of environmental and social sustainability. For example, they highlighted how a society characterized by environmental sustainability would not only spur public health initiatives and enhanced food and water security but also increase income levels for households, thus ultimately providing cornerstone conditions for a better quality of life.

The realism of the prospects for future sustainable societies was at times questioned and debated in the focus groups, indicating the importance of taking seriously the political economy dimensions; that is, how interactions between the market and political systems regulate the distribution of material and nonmaterial resources [63]. How the unequal positions within the world economy affects transformational capacity can be illustrated by a quote from one of the Cabo Verde groups, where a distinction was made between Cabo Verde and Sweden, stating that:

wishes are wishes, we can wish what we want but we need to take into consideration the reality where we are situated [. . .] because we are very poor. So, to imagine progressing and being Sweden in 2050 knowing what the reality is, we have to keep our feet on the ground. (Cabo Verde FG 2)

By contrast, other participants claimed that drawing up visions for the future is in itself a valuable exercise, as it is an important part of forming the future by spurring on the imagination, making goals and action alternatives concrete and incentivizing actors. This stance was illustrated, for instance, by exchanges in the US and Cabo Verde groups, where participants argued that the very conversations on visions can spur change, and that the creation of visions can in itself be a catalyst for change.

4.1.2. Making Sense of Current Unsustainability

Across the focus groups, participants envisioned future societies that are free from current unsustainable conditions. Participants in the Cabo Verde groups highlighted poverty, water shortages, health and sanitation problems, as well as their unpreparedness for natural disasters. Global inequality and poverty were recurring topics across the Swedish focus groups, who criticized the unsustainability of current patterns of resource use and consumption and argued that many goods are of poor quality with short lifespans. In Fiji, participants in the city and university groups discussed current problems, such as physical environmental and species and ecosystem problems (pollution, rising sea levels, logging and soil erosion, and loss of flavor in crops), whereas the village groups mentioned concerns such as the behavior of young people and how technology is changing them. The Fijian city groups mentioned current problems of abuse, and some mistrusted their police force.

Using analogies as a sense-making resource, participants in the USA and Swedish groups compared ‘developed countries’ and ‘developing countries’, citing the present effects of climate change, such as sea-level rise in Bangladesh and water and food scarcity in African countries, and highlighted how these examples can serve as cautionary tales for those living in ‘the West’. Furthermore, the topics of consumption and environmental impact arose in the US and Swedish focus groups. For example, US focus groups observed that environmental problems were rooted in American development, consumption, and waste. As one participant noted, “We have become a throwaway society, that’s one thing [. . .] There is so much waste” (USA FG 1). Another participant in the same group stated, “[We] have a system which is ultimately [. . .] unsustainable. I mean, you cannot continue to have a total system that says growth is good. But try selling that” (USA FG 1). Later, the group placed the USA in its global context, with a participant remarking, “We consume 25 per cent of the world’s resources but we are four per cent of the population” (USA FG 1).

In the Chinese groups, participants cited problems related to pollution, waste management, traffic congestion, social welfare, and security. Moreover, they highlighted their sense of losing social cohesion. The following extract is one among several stories that illustrate how the participants have experienced rapid societal change, leading them to feel disconnected, lonely, and insecure:

We are not as close to people as we used to be. Twenty or thirty years ago, in Guangzhou, we used to hang out all together. Now we don't. [...] Nowadays people ignore each other once they close their doors. Only a few occasional greetings and that's it. Where we used to live with more intimacy [...] I stay at home more, close the door and don't go out after going back home. (China FG 4)

The larger story here typically illustrates a loss of social capital, which can be linked to participants' tales and perceptions of a society where criminality and poor morals are increasing problems among the population because "they do not have a strong collective idea" (China FG 4).

In the intersection between the large-scale currents of events playing out in the global arena and local circumstances and practices, the focus group participants shared stories of problems stemming from environmental and social change, and how they navigated their everyday lives to cope with unsustainability. For instance, the following extract from one of the Cabo Verde focus groups illustrates how large-scale social, economic, and environmental changes influence the everyday practices of laypeople in a small fishing community, forming the background to what the participant hopes for her society in 2050:

By 2050, we would like to have changes in fishing. We have great deficits because sometimes we spend a lot of days without finding fish because we have small boats, we cannot go far out to sea. The negotiation with Europe that allows Europeans to fish with big boats in our waters, I think is the reason we have less fish in the sea. So, I hope that this will change and we will have new negotiations that will benefit us. We have associations to help the population because we live in a vulnerable village next to the sea, we lack jobs, most women go to the beaches to get sand to sell, destroying the beaches and the environment and putting us at risk of water rising and entering the village. So I hope by 2050 we can resolve that and help them so they stop destroying the beaches with sand extraction. [...] We have problems now with sand extraction because for two years seawater has started to get into the house. (Cabo Verde FG 3)

In this example, the participant connects experiences of local, small-scale changes in her community—decreasing incomes from fishing, unemployment, unsustainable working conditions, and seawater entering the houses—to natural resource depletion driven by a globalized economy and climate-related risks. Across the case-study sites, participants used storytelling as a key sense-making resource that served to bridge the gap between abstract, large-scale global change and their personal encounters with unsustainability. Even when the examples were local, most groups' discussions placed them in the larger context of global environmental change, global economic exchange, and geopolitical strategies.

4.2. *How do Societies Change?*

Most focus groups took their starting point in the current problems facing their region, country or the world at large. These were seen as the result of changes, in the global economy, in technology or in human relationships. Therefore, to be able to address the underlying problem, the present trajectories in turn need to change. According to the participants, this can be achieved either through more modernization, for example, in infrastructure or energy supply (China, Fiji), by a return to a pristine or traditional state, for example, in human relationships or in practices such as food production (China, Fiji) or through education and awareness-raising activities among the general public (Cabo Verde, Sweden).

Often, in discussions about desirable futures, when many action alternatives are on the table, the lines between whether a desired change is incremental or transformative are blurred. All the focus groups addressed both incremental and transformative changes, whether protracted or rapid in tempo. General societal changes over a long time period were more likely to stimulate discussions focused on transformative changes. Yet, such changes could still be very specific; referring, for instance, to changes in mindsets or technology. Our analysis suggests that, overall, focus group participants tended to

emphasize particular rather than civilization-scale transformations, focusing on transformative changes in specific practices, segments or sectors of society rather than society as a whole.

Is sustainability transformation something that will happen in the future or something that is ongoing? The UN 2030 Agenda tells several different stories in this regard [13]. In one sense, we have to take “bold and transformative steps which are urgently needed to shift the world onto a sustainable and resilient path” [12] (Preamble). Trends have to be reversed, behaviors changed, and those left behind from now on should be included. However, there is also recognition of positive change attained during the Millennium Development Goals era. To sum up, in some areas, the 2030 Agenda states that we have to break with current development trends, whereas in others, we should build on what we have achieved so far.

This duality was also reflected in the focus groups, where the dominant framing suggested that the participants largely saw societal transformations as deliberate rather than emergent, and possible to influence through governance. There were, however, some exceptions to this deliberate and future-positioned framing of societal transformations in our groups. One sense-making strategy commonly used to understand the temporal dimensions of transformations was to make experience-based analogies with previous changes that had occurred during the participants’ lifetimes. For example, in the Cabo Verde focus groups, a recurring notion was that the country had embarked upon a transformative road out of poverty during the early post-independence era in the 1970s and is still in the middle of a great transformation towards higher middle income status. The challenge is to steer it in a more sustainable way, to capture opportunities and avoid pitfalls while navigating changes in the global political economy. Similarly, participants in the Chinese focus groups cited unexpected, rapid developments in science and technology during the past fifty years, which they took as a sign that changes in society over the next fifty years will be equally unpredictable. Some of the participants in China argued that present-day society is already in the midst of transformation and, thus, to some extent de-emphasized the past–present–future thinking on societal transformations.

At all five geographical sites, transformation was most commonly framed as a fundamental change from today’s society that will nevertheless still build on developments in present-day society. In other words, this type of merging between new and old structures can be seen as transformation through amalgamation rather than as a consequence of the collapse of the old system. In our study, it was only in some of the US focus groups that participants expressed views in line with the collapse thesis of some of the transformation literature [36,37], as they argued that the selfish nature of humans has put us on a track towards inevitable environmental and societal crises or even collapse, forcing transformations to emerge. The overarching view across the focus groups was that a sustainable future does not have to spring out of the destruction of present-day society but can be achieved by profoundly, sometimes radically, changing political, economic, social, and cultural practices. A new society is built by reforming the old, rather than out of its destruction.

4.3. *How Could Transformation Come About?*

The overall consensus among the focus groups was that sustainable futures are possible; however, significant efforts are needed at the individual, local, national, and global levels to achieve these aims. Among the main themes that emerged from the groups were: The importance of educating the general public about climate change and sustainability; drawing on local and traditional knowledge; the significance of climate crises in various forms as instigating behavioral change; the promises and perils of technological development, and top–down versus bottom–up transformations.

4.3.1. Awareness, Education, and Knowledge

The role of awareness, education, and knowledge as drivers of sustainability transformations was highlighted across all the case-study settings. For example, participants in the Cabo Verde groups stated that “education is the basis to achieve sustainable development” (Cabo Verde FG 1), highlighting the need for better education in schools, more financial support for local communities and associations,

and more environmental education to improve knowledge among the local population. Similarly, in the Fiji focus groups, participants highlighted the need to raise awareness and promote prevention. Raising awareness and education through schools and clubs were considered useful actions to motivate change. While knowledge gained at universities should be returned to people in the villages, this was juxtaposed with the view that local knowledge and chiefs, who have already consulted with the people, should also be listened to and acted upon by governments in a circular dialogue of exchanged knowledge. In the US groups, participants also emphasized the significance of education in promoting sustainable lifestyles. Groups cited increased funding for primary, secondary, and higher education and government subsidies for education as significant means of achieving their preferred future societies. Beginning in primary schools, participants suggested that young children should learn about food systems and sustainable farming. Participants in some of the Swedish groups also discussed the role of education in achieving sustainability. When it was situated globally, participants viewed education as a way to empower people more generally, but when talked of in the Swedish setting, some participants voiced the need for an educational system that, rather than reflecting the structures and patterns of past societies, reflects contemporary societies, e.g., cross-border thinking and a focus on motivations for learning.

4.3.2. Drawing on Local and Traditional Knowledge

Another recurring theme advocated drawing on local and traditional knowledge for transforming societies towards sustainable futures. Through storytelling, the older participants in particular recalled previous practices, such as conservation during the Great Depression and the Second World War (USA) or consuming less and recycling more (Sweden). The argument here was that earlier lifestyles were more sustainable than current ones. Along similar lines, the notion of ‘going back to traditional ways’ became a focal point in several of the discussions, as illustrated in the following quote from one of the Fijian focus groups, in a discussion on drawing inspiration from local knowledge and traditions:

Interestingly, in Fiji right now, they are getting communities like the villages and provinces that have chiefs over them, they are getting involved even in the way they utilize the rivers and the sea around them. The area near the land where they can fish and all that. They are starting to go back to some of the ways of the past, in the way that they put *tabu* [rules prohibiting something] down for making sure that certain foods won't be harvested from the sea and land at certain times. So from this time to this time you aren't going to be fishing, you aren't eating this type of fish at this time. They are reinforcing that now, previously it was looked at as cultural ... but now it is all tied into this whole way of making change happen in a positive way. So now they are even getting rewarded for ensuring that they are putting these things down. [...] They have noticed the change even in the ecosystem down in the water ... the number of things that have come out, as a result of that a lot more of the other provinces have come into it. So I think that even going back to traditional ways of preservation, they are trying to encourage that a lot more so they can utilize whatever is there. The way they preserve food, the way they plant it, it's good, it's starting to come back again. (Fiji FG 4)

This example tells the story of how ‘going back to traditional ways’, through the reestablishment of old *tabu* traditions that regulated fishing and harvesting, is seen as a way of securing the future in Fijian communities. While much environmental and sustainability discourse draws on a journey metaphor, which connotes a forward-oriented direction, moving from unsustainable conditions, encountering hurdles along the way, and finally arriving at the destination (e.g., achieving low-carbon, resilient societies) [46,64,65], the example above uses the metaphor of a backwards journey—‘going back’—to connect the past with the future. Along similar lines, the Swedish groups were also rich in metaphorical representations of direction. Participants characterized sustainability transformations not only as a

change that 'is moving forward', 'going fast', and 'up', but also as a change that was associated with words such as 'backwards', and 'down'.

4.3.3. Crisis as the Engine of Change

A contrasting view of what sparks transformational change came across in the US groups and some of the Swedish groups, where some participants emphasized the role of personal experiences of crisis as the engine for change. Here, participants suggested that climate-related crises would be necessary to spur both systemic and personal action, as exemplified in the following extract from one of the US focus groups:

1. Participant B: I think crisis is the answer. I think crises are gonna spark change and crises tend to spark faster change, whether it is change in the direction that you want.
2. Participant C: Crisis unifies people ... (USA FG 2)

In another example, a participant stated, "I think it is human nature not to work on a problem until it hits you directly, financially or geographically or insurance-wise. We react to emergencies but what we need to do is to think ahead and try to prevent the emergencies" (USA FG 1). The suggestion here is that some Americans do not yet feel the effects of climate change and therefore are unwilling to make choices that would support sustainable lifestyles, such as buying local foods, using public transport, or investing in alternative energy at home. Similar arguments came across in one of the Swedish groups, where participants argued that, for people in Sweden to take action on climate change, they need to see 'symptoms' in real life (Sweden FG 1).

4.3.4. Technological Development

Yet another view of how nonlinear societal change comes about relates to the role of technology. Participants' stances ranged from techno-optimism to ambivalence. For instance, in the Chinese focus groups, a strong belief in science and technology stood out as an important theme as participants described ways forward towards a sustainable future. Examples cited here were innovations to generate clean energy and energy-saving measures. The underlying assumption was that economic development would be a precondition for technological development which in turn would solve environmental problems. When stating that science and technology provide one of the most important engines for transformations towards sustainability, a contrasting view was expressed by a few participants, who also talked about negative impacts of technology on people's 'heart' (China FG 1). Similarly, in some US groups, participants highlighted the technological optimism pervasive in US culture as a potential way in which the responsibility for engagement may be displaced. They commented that it can be problematic to take up a mindset in the USA to "think technology is gonna save us" (USA FG 1). In the Swedish focus groups, technological innovations were associated on the one hand with positive rapid societal change, exemplified by the development of mobile phones, radio, and television, but, on the other hand, they were also associated with environmental degradation and perceived as 'risky business'.

4.3.5. Top-Down or Bottom-Up Transformations?

Three different ways of framing transformations as top-down- or bottom-up-driven processes came across in the focus groups. First, the top-down frame, which presumes that transformational change can be deliberately instigated, can be illustrated through examples from one of the Chinese focus groups, where participants used metaphorical language when discussing the role of the government as the driver for change: "If the train needs to run faster, the locomotive must run faster" (China FG 2), or "the government should lead the people to raise awareness; just as children depend on their parents" (China FG 2).

Second, the bottom-up frame presumes multiple uncoordinated types of changes. Key examples of this frame were found in the Cabo Verde focus groups, where participants often emphasized

the importance of a bottom-up approach, by which changes start in communities with the local population, who can then demand action from national decision-makers and government. For instance, they highlighted local gardening projects in schools and the need to create opportunities for learning on sustainability not only through formal education but also in families, churches, and associations.

Third, a combined top-down/bottom-up frame mixes these two approaches. For example, Fijian participants thought that future societies required everyone to work together in communities and groups, rather than individually, although individuals, parents, communities, and governments are considered responsible for behavioral changes (e.g., recycling) relative to climate change. These findings reflect a society influenced by a collectivist rather than an individualistic perspective [66].

The US groups were also mixed in their framing of transformations as top-down or bottom-up, as seen through the following exchange:

1. Participant A: [Systemic societal change] needs to come from our leaders. I mean . . .
2. Participant C: [Interrupting] No, I think it has to come from the grassroots.
3. Participant A: Well, I think it starts, I think that the leaders have to start with enacting these policies.
4. Participant C: They're not gonna do it! It's like they're not gonna change a system where they have what they want. (USA FG 2)

While participants in the US focus groups discussed the significance of government authorities, policy-makers, and industrial groups as holding the power to push for sustainable goals, these actors were often met with scepticism. Critiques arose of both global market mechanisms and government regulations as having the capacity to lead to societal transformations. However, government subsidies for education, as well as farming, healthcare, and infrastructure, were viewed as paramount in solving future problems related to climate change. As one participant mentioned, "We aren't putting the money in the right places . . . [if we] would have just been doing that for the past sixty years, then we could maybe not be having this conversation" (USA FG 4). Participants also cited individuals and communities, through lifestyle changes and grassroots efforts, as having the potential to enact social and environmental change. They referenced specific actions, some that participants themselves practiced, which they broadly defined as cooperative efforts benefitting the social good (e.g., recycling, growing and buying local food, taking public transport and cycling to work, and meatless diets).

5. Discussion

The focus group discussions included in this study provided rich material and numerous stories of current unsustainability and visions for transformative change. The main themes and topics that came across in the focus groups are summarized in Table 2.

Examining the sense-making of transformation is important for transparent and legitimate policy-making because it sheds light on the inherent, but often unexpressed, societal and political choices of transformation pathways. It may also clarify where institutional barriers arise from different framings. Moreover, an improved understanding of the varieties of transformation pathways may facilitate the effectiveness of the global efforts towards Agenda 2030 and the Paris Agreement. Transformation towards sustainability can mean many different things, but there are some commonalities across our focus groups.

This study's focus group discussions were rich in personal narratives, and storytelling came across as a key sense-making resource for participants grappling with how to link their everyday lives, their choices and struggles, to large-scale global, social, economic, and environmental change. For societal transformations, narratives play a crucial role in bridging the personal, political, and practical dimensions. Narratives can facilitate the contemplation of preferred futures, guiding values and priorities, and enable a reconsideration of presuppositions concerning what can be changed and how transformative change can occur [13]. In our focus groups, narratives at times included analogies with previous transformations, such as countries breaking away from conditions of poverty, serving as exemplary tales of how transformative change can occur.

Table 2. Summary of results.

Transformation Aspect	Themes	Recurrent Topics	Examples	
Rationales for transformation: Why, if at all, is transformation needed?	Goals for future sustainable societies	Social sustainability	Peaceful societies	
			Domestic welfare	
			Equality	
			Justice	
			Cultural sustainability: values, attitudes, beliefs, norms	Fairness
			Friendliness	
		Respect		
		Interpersonal relationships		
		Environmental sustainability	Pollution-free societies	
			Clean societies	
			Low-carbon energy	
			Food and water security	
	Water scarcity			
	Food scarcity			
	Current unsustainability problems	Interlinked social, cultural, environmental and economic unsustainable conditions	Health problems	
			Sanitation problems	
			Unpreparedness for natural disasters	
			Inequality	
			Abuse	
			Traffic congestion	
			Social welfare problems	
			Insecurity	
			Loss of social cohesion	
			Criminality	
			Pollution	
			Rising sea levels	
			Soil erosion	
Waste and waste management				
Decreased quality of crops				
Poverty				
Short lifespans of consumer goods				
Overconsumption				
Unemployment				
Decreasing incomes from, e.g., fishing				
Scope of transformation: How do societies change?	Types of change	Fundamental changes from today's society	Transformation through amalgamation	
			Collapse of old systems	
			Return society to a previous state	
	Scale of transformation	Particular or civilization-scale transformation	Transformative changes in specific practices, segments or sectors of society	
Drivers of transformation: How could transformation come about?	Engines of change	Awareness, education and knowledge	Formal education	
			Nonformal education	
		Drawing on local and traditional knowledge	Conservation practices	
			Less consumption, more recycling	
			Using traditional, indigenous practices, to regulate fishing and harvesting, e.g., <i>tabu</i>	
		Climate-related crises	Personal experience of loss	
		Technological development	Innovations for, e.g., renewable energy, modernization of infrastructure	
		Top-down and bottom-up transformations		Top-down framing: governments
				Bottom-up framing: local communities and individuals
				Combined top-down and bottom-up framing: e.g., individuals, local communities, government authorities, policy-makers, and industrial groups

In these narratives, participants' sense-making of the scope, drivers, and agents of sustainable transformations emerged, as summarized in the following paragraphs:

Scope. Across the focus groups, visions of the future were cast in environmental, social, and/or cultural sustainability framings. In particular, sustainable futures were closely linked to interpersonal relationships and a sense of community and belonging. These topics are rarely discussed in international development fora, nor can they be measured by quantitative Sustainable Development Goal (SDG) indicators. Nevertheless, there seemed to be a generic and strong desire across all the focus groups, regardless of cultural and geopolitical context. Thus, the desired sustainable development extends beyond material welfare or other aspects measured by the SDGs to include a sense of belonging. This reminds us not to conflate the agreed global goals, which are instrumental for joint global action, with what people seek in sustainability transformations. While the global SDGs served as a fundamental reference point in the focus groups, sustainability for our participants turns out to be far more personal, even existential. Participant characterizations of sustainable futures can thus be seen as a matter of ontological security [67,68]. Ontological security refers to the importance of a sense of stable self-identity enabling people to make sense of world events, such as climate change and world affairs. In parallel with security from physical violence and human security, people also strive for security-as-being, which involves "biographical continuity" [68] (p. 4); that is, "a sense of continuity and order in events in people's life" [67] (p. 243). Disruptive environmental changes can threaten not only state and human security but also ontological security [69].

International environmental cooperation emphasizes global commonalities and envisions a mutual destiny for all countries and peoples as a basis for promoting collective action. This view was already embodied in the theme for the United Nations Conference on the Human Environment in 1972: "Only One Earth", where the declaration called "for a common outlook and for common principles to inspire and guide the peoples of the world in the preservation and enhancement of the human environment." Similarly, the Brundtland Commission entitled its report "Our Common Future", and the outcome document of the United Nations Conference on Sustainable Development was given the title "The Future We Want" [70]. The notion of a globally shared destiny in which people around the world share assumptions, perspectives, and interests has been criticized by several scholars, who argue that the idea of a common agenda downplays fundamental disparities in conditions, needs, and aspirations both between and within countries [71,72].

Despite the transformative potential of the SDGs, scholars have argued that they do not sufficiently attend to the power dimensions embedded in the instigation of fundamental societal transformation [73]. Along similar lines, the middle-income country focus groups also voiced some political economy concerns about global justice and the responsibility of richer and historically polluting countries to take action and lead the transformation efforts. Such critical perspectives were also voiced by some participants in the US groups.

This tension between the common elements of sustainable development aspirations and the variations across societies permeated our analysis of the focus group discussions. There are profound differences in what the groups emphasize as the core challenges and what needs to be done, which are evidently rooted in where the participants are situated culturally, socioeconomically, sociotechnically, and historically. Yet, in spite of the variations in specific goals, there are some common themes in evidence on how to think about transformations across these geographical sites that could be starting points to stimulate profound discussions and negotiations across borders.

In all five geographical sites included in this study, transformations were framed as fundamental changes from today's society. However, these transformations still build upon ongoing developments in the present day. The new society is perceived as evolving as new structures are spliced into the old: What can be called transformation through amalgamation [38], as opposed to the idea, also found in the literature, of transformation emerging out of the collapse of the old society or system [36,37]. Only in the US groups could a few such expressions of the collapse framing be found. A counterpart to the collapse framing is that, instead of a completely new system or society evolving out of the ruins

of the old, the transformation would return society to a previous state, such as a pristine relationship with nature, traditional ways in which human relationships thrived, traditional practices in food production, or older ways that appreciated conservation and frugality in the household use of natural resources. Both the expectation of something new evolving out of the present state and the notion of transforming societies towards sustainable futures by going back to traditional ways or older practices were expressed across all five geographical sites, despite the fact that they vary in their degree of economic development. These three different views can be seen as opposing pathways, or they can sometimes be combined in people's minds.

Drivers and agency. The drivers of transformational change varied considerably in the focus group participants' views. At all sites, hopes were raised for new technologies for low-carbon energy production and transport. Some participants in Sweden and the USA identified a need for a changed economic order, several pointing to radically reduced consumption, or a transformation in consumption patterns to include only sustainable goods. Yet, the most common driver for sustainability transformations across the focus groups was the vital role of awareness, education, and knowledge sharing.

We are not arguing, however, that the aspects brought up in the groups are the only ones that matter for transformation. The research literature highlights numerous drivers of transformation, operating on multiple temporal and spatial scales, such as technological innovations, new economic paradigms, education, new narratives, perspective changes, social innovations, and experimentations (e.g., [2,13,24,74]). For example, with very few exceptions, the groups scarcely touched on the macroeconomic or geopolitical aspects of transformation. The focus groups only inform us about what seems to matter most to the participants when discussing how to fundamentally address current unsustainability.

A common basic assumption was a virtual consensus among all the focus groups that sustainable societies are possible in the future but that this will require momentous efforts at the individual, local, national, and global levels. In the face of the unprecedented scale of influence that humans have had on the global climate and environment (in the research literature referred as the 'Anthropocene' [75]), focus group participants repeatedly argued that merely individual engagement without larger-scale institutional and policy commitments remains a feeble response to the challenges before us. Across the groups, there was a recognition of the importance of structural, institutional, and collective action alongside individual engagement.

Yet, most of the focus groups emphasized personal agency. Some talked about it in terms of a responsibility to act, while others concluded that, in order for change to happen, we will have to be prepared to start. Whereas some participants argued that waiting for others—the state or businesses—would risk getting us nowhere, other participants deemed their individual agency to be more closely linked to overall societal motivations to act. The focus groups displayed various perceptions of the relationship between the individual, the nation state, and businesses. However, the need to act personally featured both when the state was given a vital role in transformation and where a more sceptical stance towards centralized sustainable development governance was voiced.

The participants did not see their agency in transformation processes restricted by calls for new economic structures or reliance on advanced technological innovations. Even though some participants raised these as vital drivers of sustainability transformations, a sense of personal agency permeated the groups, enabled by the ability to change consumption preferences and enhance one's own awareness and views. And in the longer perspective, in protracted transformations, agency in structural and technological change could be achieved through education.

This study has analyzed stories of sustainability transformations from places and contexts where such transformations are on the agenda for public debate. Future research should explore laypeople's views on the goals and pathways for societal transformations toward sustainability in sites where there is less public attention to these issues. On a general level, we would also need more studies from around the world of lay perspectives from regions with different cultural, economic,

and geopolitical circumstances. Moreover, following Blythe et al. [1], we recognize that transformations will affect different groups and individuals differently. Thus, we see a need for further research into “how transformation policies and practices are viewed and experienced by different social groups” [1] (p. 1213), taking intra- as well as intergenerational justice dimensions into account [76].

6. Conclusions

This paper has explored how focus group participants in five countries made sense of societal transformations towards sustainability. In sum, ubiquitous differences in ideological preferences for and socioeconomic interests in societal transformations remained within and across the focus groups. However, our focus groups also displayed a shared understanding across the geographical settings: A common realization of profound sustainability predicaments facing societies across the world, and a desire for fundamental change towards a more sustainable way of life. The realization of an unsustainable situation and the shared desire to be part of the solution together with others are fundamental ingredients in transformational reconciliation processes [77]. This is good news for the global transformative aspirations of the 2030 Agenda, as it motivates actors across societies in the world to seek common ground and explore pathways to sustainability.

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