Article

Exploring the Role of a Colombian University to Promote Just Transitions. An Analysis from the Human Development and the Regional Transition Pathways to Sustainability

Diana Velasco [1,2,*], **Alejandra Boni** [2,*], **Carlos Delgado** [2] **and Geisler Dayani Rojas-Forero** [1]

[1] Peace and Region Program, Universidad de Ibagué, Ibagué, Colombia; geisler.rojas@unibague.edu.co
[2] Ingenio (CSIC-UVP), Universitat Politècnica de València, 46022 València, Spain; cardelca@alumni.upv.es
[*] Correspondence: dcvelmal@ingenio.upv.es (D.V.); aboni@ingenio.upv.es (A.B.)

Abstract: Universities are central organisations that can act as promoters and amplifiers of regional just transitions. In this paper, we analyse how a Colombian regional university, the University of Ibagué (UI), is playing this role through two initiatives: (1) a governance experiment piloted between 2018 and 2019 that constructed an aspirational vision for this university through the definition of eight human capabilities; (2) a formal curriculum regional programme named Peace and Region (P&R) established in 2010 as a service-learning strategy for undergraduates in their final year. To analyse the contribution of these two initiatives towards a just transition, we built a specific analytical framework based on the human development and capability approach and Regional Transition Pathways to Sustainability (RTPS). Exploring both the content and the process of building the list and perceptions of the different actors involved in the P&R programme, we found that both initiatives have a strong directionality that resonates with the normative ambition of a just transition. Moreover, in both processes, people involved have expanded human capabilities, and co-produced holistic and transdisciplinary knowledge through the interaction of academic and non-academic actors. From an RTPS perspective, the programme captures regional complexity and moulds micro-dynamics to socially fair and sustainable paths.

Keywords: university; higher education; just transition; regional transitions; sustainable development; human development; capability; knowledge; co-production; Colombia; Tolima; global south

1. Introduction

International organisations have widely recognised universities' roles in promoting sustainable development in both the Global North and the Global South. With other international organisations, UNESCO stresses the vital role of education as the main driver for peace, tolerance, human fulfilment, and in achieving the proposed Sustainable Development Goals [1]. However, what is the meaning of sustainable development in specific regional locations? Following Storper and Pike et al. [2,3], we argue that the notion of development is contextual and related to specific economic, institutional, cultural and social trajectories. Development cannot be measured simplistically through GDP growth in an empty container delimited by political and geographical borders. Development occurs in particular spaces where actors interact and shape the flow of capital, knowledge, rules, politics and energy. Hence, we understand the space as a relational social construction [4–6].

In this paper, we explore how a university can contribute to development in a regional context. Our case study is the Universidad de Ibagué (UI), a Colombian medium-size private university located in a Colombian region (Tolima) with a low human development index. Tolima has suffered from a prolonged armed conflict between the State, civilians, guerrillas, and illegal armed groups. In this context, discussing sustainability implies posing ourselves the question: what kind of local and regional development is happening,

and for whom? [3] The answer suggests a choice about what development means, for whom and where. It also implies a choice on how development priorities should be decided.

Human development pays special attention to those questions. It is based on the core values of empowerment, participation, equity, efficiency and sustainability [7]. A human development understanding stresses the relevance of equitable opportunities for all, and it implies a world where many worlds fit (un mundo donde quepan muchos mundos; It is a phrase attributed to the Subcommander Marcos of the Zapatista Army of Mexican National Liberation, a political–military movement for the reinvindication of indigenous rights) without jeopardising future generations' resources. The inclusion of typically unheard voices giving them agency in decision-making processes related to their own becoming is a crucial element of a people-centred notion of development. We stress the United Nations principle of "Leave No One Behind" (Universal Values UN 2030 Agenda, https://unsdg.un.org/2030-agenda/universal-values/leave-no-one-behind accessed on 10 February 2021), not only for the inclusion of the poorest, combating discrimination and preventing inequalities, but also to enable and enhance cognitive justice by recognising the multiplicity of social practices and experiences of the world [8]. Human development has been theorised through the capability approach, and the two concepts are closely interwoven. Human development seeks to expand a persons capabilities, and expanding capabilities advances human development [9]. Therefore, the effective opportunities people have, and what they have reason to value, is at the centre. It highlights substantive freedoms ("capabilities") and outcomes or what is achieved ("functionings") [10,11].

However, human development does not discuss the role of HEIs as multi-scalar inter-mediaries that integrate regional, national and global scales and have the agency to drive towards specific directionalities [12,13]. This is our second analytical framework's contribution: the regional transition paths to sustainability (RTPS). In this understanding, HEIs can enact change at the regional level by understanding and acting on the co-evolution, co-production and co-learning [14] required to trigger sustainability with a transdisciplinary approach [14,15]. This understanding goes beyond the idea of an "engaged university" that provides tailor-made solutions to region-specific challenges and problems [16]. The university becomes a "change agent" that pinpoints the potential of HEIs to modulate and trigger institutional and organisational changes that are part of the micro-level plasticity of regional paths ("Path plasticity provides acertain scope for variation within a well-established institutional setting of a path. This characteristic of paths is rooted in the interpretative flexibility of institutions and incoherence of paths themselves due to the interconnectedness of institutional settings at different [spatial] levels." [17], p. 69.

The combination of the two analytical frameworks provides meaning to the idea of just transition in the sense understood by Swilling [18] (p. 19): "the outcome is a state of well-being (Firiamonti, 2015) founded on greater environmental sustainability and social justice". Figure 1 depicts our approach to just transitions. This understanding of transitions is particularly relevant in a Global South Context where states have a mixture of diverse institutions, in a context of an imperfect market, with clientelistic and exclusive communities, homes where patriarchal culture prevails and patrimonial and market-dominated states [19,20]. Ramos-Mejía et al. [21] highlight that research on transitions has rarely explored the characteristics of Global South contexts implicitly focusing on the environmental sustainability of production and consumption systems, without paying due attention to social and institutional sustainability. This social and institutional dimension of sustainability refers to the ability of societies to reverse processes of reproduction of poverty and deprivation of human capabilities, as understood by human development [21]. A similar critique comes from the field of socio-ecological transitions where it is noted that structural biases in knowledge production systems mean that the unique and necessary capacities of the Global South to innovate, experiment towards sustainability and nurture transformative trajectories are under-researched and sometimes not even known, despite their potential to inform transformative processes across the world [22–24]. For this reason, authors such as Swilling [18] propose just transitions, which are those in which processes

of radical incremental changes accumulate over time and advance towards the SDGs and sustainability. The result is a welfare state based on greater environmental sustainability and social justice. These changes arise from a great multiplicity of struggles, each with its own context-specific spatial and temporal dimensions.
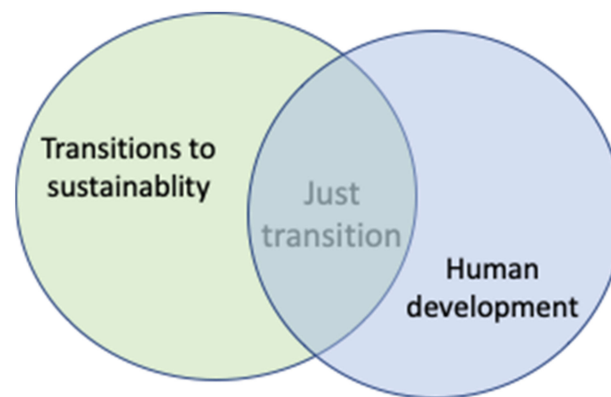

Figure 1. Analytical frameworks to understand just transitions.

To explore further our framework, we use two case studies. The first one is a governance experiment piloted between 2018–2019 that constructed, following a participatory process, an aspirational vision for this university through the definition of eight human capabilities. The second is a formal curriculum regional programme named Peace and Region (P&R). It was established in 2010 as a service-learning strategy for undergraduates in their final year. During one semester, the students get involved in transdisciplinary projects working and living with the communities to contribute to peace and local development.

The paper is structured as follows: in Section 2, we present the analytical approach to explore the case studies focusing mainly on the implications of human development, regional transition paths to sustainability, and the role of universities in unfolding such regional just transitions; in Section 3, we introduce the context of the UI and the main characteristics of the two initiatives; in Section 4, we refer to the research methods; in Section 5, we discuss the outcomes of the two experiments providing theoretical insights to just transitions in spatio-temporal institutional settings in Global South contexts. Finally, we conclude with the main findings of our study.

2. Analytical Approach

2.1. The Human Development: A Multi-Dimensional and Normative Approach to Development

Although the appearance of the Human Development Report (HDR) of the United Nations Development Program (UNDP) in 1990 marks a fundamental milestone for the dissemination of the concept of human development, the origins of this theory go back to the 1970s with the conceptualization of the basic needs approach applied to development processes [25] and the adjustment with human face promoted by UNICEF. The first one represented a shift in economic development thinking by introducing concerns about the social aspects of development, participation, and the depletion of natural resources. The second one represented a significant challenge in facing dominant mainstream development paradigms, putting people first in development planning [26]. Another relevant milestone for the introduction of human development was the entrance of Mahbub Ul Haq as a special advisor to the general manager of the UNDP in 1989. Haq [27] explained that social arrangements must rather be judged by the extent to which they advance the human good, citing Aristotle, who argued that "wealth is evidently not the good we are seeking for, it is merely useful and for the sake of something else". As Haq [27] p. 17 elucidated, "the basic purpose of development is to enlarge people's choices"; such choices are dynamic and encompass economic, social, cultural, and political lives.

Alkire [28] explains that human development sets priorities among goals, integrating several principles simultaneously. Commonly used principles include poverty reduction, equity, efficiency, voice and participation, sustainability, respect for human rights and fostering the common good. Human development is thus multi-dimensional, and its components are crucially interconnected. Alkire outlines the definition of human development as follows:

Human development aims to enlarge people's freedoms to do and be what they value and have reason to value. In practice, human development also empowers people to engage actively in development on our shared planet. It is people-centred. At all levels of development, human development focuses on essential freedoms: enabling people to lead long and healthy lives, to acquire knowledge, to be able to enjoy a decent standard of living and to shape their own lives. Many people value these freedoms in and of themselves; they are also powerful means to other opportunities. [28] p. 43.

What is clear from Alkire's definition above is that human development conceives a multi-dimensional notion of the plurality of what a good life encompasses. These plural dimensions and underpinning values constitute a crucial anchor and guard against easy domestication when applying the ideas to universities. Alkire and Deneulin [7] (pp. 36, 37) identify four interlocking principles of equity, efficiency, participation and empowerment, and sustainability and elaborate each as follows:

(1) Equity draws on the concept of justice, impartiality, and fairness. It incorporates consideration for distributive justice between groups. In human development, we seek equity in the space of people's freedom to live valuable lives. It is related to, but different from, the concept of equality, which implies equality of all people in some space. In human development, equity draws attention to those who have unequal opportunities due to various disadvantages and may require preferential treatment or affirmative action.

(2) Efficiency refers to the optimal use of existing resources. It is necessary to demonstrate that the chosen intervention offers the highest impact on people's opportunities. When applying this principle, one must conceive efficiency in a dynamic context since what is efficient at one point in time may not necessarily be efficient in the long run.

(3) Participation and empowerment are about processes in which people act as agents—individually and as groups. It is about the freedom to make decisions in matters that affect their lives, hold others accountable for their promises, and the freedom to influence development in their communities.

(4) Sustainability is often used to introduce the durability of development in the face of environmental limitations. However, it is not confined to this dimension alone. It refers to advancing human development in all spheres—social, political, and financial—over time. Environmental sustainability implies achieving developmental results without jeopardising the natural resource base and biodiversity of the region and affecting future generations' resource base. Financial sustainability refers to how development is financed without penalising future generations or economic stability. Social sustainability refers to how social groups and other institutions are involved, support development initiatives over time, and avoid disruptive and destructive elements. Cultural liberty and respect for diversity are also important values that can contribute to socially sustainable development. In education, sustainability requires quality in processes and to secure educational achievements.

As Alkire and Deneulin point out, these four principles are not exhaustive; other values, such as responsibility or justice, could also be considered. However, we agree with Ibrahim and Tiwari [29] that an intervention inspired by the human development approach should incorporate the four dimensions; even if its focus is on one dimension, the others must also be considered concerning the primary value chosen.

2.2. The Capability Approach: Freedoms, Opportunities and Agency

Human development is theorised through the capability approach, and the two concepts are closely interwoven; human development seeks to expand people's capabilities and expanding capabilities, in turn, advances human development. The capability ap-

proach [11,30] is a broad normative framework rooted in a philosophical tradition that values individual freedoms and is used to evaluate and assess individual well-being, social arrangements, and the design of policies and proposals about social change. The approach conceptualises "good" development as broad freedoms constituted by human capabilities, rather than only as national income or people's subjective preferences. Income does not tell us who has money or what it is used for, while preferences may be subject to adaptations in the light of poor living conditions. Instead, the core focus of the approach is on the effective opportunities people have, and what they have reason to value. It highlights substantive freedoms ("capabilities") and outcomes or what is achieved ("functionings"). If the capability is freedom of opportunity, the agency is freedom of process. Agency refers to the ability of the individual to pursue and achieve the objectives they value. An agent is someone who acts and makes change happen [10]. As Deneulin [31] (p. 27) explains, "well-being depends not only on what a person does or is, but on how [author's emphasis] she achieved that functioning, whether she was actively involved in the process of achieving that functioning or not". The process is therefore significant. Sen [32] (p. 150) explains: "The crucial question here, in the context of well-being, is whether freedom to choose is valued only instrumentally, or is also important in itself". In other words, being able to make one's own choices matters intrinsically. Because people as agents will choose the life they have reason to value, this makes "capabilities an agency-based and opportunity-oriented theory" [33] (p. 2).

2.3. Human Development, Capability Approach and University

Despite international declarations recognising the role of HEIs in promoting sustainable development [1,34], mainstreaming higher education policy is driven by an economic and knowledge-based development paradigm [35]. Coherent with this direction, scientific activities are aligned with a global environment highly competitive in knowledge resources [36] and the training of a qualified labour force. This configuration reinforces the predominance of higher education from the North, excluding most universities in developing countries [37]. Such a scenario is more likely to perpetuate uneven development.

The human development and capability approach can provide a different narrative to understand the purpose of HEIs [9]. A narrative that challenges the rationale where: university fees become the price, students are customers, knowledge is converted into money units (cost of a book, price for an article), the education is a commodity to be bought and sold. Human development and capability thinking offer visionary norms by adopting a multi-dimensional and policy-responsive view of what a good university could look like, embracing the public good, social justice and sustainability in any definition of a policy narrative [38].

The approach also provides an evaluative space to analyse the extent to which capabilities such as practical reason, educational resilience, knowledge and imagination, learning disposition, social relations and social networks, respect, dignity and recognition, emotional integrity, emotions and bodily integrity [39] can be enhanced through teaching [40], research [41], and social outreach [42]. Finally, the human development and capability approach can be helpful to scrutinise the strategic level of universities in terms of their policy-making processes.

2.4. Regional Transition Paths to Sustainability (RTPS) and Universities

Sustainability transitions have been mainly studied from four theoretical frameworks: the Multi-Level Perspective (MLP), The Technological Innovation Systems (TIS), Strategic Niche Management (SNM) and Transition Management (TM) [43–45]. The MLP has been very influential within the transition studies (TS) since it provides a heuristic to understand and analyse transitions in the long-term and through the interactions of three analytical levels: (1) niches, which are protected spaces for experimenting with developing sustainable alternatives to the dominant practices. It is in the niches where radical innovations are assumed to emerge [46,47]; (2) socio-technical regimes that constitute the stable set of rules

and routines and account for path-dependence and stability in industrial, technological, behavioural, cultural and political practices; (3) the broad, long-term, exogenous environment trends that are called landscape [48]. The MLP provides a valuable and powerful analytical framework to govern transitions by offering tools to understand incremental and radical innovation dynamics and complexity. However, scholars have highlighted some limitations when applied to empirical cases [44,49–52]. The landscape is less studied and therefore can act as a "black box" where everything that does not fit in the regime and niche levels go to; natural, physical and geographical studies are only tangentially incorporated; agency of different actors beyond their role as consumers or users is less explored given the strong emphasis on the technical side of innovation; the fluidity and dynamic configurations of the niches, regimes and landscape are oversimplified, and therefore the MLP fails to capture microdynamics in boundary categories [53,54].

Regional institutional settings with their territorial actors' configurations and networks influence sustainability transitions' pace and scope [51,54–56]. A spatially sensitive perspective is needed to study innovative interactions, which have contingencies of the territory's transitions. The growing interest in urban and regional transitions and their multi-scalar character has urged for a framework that captures the short-time changes on the micro-level and long-term transformations at socio-technical system levels [54]. Regional transition paths to sustainability (RTPS) provide a robust alternative to study organisational and institutional dynamics that happen simultaneously in multiple socio-technical regimes [57]. In this sense, the RTPS framework goes beyond single regime-niche interactions, as analysed in the MLP. Four key features are relevant to understand transitions from the RTPS perspective. Firstly, transition processes in interdependent regimes are a primary unit of analysis. Secondly, adjustment and recombination of institutional settings and change occur in the niches and regime levels. The overlapping nature of change is particularly important in the Global South context [44], where forming regimes compete with mature niches. Thirdly, change starts from and within micro-level transformations at a progressive pace in protected spaces. These transformations are place-specific, which mould possibilities for adjustment depending on the recombination of the existing contextual institutions. Fourthly, RTPS emphasises the temporary dimension of transitions by analysing if and how microdynamics changes are finally stabilised [54].

The four distinctive aspects of the RTPS have in common the attention to the processual analysis of the institutional dynamics on the emergence and evolution of multiple paths. Path-dependency is studied beyond the rigid categories of regimes and niches and includes analysing context-dependent organisational forms in spatio-temporal arrangements [54]. By including an evolutionary economic geography understanding, the RTPS explores path-dependent developments at the micro-level characterised by local actors' incremental changes [53,58]. Within these actors, universities play a critical role.

2.5. Role of Universities in RTPS

Universities are key regional actors to promote and trigger sustainability transitions, especially in regions with low human development indexes. Beyond their role of educating, universities serve societal needs by being intermediaries between local and global knowledge (since they are embedded in regional and international networks) [59]. Through their institutional framework, campus operations, teaching, knowledge generation, outreach and collaboration [60] towards a localised development agenda, universities have the potential of becoming experimental frontrunners for temporary organisational forms for de- and re-alignment of normative cultural and behavioural practices [61].

Knowledge, scholarship and research are not neutral [62], and therefore HEIs can promote a normative kind of development rooted in regional needs [63]. The agency that universities have in their relational space allows them to be key actors in promoting a sustainability vision with social inclusion and empowerment.

An engaged university acts on a regional base to provide alternative solutions to oppressing challenges that affect people's well-being in diverse needs such as sanitation,

health, food, transport, energy, and education. Due to their close connection and influence with local actors, HEIs have a great potential to influence the micro-dynamics that shape the culture, knowledge, industrial settings, markets, and policies of intertwined socio-technical systems. From this perspective, universities can serve as facilitators between regional and other institutional actors [13].

Higher education can contribute to territorial sustainability change in developing a societal vision with short, mid and long term specific goals (strategic level); drawing and fostering coalitions and cooperation in regional actors networks to create inclusive sustainability paths (tactical level); and aligning and embracing change towards sustainability with social justice in their curriculum, research, campus operations and social outreach (operational level) [14,63]. The extent to which HEIs can contribute RTPS is multi-scalar in time and space and related to their missional functions and campus operations

Teaching activities can advance a long-term vision of a desirable development via the graduates and their professional activities, acting as multipliers of sustainable development processes in social learning systems. "While a theoretical consideration of sustainability issues helps to raise awareness, practical student projects in collaboration with regional stakeholders can have a direct impact on the regional transition path" [17], (p. 165. In this sense, pedagogical innovation in strategies such as service-learning to move forward from knowing what to knowing how with social responsibility are positive directions to unlock the role of HEIs as mere knowledge transfer institutions to a transdisciplinary way of co-production and use of knowledge in context.

Research is one of the most visible functions of HEIs to contribute to society. The mainstream knowledge production system has been challenged to break the disciplinary silos and integrate findings from different knowledge areas (interdisciplinarity). Moreover, HEIs are called to integrate other knowledge producers such as citizens, practitioners, and policymakers (transdisciplinarity). As O'Riordan et al. highlight, "We need to expand the boundaries of each discipline, make them porous and flexible, and identify inter and transdisciplinary processes that integrate knowledge and diverse ways of knowing" [15], (p. 7). Research that contributes to RTPS requires a transdisciplinary approach with strong problem-solving. The transition of knowledge production towards more integrative science requires a multi-stakeholders research agendas definition to envision timely and contextual sustainability paths [13].

Social outreach, or more commonly known in Global South contexts as the third mission of universities, plays a substantial role in transformation. Materialising sustainable development in a specific territory requires cross-sector partnerships based on co-creation [64]. A socially embedded knowledge to trigger environmental transformations acts as a chief driver, which challenges the traditional technology transfer model developed by HEIs [65]. Engaging in co-creation processes requires trust-building and long-term commitment between actors, highlighting how power modulates relationships and connections within networks across various scales [56]. To influence localised paths in multi-actor environmental and social governance, universities, as influential organisations in their territories, can take a proactive role in advancing sustainability agendas in regional advisory boards, political engagements, and civic movements. Moreover, they can enhance their brokering and bridging function to expand and deepen regional networks to mobilise human, financial and material resources [61].

3. The Universidad de Ibagué and Its Two Processes: A Capabilities List as a Collective Actionable University Vision and the Peace and Region Program

The Human Development Index (HDI) is a summary measure for assessing long-term progress in three human development dimensions: a long and healthy life, access to knowledge and a decent standard of living. Colombia's HDI value for 2019 ranks it 83rd out of 189 countries (UNDP, 2020). Although the country has improved from 1990 in its three dimensions by almost 30%, inequality is still profound. The 2010 Human Development Report introduced the Inequality-adjusted HDI (IHDI), "which considers inequality in all three dimensions of the HDI by "discounting" each dimension's average value according to

its level of inequality" (UNDP:4, 2020). When the inequality is discounted from Colombia's HDI, the country losses 22.4% in the distribution of the HDI dimension indices. It directly hinders people's right to enjoy a decent standard of living and, therefore, shape their own lives. Moreover, there are prominent differences at the regional level, surprisingly having those regions with richer natural resources with lower HDI and higher inequality. From 32 departments (departments are the geographical political division of territories in Colombia), the Tolima region ranks in 18th place.

The Universidad de Ibagué (UI) is located in Ibagué, the capital and biggest city in terms of population, administrative and financial size of the Tolima Department. The region has great natural wealth (in Tolima's territory, 27.7% are paramos (Ecosystem of the regions above the continuous forest line, yet below the permanent snowline); it has 40% of the country's bird's species; 11% of dry tropical forest; contains three protected natural parts; and fourteen strong agricultural products for national and exports consumption, being rice the main crop) and cultural diversity (Tolima has 11 indigenous communities from the Pijao Etnia. It also has mestizos originally coming from the Tolima territory, and migrations from Antioquia, Cundinamarca and Boyaca (other Colombian departments)), but only two regional universities (there are other university branches but they only offer a limited number of programs), including the UI. Therefore, a large part of the local population has limited access to higher education, which has influenced the relatively low development and the high unemployment rate (In 2019, according to the National Department of Statistics (DANE), Tolima was the department with the highest unemployment rate (15.3%)). Additionally, Tolima has been a region hit hard by political violence, first during the 1950s with a bi-partisan civil war. From the 1960s onwards, the conflict between illegal armed groups and the State has been sustained.

The UI has a good reputation in the Tolima region, which was amplified nationally with its high-quality institutional accreditation, obtained in 2019. The UI defines itself as a regional university committed to regional development. From its beginning, the UI has adopted a human development conception based on the construction of local identities and the balance of human well-being with environmental sustainability. Formal curriculum reforms to situate learning in the territory from the first semester onwards; regional teaching case studies based on real regional challenges gathered through the territory-based programs; sustainable business practices; citizen's engagement through business and law clinics; the institutional research agenda co-produced with regional stakeholders aimed at solving local problems; and the programs of social projection and extension, are some of the concrete initiatives the university has promoted from its foundation [66].

However, the UI approach to sustainability is less clear since most of the transversal and specific guidelines, programs, projects, policies have not been thought from that perspective. Nevertheless, there is a formal recognition that there cannot be social well-being without preserving territorial natural resources. In the last years, the UI introduced courses related to the conception of sustainability and technical understanding on how to produce sustainable solutions; had an increase in research projects related to sustainability both funded internally and externally; changed practices related to water, electricity, waste disposal, recycling, green spaces in the campus operations; and introduced a normative direction towards environmentally friendly practices in the social outreach projects. These changes motivated voluntary participation of the UI in the Green Metric World University Ranking (http://greenmetric.ui.ac.id/what-is-greenmetric/. Access on 14 February 2021. In 2019 the UI ranked 278th out of 780 universities, and in 2020, 381st out of 912 universities in the world. In Colombia, the university is ranked 27th out of 47 universities).

The UI academic offer has concentrated on undergraduate programs. The professional programs are offered, in the majority, for students in the most vulnerable levels of economic income, which in Colombia is qualified in socio-economical strata. The strata levels go from 1 (the lowest) to 6 (the highest). In 2019, 48% of the students were in strata 1 and 2 and 35% in strata 3. The university offers the opportunity to local students (up to 85% of the students come from Tolima) to get a high-quality education (The UI was accredited

by the National Ministry of Education of Colombia as a High Quality University in 2019 (Resolution 010440 03). This is a voluntary process where universities present themselves to the Accreditation National Council. It is a highly demanding process. At the time, the UI was the only university in Tolima with High Quality Accreditation). The UI presents 32 subjects that include sustainability topics in the teaching function, representing 5.2% of the total subjects offer.

The research agenda of the UI is updated according to the regional needs through participatory forums where different sectors (industry, government, producers, civil society) express their needs and interests. The UI responds with its faculty expertise. The agenda is defined around five research topics: food security, environment, social well-being, civic coexistence, regional development. These topics collate six interdisciplinary programs: Innovative technology-based agroindustry; conservation and eco-efficient use of natural resources and the environment; High value-added service industry; Education and well-being for integral human development; Laws and justice for citizen coexistence; Inclusive and sustainable regional development. During 2018–2020, the university had 75 active research projects related to sustainability from humanities, engineering, social sciences, natural sciences, mathematics, business and finances, law and political science. During the same period, 69 finalised, according to data provided from the UI Research Direction.

However, despite these efforts, there is a limited assumption in the relation between regional needs and disciplines among faculties and students. As the rector stated: "There is a misunderstanding of the purpose of academia. For instance, the misunderstanding that focusing on the region distracts the disciplines from their formal instruments and cutting-edge research. It is important to deactivate these conceptions through a dialogic and pedagogical process". Furthermore, this is, precisely, one of the goals of the capabilities list initiative.

3.1. The Aspirational Capabilities List for the UI

In 2018 the UI leadership enabled a participatory process to envision the university as a space where the community, both from the university and from the region, can expand human capabilities. The definition of what is valuable for the UI included representatives of faculty members, students, administrative staff, service staff, leadership, alumni, enterprises, and social organisations that work with the university. The initial aim was to build an umbrella institutional policy based on the capability approach designed from a bottom-up approach [67].

The final capabilities list, developed and approved by the UI community, can be seen in Table 1:

Table 1. The UI capabilities list †.

Category	Capability	Definition
Training	Training of persons and citizens	A university community capable of training people, professionals, and citizens with critical thinking, ethical principles, and sensitivity regarding social differences and needs.
	Integral leadership	A university community capable of training people for reasoned and responsible decisions, in accordance with criteria of justice, fairness, and respect for differences (within the framework of empathic and affective communication) that leads to the realisation of joint actions oriented to the common good.

Table 1. *Cont.*

Category	Capability	Definition
Territory	Social construction of territory	A university community that is capable, in association with the other social actors, of rebuilding and appropriating its territory collectively, through dialogue and mutual understanding, committing itself to nature, culture, and diversity of knowledge for connivance and peace.
	University that transcends	A university community capable of generating projects and actions aimed at the development of a fair and democratic society that enhances reflection, exchange, and generation and appropriation of knowledge to respond to aspirations, challenges, and problems that affect the various actors in the territory.
University community	Purposeful critical reflection	A university community capable of reflecting and building critically on their being and daily work in the light of their identity, history, ethical stakes, bonds of trust, organisational forms, growth opportunities, and personal and collective aspirations.
	Care	A community that is capable of ensuring conditions that allow the integral growth of the self and the other, through relationships that build trust and recognition among its members as well as of the environment in which they are immersed.
	Constructive interaction	A university community capable of stimulating, allowing, and promoting a dialogue that is well informed, clear, transparent, and respectful of freedom and differences of opinion. It is oriented, on the one hand, to strengthen the social interaction between the members of the community, so that they develop the personal power to choose and act in situations of social and political environment. On the other hand, it favours participation, a good working environment, and individual and collective integral human development.
Enterprise	Weave nets	A university community capable of fostering interconnections with companies, communities, and students to develop innovative projects that respond to territorial needs, build trust and take care of the common good, to make possible a truly local development with a global perspective.

† [67] p. 47 In (Velasco and Boni: 47, 2020).

The UI capabilities list shows what the university community values and wants to expand through its organisational operation and its different academic and social out-reach programs. It is a collective manifestation of a human-centred vision integrated with the territory. The effects of the list in the university operation are still to be seen. However, this participatory process shows the possibilities that an HEI has to enable and co-create a collective vision.

3.2. The Peace and Region Programme of the UI

The Peace and Region Programme (P&R) is an undergraduate curricular strategy that links students with projects in rural and urban municipalities of the Tolima region. It started as a graduation option, but in 2015, after a curricular reform for all the undergraduate programs, it became a graduation requirement. Students spend a semester living in the territory, with the support from regional advisors, who are full-time tutors specialised in regional development. The programme revolves around three key themes: peace, citizenship, and regional development. It is developed in three stages:

1. Contextualisation: It encompasses a seminar (16 h to approach the three themes); the development of the semester's action plan, and an induction week, before the displacement of the students to the different municipalities in rural or urban contexts.
2. Regional experience: Each student settles in different locations (provided by the public or civic organisation that the student will engage with); incorporates in a project previously agreed; engage in two learning encounters organised by the regional tutors in which students located in geographical proximity gather to have a critical reflection on their process and the regional needs.
3. Closure: It includes two activities, a collective review between the university tutor, the regional organisation's project leader, and the student to evaluate the experience and to define the continuity of the project to be taken from a coming student; and a collective formative evaluation in the UI campus where all the students and tutors reflect on the learning experiences both in terms of their personal growth and professional training and in terms of the knowledge co-production between local communities and the University for regional thriving.

From 2010 until 2019, P&R has co-designed and implemented more than 400 regional development projects in the 47 municipalities of the Tolima department. It has signed over 70 cooperation agreements to develop projects with municipal governments, hospitals, public services providers, community and civic organisations, agricultural producers' associations, and enterprise foundations. Over 1000 students from the schools of engineering, business and economics, humanities and social sciences, and law, have fully immersed themselves in the territory and worked with the local communities [68].

From an organisational perspective, the P&R programme has an internal administrative and academic unit with a director, three coordinators: research, academic, projects, and the regional tutors' group. The UI-local organisation agreement guarantees that the UI supports the co-identification of local needs, co-formulates relevant projects to respond to those needs, and supports the continuation of the projects until their closure. From the organisations' side, they commit to providing housing and food for the students and support their learning process.

4. Methodology

To explore how, and to what extent, universities can develop and promote just transitions, we chose a middle-size regional university in a region with a low human development index in the Global South. It was a deliberate decision, not only because of the novelty of the two cases that we studied within the university, but also to have a deeper exploration of just regional transition paths to sustainability in adverse contexts. Although our research was based on two experiments within a single university, we aim to contribute to the understanding of the role of HEIs towards regional just transitions.

We developed qualitative research based on semi-structured interviews, focus groups, participant observation, documentary analysis, and a set of participatory methods designed following the human development values and the human capabilities approach. The two case studies were the construction process of a university policy deeply rooted in the territory and the contribution of a curricular programme to human development and RTPS.

The capabilities list construction process started in March 2018 with two phases that finished in December 2019. The analysis of the Peace and Region programme had two stages. The first was carried out between September and November 2019, and the second between November and December 2020. Each case study had a different methodology design; that is why we describe them separately. Although the methodologies for both cases were tackled from the human capabilities approach, we analysed the data gathered with RTPS lens.

4.1. The Capabilities List Methodology

The list was built in two stages. The first phase was explorative and based on an opening up process to integrate: (1) the various narratives, knowledge, and discourses of

the different groups; (2) actors and networks involved in the UI action; (3) the underlying vested interests of the participants. The second phase was devoted to validating the list with the community, reflecting on the enablers and disablers to expand the capabilities list, and building connections between them. A third phase that was truncated due to changes in the university leadership was devoted to building action pathways to expand those capabilities expressed in concrete plans, programs, calls, policies [67]. A description of the methods and phases can be seen in Figure 2.
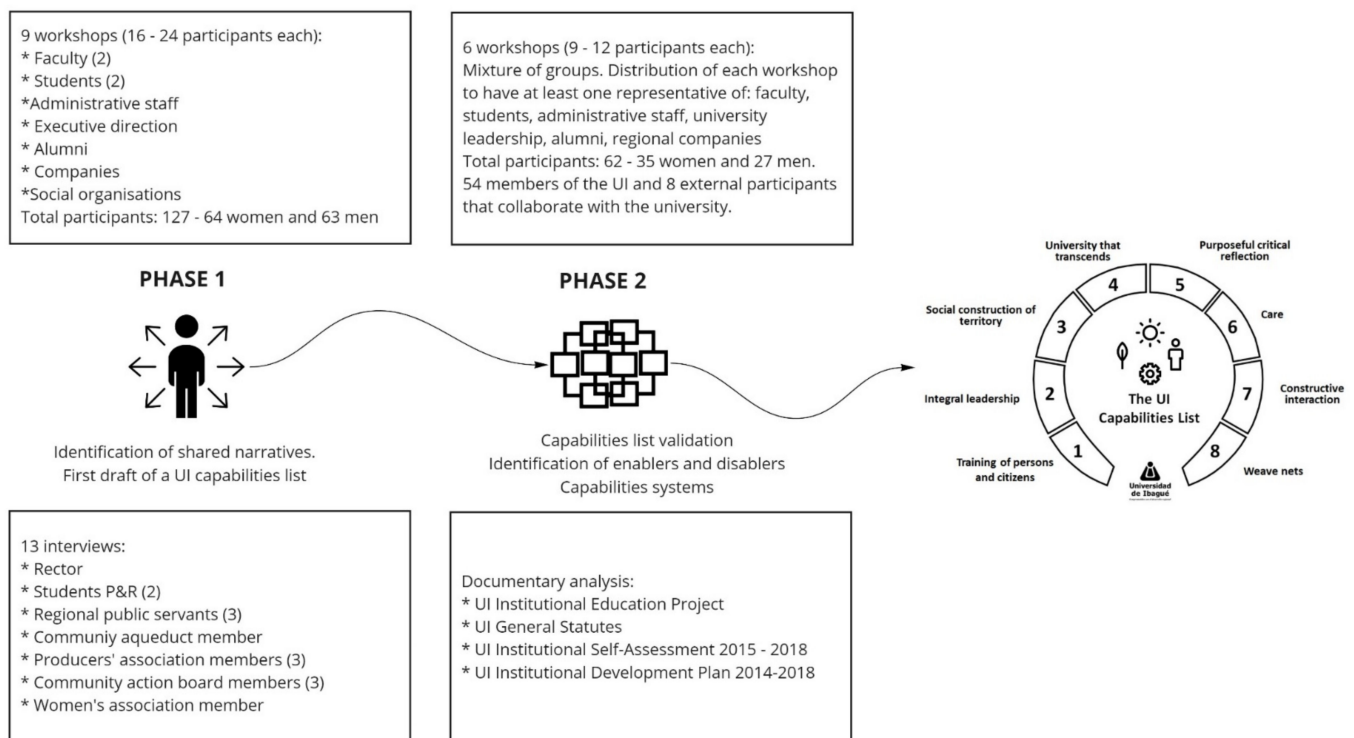

Figure 2. The UI capabilities list methodological process.

The methodology was designed and applied by a group of seven researchers trained in human development, innovation studies, and systemic thinking from the UI, and by the joint research centre of the Spanish National Research Council (CSIC) and the Universitat Politècnica de València (UPV), Ingenio. The first stage had nine workshops grouping together the same type of actors (students, faculty, administrative staff, external partners, etc.) so that participants could express themselves freely in a peers' environment. The workshops used transpersonal, narrative, and visual methods to situate participants in their context and explore what they considered valuable as university community members [68–72]. The researchers' group gathered the data through participant observation and the collection of written reflections developed by the participants. Additionally, 13 interviews were performed with the UI Rector and territory social organisations that could not be part of the workshops developed in Ibague.

Former stage participants were summoned to validate the list and formulate concrete ways to expand capabilities inside and outside the UI in a second stage that had six workshops carried out between November and December 2019. This time the participants were mixed, so that discussions on what is valuable for the UI would have different perspectives. The workshops had "three moments". The first was dedicated to recalling the first stage process and the objective and meaning of the project. The second moment had a format of a "Capabilities Gallery" where participants could interact with each one of the capabilities in a sensory way, touching the frames, reading the texts, connecting with the content. An image accompanied each capability. During the second moment, participants included new

capabilities or excluded any of the ones presented. They also related capabilities systems and identified enabling and disabling factors to expand the capabilities system. The third moment entailed participatory feedback from the participants related to the process and the output (the list). Simultaneously, a documentary analysis of formal UI documents such as the general statutes, the university educational project, and the different organisational development plan was developed. The initial list was adjusted with the second stage results, and a list of disablers and enablers to expand the list was recorded.

4.2. The Peace and Region Programme Methodology

The main methods used to analyse the P&R programme were the following: official documents analysis, semi-structured interviews, focus groups, and a seminar about initial findings with the P&R team, faculty, students, and university leadership.

Eighteen interviews were performed, distributed over: eight students, four regional organisations, three P&R board members, one faculty member, president, and provost of the university. The focus group was done with six of the regional tutors. The interviews with regional organisations and students were focused on the municipality of Chaparral since (1) Projects have been executed every year from the start of the programme in 2011; (2) Every year has a mixture of projects with local authorities, social organisations, and social foundations; and (3) There have been students doing the experience from four of the five schools. The remaining interviews and the focus group performed with the regional tutors included questions about the experience in the whole territory. Table 2 presents a description of the methods and participants involved in the data gathering.

Table 2. Peace and Region research methods description.

Participants	Methods
Students	Eight interviews to students from the programs of: Civil Engineering, Political Sciences, and Industrial Engineering. Seven women and one man.
Regional Organizations	Four interviews to: Chaparral Major's office, Chaparral Aqueduct manager, Chaparral Women's network for peace, Chaparral Hospital manager
Peace and Region Team	One focus group with six regional tutors Three interviews to: Program's director, Academic Coordinator, and Projects Coordinator
Faculty	One interview to a full-time lecturer involved with the program
Institutional Leadership	Two interviews: Rector and Provost
Researchers	Documentary analysis: Thesis related to Chaparral UI Social responsibility policy UI Institutional Education Project UI Curricular reform assessment 2018 Institutional Development Plan 2014–2018 UI Curricular Guidelines 2011 Peace and Region Semester Regulation 2017 Peace and Region Internal recompilation of learning materials

The instruments for data collection were guided by the human capabilities approach and centred the attention on the expansion of capabilities related to learning processes enhanced by the P&R program. Special consideration of the well-being and agency of all the stakeholders involved in the process was also central in the analysis.

4.3. Data Analysis for the Current Study

The authors were part of the research design and data collection processes for the two case studies and worked together with researchers from the UI. To advance in the study of the cases, we analysed the raw data with two criteria: the values of human development

and the central elements that constitute the RTPS. We triangulated the data gathered in the interviews, focus groups and workshops with institutional documents and analysed it following the categorisation in Table 3. The categorisation was done separately for each one of the categories.

Table 3. Data analysis categories.

Human Development Values	Regional Transition Paths to Sustainability
Equity	Interdependent socio-technical systems
Sustainability	Organisations and institutions involved
Participation and empowerment	Multi-scalarity
Efficiency	Plasticity
	Relational space

Human development and RTPS place a strong emphasis on the equal importance of the process and the results. Our analysis is crossed by focusing on how just transitions are configured based on these theoretical frameworks, taking our case studies as references. Therefore, in our discussion section, we present the findings for each case study differentiating the process and the results dimensions using the two analytical frameworks.

5. Discussion

In Section 2, we argued that merging the two analytical approaches, RTPS and human development, can provide us with an adequate approach to discuss to what extent the UI is contributing to a just transition through two specific initiatives. As we stated in the introduction, this is especially relevant in Global South contexts, where social justice must be a goal of any sustainable transition [18]. Following Loorbach's complexity-based governance framework, which distinguishes four types of governance activities [73], we argue that the capabilities list is a strategic university policy activity, and the P&R programme can be framed as an operational programme that roots the university regional commitment into its teaching, research and social outreach missional functions. Both cases have an experimental nature that aims to enhance a normative regional view. The regional dimension of the transition pathways shaped by specific organisations and institutions is directly addressed in both case studies. Recognising that place-specificity and scale influence the transition processes [51] is crucial to analyse how a regional university acts as an intermediary to challenge path-dependency.

From one side, the human development approach provides the following analytical elements: (1) its core values (equity, participation, sustainability, and efficiency) that will allow assessing the content of the list and the main features of the P&R programme; (2) the capabilities expansion as a result of both initiatives. From another side, the RTPS framework provides central elements to observe the two initiatives: the relevance and dependence of the spatial context; the multi-scalar nature of transitions; changes at the micro-level that can influence pathways and trigger new institutional arrangements and a process-centred perspective. Supporting our analysis in our case studies, we explore how a regional university, from its core activities of teaching, research, and social outreach operated from its campus, can contribute, or not to just transitions. Figure 3 depicts our understanding of how universities as critical actors to engage regional governments, enterprises, social organisations, and their inner community can trigger multi-scalar processes towards social justice and sustainability. Following this reasoning, in Section 5.1, we analyse the capabilities list; in Section 5.2, we approach the P&R program; in Section 5.3, we discuss to what extent the two initiatives are contributing or not to a just transition in this regional context.
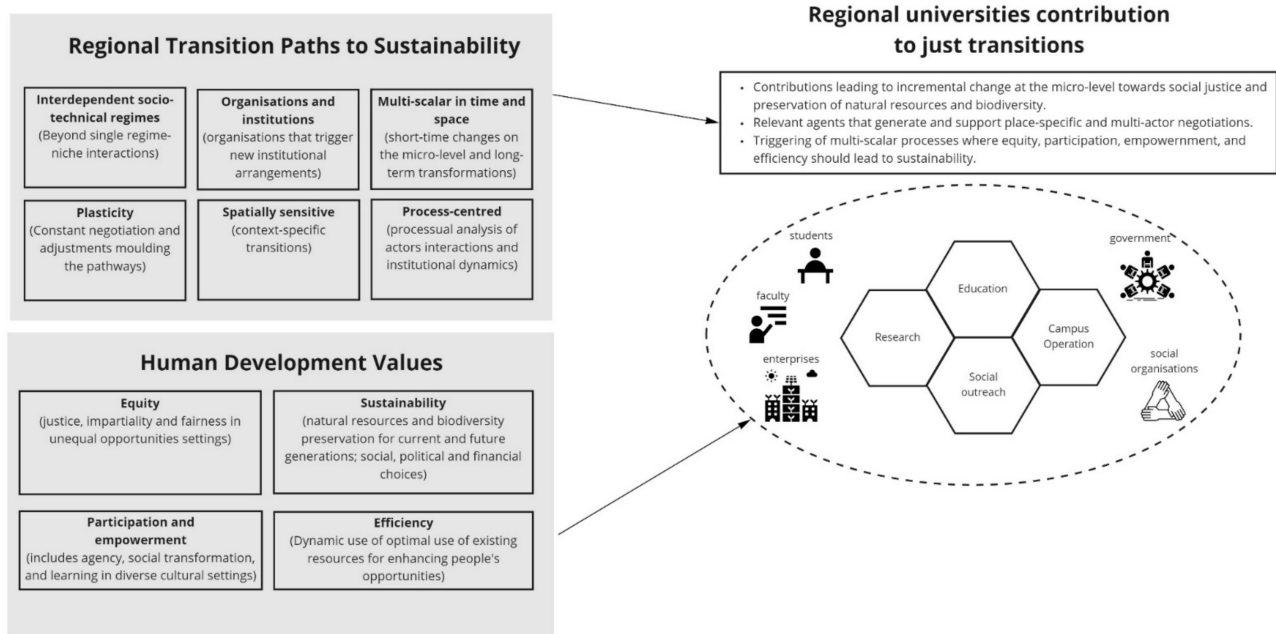
Figure 3. Human Development and RTPS to analyse the role of universities in the promotion of just transitions.

5.1. The UI's Capabilities List

5.1.1. On the Content of the List

Examining the content of the list reveals a strong connection with three of the four core values of human development. Equity is central in the definition of the training capabilities: A university community capable of training people, professionals, and citizens with critical thinking, ethical principles, and sensitivity regarding social differences and needs (cap. #1) or in accordance with criteria of justice, fairness, and respect for differences (cap. #2). References to equity also appear in the cap. #4 related to how the generation and appropriation of knowledge should respond to aspirations, challenges, and problems that affect the various actors in the territory.

Participation and empowerment are the preferred values for the UI's community. We can find references to them in all the eight capabilities, those related to the training characteristics (critical thinking, ethical principles, and sensitivity (cap. #1), with reasoned and responsible decisions (cap. #2). Additionally, as part of interactions with other actors: fostering interconnections with companies, communities, and students to develop innovative projects (cap. # 8); in its internal operation: a university community capable of reflecting and building critically on their being and daily work (cap. #5); creating relationships that build trust and recognition among its members (cap. #6) or promoting a dialogue that is well informed, clear, transparent, and respectful of freedom and differences of opinion (cap. #7). References to the capability to enact changes and expand agency appear clearly in cap. #7: develop the personal power to choose and act in the social and political environment, in cap. #3: rebuilding and appropriating its territory collectively and in cap. #8: to make possible a truly local development with a global perspective.

On the contrary, efficiency, understood as the optimal use of existing resources, is absent in the list. Even when the list mentions a university community capable of fostering interconnections between different actors to develop innovative projects, the aspiration is to respect to territorial needs, build trust and take care of the common good.

Finally, references to sustainability appear clearly in cap. #3: appropriating its territory collectively, through dialogue and mutual understanding, committing itself to nature, culture, and diversity of knowledge for connivance and peace and in cap. #6: build trust and recognition among its members and the environment in which they are immersed.

When the list is analysed from the RTPS we find coherence between the UI mission and what its community considers valuable individually and collectively. It is clear in each one of the eight capabilities that the UI has a normative regional vision that puts the environment, social well-being, and civic coexistence at its centre. That is also included in its thematic research areas and, to a lesser extent, in the academic programs offer. The UI community expresses the characteristics of a university engaged with the region, when it states the sensitivity regarding social differences and needs (cap. #1); rebuilding and appropriating its territory collectively (cap. #3), generation and appropriation of knowledge to respond to aspirations, challenges, and problems that the various actors in the territory (cap. #4); care for the environment (cap. #6); and fostering interconnections with companies, communities, and students to develop innovative projects that respond to territorial needs (cap. #8).

The expression of what is valuable for the university community and its multiple local partners in the list shows the explicit intention to influence short- and long-term regional paths at a strategic level. As the rector stated, the most valuable contribution of the UI is "a regional consciousness, a regional commitment [which is visible] in the environment, in curricula, in the regions' outlook".

The list also draws tactical regional paths based on coalitions and cooperation among regional actors when states that the territory is socially constructed (cap. #3), that a constructive interaction among different stakeholders is central to act in a joint regional vision (cap. #7), and that weave nets is the way to make possible a truly local development with a global perspective (cap. #8). The operational level of the list was started to define, in the second stage of the process, when the capabilities were displayed in a systemic, interconnected way and enablers and disablers were identified. A third stage to develop operational instruments was truncated by the change of university government and a more conservative vision of the policy-making process from the university board.

The ambition to be a decisive regional actor with a positive reputation and insertion of the UI in the regional context lays the ground for the UI to be an experimental frontrunner to trigger new institutional settings [61]. Moreover, the directionality expressed in the list suggests that new institutional arrangements should be multi-actor, inclusive, and respectful of the people and the environment. However, the extent to which the UI has influenced RTPS and could trigger transformation through its joint vision requires further research grounded in approaches developed in the RTPS field (i.e., a transition topology as the one developed by Pflitsch and Radinger-Peer (2018) [74]).

5.1.2. On the Process of Building the List

From a human development perspective, as presented with more details elsewhere [67], the participatory process for constructing the capabilities list expanded the epistemic capability of the participants. Following Fricker [75], the epistemic contribution capability is the real opportunity to produce and share information. This capability was expanded individually and in groups. Individually, in phase 1, when the participants evoked their experiences, moments, situations, and people that have been pleasant, valuable, and/or significant on their path at UI. Collectively, in the four-station journey, when they argued about how the university could contribute to the region and/or vice versa; the characteristics of a person they consider as a comprehensive trainer; the aspects of the university they would either retain or remove; and the values, knowledge, practices, and emotions that describe a humanist and autonomous leader. In the second phase, the epistemic capability was also enhanced when participants experienced the Capability Gallery when each person observed, experienced, and reflected on the capabilities presented.

Apart from the central epistemic capability, other capabilities have been expanded. We can mention the practical reason capability understood as making well-reasoned, informed, critical, independent, intellectually acute, socially responsible, and reflective choices [39] and, enacted during collective moments, the social relationships capability, understood as

being able to participate in a group to learn, work with others to solve problems or tasks, and collaborative and participatory learning [39].

The list's construction methodology was designed to be highly inclusive with regional partners and alumni included so that the aspirational guiding vision for the UI had the recognition of wide regional underlying institutional dynamics. The multi-scalar nature of regional paths was also included in the construction process. When participants were asked to state the fundamental characteristics that the UI should have to fulfil its mission and endure in time; the current enablers and disablers to expand the collective capabilities; the required short and long-term changes for the UI and the region were constantly in negotiation. The UI defines itself as a regional university. Therefore, space is a central element. In the first phase, a specific stage in the workshop was dedicated to the definition of the region and how the university can contribute to it and vice versa. In this sense, participants discussed how context-specific activities could draw specific action pathways.

The list's ambition was twofold. Firstly, to empower the university community through the process (internal and regional partners) to express what they value and want to expand through the UI. Secondly to set a high-level strategy to guide the university policies in the long-term so the coherence with its normative regional vision would be preserved. The first ambition was fulfilled, but the second is still uncertain. All processes are contextual and dependent on constant negotiations and adjustments that mould the pathways. From a RTPS perspective, the list could be seen as an attempt to trigger new institutional arrangements to foster a regional directionality towards just transitions. However, as has been showed in many analysis of socio-technical transitions [76], power issues can strongly influence directionality and are constantly moulding pathways to sustainability.

5.2. Peace and Region Program

Learning and Capabilities Expansion

Previously explained in Section 3, P&R is an undergraduate curricular strategy that links students with projects in rural and urban municipalities of the Tolima region. It is based on different pedagogical strategies devoted to promoting an active, dialogical, contextual and collaborative learning environment, as shown in Table 4 [76–78]. It is also informed by a project-based learning approach [79] designed around specific questions or problems that require autonomous learning and decision-making processes. Those questions and problems are based on community needs following a service-learning approach [80].

Table 4. Pedagogical strategies and learning types in the Peace and Region Program.

Pedagogical Strategy or Learning Mode	Peace and Region
Active: The student learns by acting and reflecting on her actions [77]	Learning by action, with constant reflections on attitudes and values.
Contextual: Critical application of knowledge in real situations	Territory as a learning space. Re-valorisation of the meaning of space and citizenship.
Cooperative or collaborative: Relational learning based on joint purposes beyond their own interests [78]	Interdependence and interaction with actors in the territory. Responsibility and communication skills.
Project-based: Learning process designed around specific questions or problems that requires autonomous learning and decision-making processes [79]	Based on projects with autonomous work with the support of disciplinary UI lectures. Co-production of solutions with the community.
Dialogic: Learning based on communication, interaction, dialogue, and consensus/dissent among participants [81]	Egalitarian dialogue and creation of meaning. Reflexive transformation of the environment.
Service-learning: based on community needs [80]	Learning through sense-making of contextual needs and participatory approaches to solving them

From a human development perspective, we can argue that P&R is based on a participatory approach where the different actors involved (local organisations, students, lecturers, regional advisors) work together to develop a learning environment. At the same time, the projects developed by the students should address problems identified by regional tutors and local organisations. Detailed scrutiny of those problems' content

reveals differences between the priorities detected by local municipalities and companies that those highlighted by social organisations. Local municipalities and companies are most inclined to identify sustainability needs (understood in terms of preventing or mitigating environmental hazards) and efficiency (how students can help local municipalities be more efficient in their performance). Some interviewees consider the UI students as bearers of technological novelties that can optimise local services: "they bring technological novelties, industrial and technological revolutionaries' ideas"; "they helped us to optimise the sanitation service".

Social organisations also value the technical contributions of UI students: "the interns helped us to manage social networks, to prepare a news stories, photographs, and with writing styles". However, they also consider that the students are closer to the social contexts in Tolima's region. As one of the former students of P&R said: "P&R gave me the opportunity to get to know the region, how it works, and how it is being prepared as a real actor of the post-conflict". However, even if we can appreciate these differences devoted to the profile of the hosting organisations, in terms of students' capability expansion, results are homogenous. Firstly, P&R contributes to expanding capabilities related to knowledge acquisition. Although this capability already exists in students, P&R contributes to acquiring multidisciplinary and contextual knowledge. One example of multidisciplinary knowledge is this quote from an interview with an engineering student: "Well, I am not doing what an [engineer] does, but what a social communications person does. However, the idea is to grow professionally or have another type of experience and not just business experience. [P&R] did open my mind, it opened my vision to other branches of a professional environment".

Another example of contextual knowledge is this quote from a student involved with a social organisation: "When you come to the network you realise the sacrifice that women undertake. In the sense that they are mothers, they have their other jobs, but nevertheless, they are there, they are there to keep the office hours of the network ... Being in the women's network was like: "Listen, you have to sweat it, you have to fight it, you have to intervene, you have to send letters, you have to make presentations, you have to influence the politics and policies for the people" ... At that point, it served as an example for me. Showing me how a simple organisation and a group of women can contribute to society or create an outcome".

The learning acquired helps expand the capability to achieve critical thinking, which the students' value as key to their personal and professional future. As one of the students interviewed stated: "When there is a problem, there is something in the background, something that is causing it. It does help you to look for, and investigate, the why and what is happening in the community and in the people causing that situation. Not to look at the problem as a problem but as a situation, an alteration in the community".

Moreover, students expand their capability to learn. At the beginning of the process, many students were reluctant and suspicious about a new learning opportunity. However, during the P&R semester, the daily presence in the context and interactions with other students and local actors enhanced the learning capability. "It's very different when they tell you: "A flowchart is done like this, a process flow is done like this". Yes, they give you the basic case, they tell you the story, but from this experience of P&R I had to do everything. You start to identify and think: "Hey, how do I do it? How can I put that down on paper so that the person who comes and sees it understands what we can do?"".

Finally, one capability that is definitively expanded is practical reasoning. It is understood as making well-reasoned, informed, critical, independent, intellectually acute, socially responsible and reflective choices [39]. Through all the P&R process, students should reason, reflect, co-produce and communicate. All of that allows students to make more informed and critical decisions about their future. This quote reveals the essence of this capability: "I believe that P&R trains you in values more than anything else. You are committed and ready for whatever they need because that's what you went there

to do, to help. It teaches you values, and that is very important for your personal and professional life".

5.3. A Spatial Analysis

When it comes to the space dimension, through the P&R program, diverse actors such as local authorities, formal and informal producers' associations, civic foundations, and public services providers define their notion of territory in terms of the culture, values, needs, challenges dynamically. The UI also states and acts on a relational base of the territory by expanding its campus to the region and encouraging experimentation with a transdisciplinary base attached to the students' formative process. Therefore, the UI's role in this Colombian regional context is also a good example of the interdependence of socio-technical systems. As Kanger (2020) [52], (p. 352) points out: "an education system that would integrate sustainability issues to every subject on all levels could play a foundational role in supporting transitions in other systems by socialising a whole generation of people in a considerably different manner (. . .) This, in turn, can contribute to the alleviation of resource pressures on energy, mobility and food systems". We argue that P&R, as part of the educational socio-technical system in the Tolima's regions, is playing this role not only in training students but also in fostering co-creation processes with local stakeholders to enrich projects. Such an approach facilitates lasting solutions and capacity-building in communities for managing their own transition pathways, and challenges current institutional arrangements. Another relevant contribution of P&R to a more nuanced spatial understanding of the challenges that the Tolima faces is identifying and addressing those challenges. Students are asked to approach a specific local context from the beginning of the semester and identify its needs and challenges. As one of the companies interviewed stated, talking about the relationship between the UI and local companies: "We have recovered a broken bond. We build with, and for, local companies. The P&R programme offers a real immersion, real participation. It is not only the intern's support . . . we value the process continuity; the students become part of our organisation. We also value the dynamic and flexible planning".

In that sense, the local context is understood holistically, avoiding compartmentalisation of socio-technical systems. The P&R programme does not focus on specific systems but a collective understanding of challenges. From a RTPS perspective, the programme captures this complexity and moulds micro-dynamics to socially fair and sustainable paths. In that way, the UI is immersed in local internal dynamics and builds transdisciplinary bridges to propose specific action lines.

Finally, since the UI is an influential actor at a regional scale, P&R can create spillovers on different socio-technical systems such as food, water, energy, and health. Additionally, the UI influences the policy sector by engaging with local and regional authorities. By working with local governments, faculty and students improve policy coordination in the different government secretaries (agriculture, infrastructure, planning, mobility, among others). It also advocates for the engagement with a broad range of actors where communities and their well-being are at the centre, which increases social acceptance, absorption, and acceleration of sustainability practices.

However, the temporal scope to which P&R is contributing to sustainability remains to be seen through more in-depth studies. As we suggested in the capabilities list, a transition topology could provide a more comprehensive view of the UI's role in new organisational and institutional arrangements towards regional sustainability. The programme was conceptualised and operated from a people-centred regional development notion. However, the region cannot thrive without preserving its natural resources endowment; that is why the lines of action include an ecological dimension. P&R is still under an experimental pathway and learning by doing.

5.4. Is the UI Contributing to Just Transitions?

Swilling [18] argues that just transitions are processes where incremental and increasingly radical changes accumulate over time and head towards the SDGs. The result is a welfare state based on greater environmental sustainability and social justice. These changes arise from a great multiplicity of struggles, each with its own context-specific spatial and temporal dimensions.

We analysed how the UI can be a relevant change actor in its regional context. Change comes from the directionality that inspires its activities, from the role that the UI plays in its regional context by convening multiple actors, from the knowledge produced and the capability expansion in the UI's activities. However, our study has a limited temporal scope, and we cannot observe if those changes have a broader and long-term influence on the whole regional context. It depends, among other factors, on the influence of other regional actors and institutions both inside and outside the UI. However, we can argue that micro-level transformations are in place, and those transformations have a specific directionality grounded in environmental sustainability and social justice, as Swilling [18] proposes.

The directionality is clearly expressed in the content of the capability list: teaching, researching, outreaching, and governing the UI should be based on core values such as participation, empowerment, equity, sustainability, inclusiveness and triggered by a network of different actors. All of that resonates clearly with the normative ambition of a just transition.

Moreover, during the process of building the list and participating in P&R, we found capability expansions. Swilling [18] and Ramos-Mejía et al. [21] point out that transitions should consider capabilities' expansion and deprivation as a proxy of how just a transition is, especially in Global South contexts. We found that the epistemic, learning, social network and practical reason capabilities are outcomes of the two processes. Going back to the idea of micro-level transformations pointed out by the RTPS, we argue that scrutinising if those transformations are contributing to a just transition is the degree of human capabilities expansion.

Another consideration when discussing the idea of a just transition is the inclusive character of both initiatives that show a genuine willingness to sustain co-creation processes. The list was made with greater involvement of the UI community, including external actors as companies, municipalities, and social organisations. P&R is based on the participation of a broad range of regional actors. The list is an example of a co-produced document with the help of participatory methodologies. In P&R, students design solutions for local problems interacting with local actors and the regional tutors. Both initiatives are good examples of the relevance of transdisciplinary knowledge produced through academic and non-academic actors' interaction. As pointed out by Stephens et al. [14], this is how HEIs can enact change at the regional level towards sustainability and, we add, social justice.

However, as discussed previously, the influence of the micro-changes that the list and P&R can have in a broad temporal scope should be researched. Both initiatives have contributed, at the moment, to expand several capabilities and sustainability in a broad sense.

Nevertheless, the UI is part of a historically regional governance structure in which the relationship between HEIs and their regional environment is critical. Organisational and institutional normative change is also multi-scalar within the HEIs (from HEI management to individual researchers and time-dependent), which shapes its expansion to a desired regional development. Hence, triggering change within and outside the HEIs requires both bottom-up activities (coming from single organisations) and top-down approaches (with more comprehensive organisational coordination) [74]. So far, the UI has expanded its potential as a regional broker by enabling co-creation spaces to respond to local challenges and actively promote desirable regional pathways.

Explicitly discussing the kind of development in a particular regional setting through the lens of human capabilities provides a cross-fertilisation for the RTPS needed not only theoretically but also empirically. The notion of justice in the centre of the discussion [82]

and how it can be triggered by local actors such as universities strengthen the RTPS analytical framework and opens up possibilities in Global South contexts.

6. Conclusions

HEIs and particularly universities are central organisations that can act as bridges between diverse actors and, more importantly, act as promoters and amplifiers of just transitions. This paper discusses how a Colombian regional university, the UI, plays this role through two initiatives: a governance experiment piloted between 2018 and 2019 that constructed, following a participatory process, an aspirational vision for this university through the definition of eight human capabilities. The second is a formal curriculum regional programme named P&R. It was established in 2010 as a service-learning strategy for final year undergraduates as a requisite for graduation. During one semester, university students get involved in interdisciplinary projects working and living with the communities to contribute to peace and local development.

To analyse the contribution of these two initiatives towards a just transition, we built a specific analytical framework based on the human development capability approach and RTPS. We argue that combining the two frameworks is crucial to understanding the UI's contributions to just transitions in Global South contexts characterised by environmental, social, and institutional un-sustainability.

Exploring both the content and the process of building the list and perceptions of the different actors involved in the P&R programme, we found that both initiatives have a solid normative directionality grounded in core values such as participation, empowerment, equity, sustainability, inclusiveness triggered by a network of different actors. All of that resonates clearly with the normative ambition of a just transition. Moreover, in both processes, people involved have expanded human capabilities (such as learning and epistemic capability) that contribute to a just transition. Both initiatives are also sound examples of the relevance of holistic and transdisciplinary knowledge produced through academic and non-academic actors' interaction.

However, further research should be undertaken to analyse to what extent these initiatives are triggering long term transition pathways in contexts characterised by lower human development. How to bring about paths to sustainability in regions where institutional and organisational changes are permeated by social conflict is at stake. Challenges go beyond what has been spotted in the transitions literature, primarily based on developed and industrialised economies. Our case studies argue that context matters even more in Global South regional settings characterised by resource endowments, socio-political struggles, corrupt political systems, which require going beyond organisational and single socio-technical systems path-dependence. A next step to further explore the UI's role in Tolima to triggering just RTPS is the construction of a transition topology to capture micro-level institutional and organisational change processes over time [74]. Such a topology would need to be strengthened with a human development perspective, so identifying boundary-spanning activities would also depict if the regional paths expand human capabilities.

Author Contributions: Conceptualization, D.V. and A.B.; methodology, C.D.; validation and data curation, G.D.R.-F.; writing—original draft preparation, D.V. and A.B. All authors have read and agreed to the published version of the manuscript.

Institutional Review Board Statement: Ethical review and approval were waived for this study, due to the low risk of the study. The interviews and focus group questions did not include sensitive information that could harm (physically or psychologically) in any way to the participants.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

References

1. United Nations. Transforming Our World: The 2030 Agenda for Sustainable Development. 2015. Available online: https://sustainabledevelopment.un.org/content/documents/21252030 (accessed on 26 February 2021).
2. Warf, B.; Storper, M. The Regional World: Territorial Development in a Global Economy. *Econ. Geogr.* **2000**, *76*, 101. [CrossRef]
3. Pike, A.; Rodríguez-Pose, A.; Tomaney, J. What Kind of Local and Regional Development and for Whom? *Reg. Stud.* **2007**, *41*, 1253–1269. [CrossRef]
4. Boggs, J.S.; Rantisi, N.M. The 'relational turn' in economic geography. *J. Econ. Geogr.* **2003**, *3*, 109–116. [CrossRef]
5. Amin, A. Spatialities of Globalisation. *Environ. Plan. A Econ. Space* **2002**, *34*, 385–399. [CrossRef]
6. Bathelt, H. Glucker. Toward a relational geography. *J. Econ. Geogr.* **2003**, *3*, 117–144. [CrossRef]
7. Alkire, S.; Deneulin, S. Introducing the human development and capability approach. In *An introduction to the Human Development and Capability Approach: Freedom and Agency*; Deneulin, S., Shahani, L., Eds.; IDRC: London, UK, 2009.
8. De Sousa Santos, B. *Epistemologies of the South: Justice against Epistemicide*; Routledge: Paris, France, 2016. [CrossRef]
9. Boni, A.; Walker, M. *Universities and Global Human Development: Theoretical and Empirical Insights for Social Change*; Routledge: London, UK; New York, NY, USA, 2016.
10. Sen, A. *Development as Freedom*; Oxford University Press: Oxford, UK, 1999.
11. Sen, A.K. *The Idea of Justice*; Harvard University Press: Cambridge, MA, USA, 2009.
12. Arbo, P.; Benneworth, P. *Understanding the Regional Contribution of Higher Education Institutions: A Literature Review*; OECD Education Working Papers, No. 9; ERIC: Washington DC, USA, 2007.
13. Sedlacek, S. The role of universities in fostering sustainable development at the regional level. *J. Clean. Prod.* **2013**, *48*, 74–84. [CrossRef]
14. Stephens, J.; Hernandez, M.E.; Román, M.; Graham, A.C.; Scholz, R.W. Higher education as a change agent for sustainability in different cultures and contexts. *Int. J. Sustain. High. Educ.* **2008**, *9*, 317–338. [CrossRef]
15. O'Riordan, T.; Jacobs, G.; Ramanathan, J.; Bina, O. Investigating the Future Role of Higher Education in Creating Sustainability Transitions. *Environ. Sci. Policy Sustain. Dev.* **2020**, *62*, 4–15. [CrossRef]
16. Breznitz, S.M.; Feldman, M.P. The engaged university. *J. Technol. Transf.* **2010**, *37*, 139–157. [CrossRef]
17. Strambach, S.; Klement, B. Exploring plasticity in the development path of the automotive industry in Baden-Württemberg: The role of combinatorial knowledge dynamics. *Z. Wirtsch.* **2013**, *57*, 67–82. [CrossRef]
18. Swilling, M. *The Age of Sustainability: Just Transitions in a Complex World*; Routledge: New York, NY, USA, 2020.
19. Bevan, P. The dynamics of Africa's in/security regimes. In *Insecurity and Welfare Regimes in Africa, Asia and Latin America*; Cambridge University Press: Cambridge, UK, 2004; pp. 202–254.
20. Wood, G.; Gough, I. A Comparative Welfare Regime Approach to Global Social Policy. *World Dev.* **2006**, *34*, 1696–1712. [CrossRef]
21. Ramos-Mejía, M.; Franco-Garcia, M.-L.; Jauregui-Becker, J.M. Sustainability transitions in the developing world: Challenges of socio-technical transformations unfolding in contexts of poverty. *Environ. Sci. Policy* **2018**, *84*, 217–223. [CrossRef]
22. Pereira, L.; Frantzeskaki, N.; Hebinck, A.; Charli-Joseph, L.; Drimie, S.; Dyer, M.; Eakin, H.; Galafassi, D.; Karpouzoglou, T.; Marshall, F.; et al. Transformative spaces in the making: Key lessons from nine cases in the Global South. *Sustain. Sci.* **2020**, *15*, 161–178. [CrossRef]
23. Nagendra, H.; Bai, X.; Brondizio, E.S.; Lwasa, S. The urban south and the predicament of global sustainability. *Nat. Sustain.* **2018**, *1*, 341–349. [CrossRef]
24. Marshall, F.; Dolley, J. Transformative innovation in peri-urban Asia. *Res. Policy* **2019**, *48*, 983–992. [CrossRef]
25. Streeten, P. Shifting fashions in development dialogue. In *Readings in Human Development: Concepts, Measures and Policies for a Development Paradigm*; Fukuda-Parr, S., Shiva Kumar, A.P., Eds.; Oxford University Press: New Delhi, India, 2003; pp. 10–92.
26. Griffin, K. Desarrollo Humano: Orígenes, Evolución en Impacto. *Ensayos Desarro. Hum.* **2001**, *8*, 25.
27. Haq, M. *The Human Development Paradigm*; Oxford University Press: New York, NY, USA, 1995.
28. Alkire, S. Human Development: Definitions, Critiques, and Related Concepts. *SSRN Electron. J.* **2010**. [CrossRef]
29. Ibrahim, S.; Tiwari, M. *The Capability Approach: From Theory to Practice*; Springer: Berlin/Heidelberg, Germany, 2014.
30. Nussbaum, M.C. *Women and Human Development: The Capabilities Approach*; Cambridge University Press: Cambridge, UK, 2001; Volume 3.
31. Deneulin, S. *Wellbeing, Justice and Development Ethics*; Routledge: New York, NY, USA, 2014.
32. Sen, A. *Inequality Re-Examined*; Russell Sage Foundation and Clarendon Press: New York, NY, USA; Oxford, UK, 1992.
33. Biggeri, M.; Ferrannini, A. Opportunity gap analysis: Procedures and methods for applying the capability approach in development initiatives. *J. Hum. Dev. Capab.* **2014**, *15*, 60–78. [CrossRef]

34. UNESCO. World Conference on Higher Education: Final Report, Paris. 2009. Available online: https://unesdoc.unesco.org/ark:/48223/pf0000189242 (accessed on 10 February 2021).
35. Obamba, M.O. Uncommon knowledge: World Bank policy and the unmaking of the knowledge economy in Africa. *High. Educ. Policy* **2013**, *26*, 83–108. [CrossRef]
36. Münch, R. *Academic Capitalism: Universities in the Global Struggle for Excellence*; Routledge: New York, NY, USA, 2014.
37. Naidoo, R. Transnational Perspectives on Higher Education and Global Well-Being. 2015. Available online: https://srheblog.com/2015/10/14/transnational-perspectives-on-higher-education-and-global-well-being/ (accessed on 18 January 2021).
38. Boni, A.; Gasper, D. Rethinking the Quality of Universities: How Can Human Development Thinking Contribute? *J. Hum. Dev. Capab.* **2012**, *13*, 451–470. [CrossRef]
39. Walker, M. *Higher Education Pedagogies*; McGraw-Hill Education: London, UK, 2005.
40. Leivas Vargas, M.; Fernández-Baldor, A.; Maicas-Pérez, M.; Calabuig-Tormo, C. A Freiran Approach to Epistemic Justice: Contributions of Action Learning to Capabilities for Epistemic Liberation. In *Participatory Research, Capabilities and Epistemic Justice*; Walker, M., Boni, A., Eds.; Palgrave Macmillan: London, UK, 2020; pp. 89–114.
41. Martinez-Vargas, C. Democratic Capabilities Research: Exploring Contextual Challenges and Contributions of Participatory Research towards Epistemic Justice. In *Participatory Research, Capabilities and Epistemic Justice*; Palgrave Macmillan: London, UK, 2020; pp. 139–164.
42. Boni, A.; Sastre, J.J.; Calabuig, C. Educating Engineers for the Public Good through International Internships: Evidence from a Case Study at Universitat Politècnica de València. *Sci. Eng. Ethic* **2015**, *25*, 1799–1815. [CrossRef]
43. Markard, J.; Raven, R.; Truffer, B. Sustainability transitions: An emerging field of research and its prospects. *Res. Policy* **2012**, *41*, 955–967. [CrossRef]
44. Wieczorek, A.J. Sustainability transitions in developing countries: Major insights and their implications for research and policy. *Environ. Sci. Policy* **2018**, *84*, 204–216. [CrossRef]
45. Köhler, J.; Geels, F.W.; Kern, F.; Markard, J.; Onsongo, E.; Wieczorek, A.; Alkemade, F.; Avelino, F.; Bergek, A.; Boons, F.; et al. An agenda for sustainability transitions research: State of the art and future directions. *Environ. Innov. Soc. Transit.* **2019**, *31*, 1–32. [CrossRef]
46. Smith, A. Translating Sustainabilities between Green Niches and Socio-Technical Regimes. *Technol. Anal. Strat. Manag.* **2007**, *19*, 427–450. [CrossRef]
47. Smith, A.; Raven, R. What is protective space? Reconsidering niches in transitions to sustainability. *Res. Policy* **2012**, *41*, 1025–1036. [CrossRef]
48. Grin, J.; Rotmans, J.; Schot, J. *Transitions to Sustainable Development: New Directions in the Study of Long TermTransformative Change*, 1st ed.; Taylor & Francis Ltd.: New York, NY, USA, 2010.
49. Jørgensen, U. Mapping and navigating transitions—The multi-level perspective compared with arenas of development. *Res. Policy* **2012**, *41*, 996–1010. [CrossRef]
50. Whitmarsh, L. How useful is the Multi-Level Perspective for transport and sustainability research? *J. Transp. Geogr.* **2012**, *24*, 483–487. [CrossRef]
51. Hansen, T.; Coenen, L. The geography of sustainability transitions: Review, synthesis and reflections on an emergent research field. *Environ. Innov. Soc. Transit.* **2015**, *17*, 92–109. [CrossRef]
52. Kanger, L. Neglected systems and theorizing: A comment on the transitions research agenda. *Environ. Innov. Soc. Transit.* **2020**, *34*, 352–354. [CrossRef]
53. Späth, P.; Rohracher, H. Beyond Localism: The Spatial Scale and Scaling in Energy Transitions. In *Scale-Sensitive Governance of the Environment*; Wiley Online Library: New York, NY, USA, 2014; pp. 106–121.
54. Strambach, S.; Pflitsch, G. Transition topology: Capturing institutional dynamics in regional development paths to sustainability. *Res. Policy* **2020**, *49*, 104006. [CrossRef]
55. Coenen, L.; Benneworth, P.; Truffer, B. Toward a spatial perspective on sustainability transitions. *Res. Policy* **2012**, *41*, 968–979. [CrossRef]
56. Coenen, L.; Truffer, B. Places and Spaces of Sustainability Transitions: Geographical Contributions to an Emerging Research and Policy Field. *Eur. Plan. Stud.* **2012**, *20*, 367–374. [CrossRef]
57. Strambach, S.; Pflitsch, G. Micro-dynamics in regional transition paths to sustainability - Insights from the Augsburg region. *Appl. Geogr.* **2018**, *90*, 296–307. [CrossRef]
58. Strambach, S.; Halkier, H. Reconceptualizing change: Path dependency, path plasticity and knowledge combination. *Z. Wirtschgeogr.* **2013**, *57*, 1–14.
59. Sedlacek, S.; Gaube, V. Regions on their way to sustainability: The role of institutions in fostering sustainable development at the regional level. *Environ. Dev. Sustain.* **2009**, *12*, 117–134. [CrossRef]
60. Lozano, R.; Ceulemans, K.; Alonso-Almeida, M.; Huisingh, D.; Lozano, F.J.; Waas, T.; Lambrechts, W.; Lukman, R.; Hugé, J. A review of commitment and implementation of sustainable development in higher education: Results from a worldwide survey. *J. Clean. Prod.* **2015**, *108*, 1–18. [CrossRef]
61. Radinger-Peer, V.; Pflitsch, G. The role of higher education institutions in regional transition paths towards sustainability. *Rev. Reg. Res.* **2017**, *37*, 161–187. [CrossRef]

62. Boni, A.; Velasco, D. Epistemic Capabilities and Epistemic Injustice: What is the Role of Higher Education in Fostering Epistemic Contributions of Marginalized Knowledge Producers? *Glob. Justice Theory Pract. Rhetor.* **2020**, *12*, 1–26. [CrossRef]
63. Chatterton, P.; Goddard, J. The Response of Higher Education Institutions to Regional Needs. *Eur. J. Educ.* **2000**, *35*, 475–496. [CrossRef]
64. Trencher, G.; Yarime, M.; Kharrazi, A. Co-creating sustainability: Cross-sector university collaborations for driving sustainable urban transformations. *J. Clean. Prod.* **2013**, *50*, 40–55. [CrossRef]
65. Trencher, G.; Yarime, M.; McCormick, K.B.; Doll, C.N.H.; Kraines, S.B. Beyond the third mission: Exploring the emerging university function of co-creation for sustainability. *Sci. Public Policy* **2013**, *41*, 151–179. [CrossRef]
66. Universidad de Ibagué. Informe de Autoevaluación Institucional, Ibagué. 2018. Available online: http://docplayer.es/209056204-Informe-del-consejo-superior-y-la-direccion-de-la-universidad-de-ibague-al-consejo-de-fundadores.html (accessed on 10 August 2019).
67. Velasco, D.; Boni, A. Expanding Epistemic Capability in Participatory Decision-Making Processes: The Universidad de Ibagué Capabilities List. In *Participatory Research, Capabilities and Epistemic Justice*; Palgrave Macmillan: London, UK, 2020; pp. 27–57.
68. Universidad de Ibagué. Anexo 13, Semestre de Paz y Región, Ibagué. 2018. Available online: https://repositorio.unibague.edu.co/bitstream/20.500.12313/828/16/Anexo13.SemestredePazyRegión.pdf (accessed on 10 August 2019).
69. Mannay, D.; Staples, E.; Edwards, V. Visual methodologies, sand and psychoanalysis: Employing creative participatory techniques to explore the educational experiences of mature students and children in care. *Vis. Stud.* **2017**, *32*, 345–358. [CrossRef]
70. Bradbury, J. Creative twists in the tale: Narrative and visual methodologies in action. *Psychol. Soc.* **2017**, *1*, 14–37. [CrossRef]
71. Pink, S. Interdisciplinary agendas in visual research: Re-situating visual anthropology. *Vis. Stud.* **2003**, *18*, 179–192. [CrossRef]
72. Anderson, R. Transpersonal inquiry and the next generation of transpersonal researchers and scholars. *J. Transpers. Res.* **2015**, *7*, 210–216.
73. Loorbach, D. Transition Management for Sustainable Development: A Prescriptive, Complexity-Based Governance Framework. *Governance* **2010**, *23*, 161–183. [CrossRef]
74. Pflitsch, G.; Radinger-Peer, V. Developing Boundary-Spanning Capacity for Regional Sustainability Transitions—A Comparative Case Study of the Universities of Augsburg (Germany) and Linz (Austria). *Sustainability* **2018**, *10*, 918. [CrossRef]
75. Fricker, M. Epistemic contribution as a central human capability. In *The Equal Society. Essays on Equality in Theory and Practice*; George Hull, Ed.; Lexington Books: Lanham, MD, USA, 2015; pp. 73–90.
76. Avelino, F.; Grin, J.; Pel, B.; Jhagroe, S. The politics of sustainability transitions. *J. Environ. Policy Plan.* **2016**, *18*, 557–567. [CrossRef]
77. Bonwell, C.C.; Eison, J.A. *Active Learning: Creating Excitement in the Classroom. 1991 ASHE-ERIC Higher Education Reports*; The George Washington University: Washington DC, USA, 1991.
78. Johnson, D.W.; Johnson, R.T.; Holubec, E.J. *Cooperative Learning in the Classroom*; Association For Supervision and Curriculum Development: Alexandria, VA, USA, 1994.
79. Jones, B.F.; Rasmussen, C.M.; Moffitt, M.C. *Real-Life Problem Solving: A Collaborative Approach to Interdisciplinary Learning*; American Psychological Association (APA): Washington, DC, USA, 1997.
80. Bringle, R.G.; Hatcher, J.A. A service-learning curriculum for faculty. *Michigan J. Community Serv. Learn* **1995**, *2*, 112–122.
81. Aubert Simon, A.; Flecha Fernandez, A.; García Yeste, C.; Flecha García, R.; Racionero Plaza, S. *Aprendizaje Dialógico en la Sociedad de la Información*; Hipatia: Barcelona, Spain, 2011.
82. Belda-Miquel, S.; Pellicer-Sifres, V.; Boni, A. Exploring the Contribution of Grassroots Innovations to Justice: Using the Capability Approach to Normatively Address Bottom-Up Sustainable Transitions Practices. *Sustainability* **2020**, *12*, 3617. [CrossRef]