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RETHINKING CULTURAL DEMOCRATIZATION PROJECTS

Proposal of an Inclusive Framework for Underdeveloped
Environments

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Dissertation

presented as partial requirement for obtaining the Master Degree Program in Information Management

NOVA Information Management School
Instituto Superior de Estatística e Gestão de Informação

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RETHINKING CULTURAL DEMOCRATIZATION PROJECTS

By

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Master Thesis presented as partial requirement for obtaining the Master's Degree in Information Management, with a specialization in Marketing Intelligence

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STATEMENT OF INTEGRITY

I hereby declare having conducted this academic work with integrity. I confirm that I have not used plagiarism or any form of undue use of information or falsification of results along the process leading to its elaboration. I further declare that I have fully acknowledge the Rules of Conduct and Code of Honor from the NOVA Information Management School.

Catarina O. Ferraz

Lisbon, 24th of November 2022

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ABSTRACT

Cultural assets are physical or intangible artifacts that embody humanity’s expressions of individual and collective experience, and supportively contribute to education and knowledge dissemination. Yet, it is fathomed that “underdeveloped countries” experience a multitude of structural barriers that limit their citizens from accessing these important cultural artifacts.

In pursuits of an interdisciplinary approach, this study first intends to identify the cultural, historical, and international paradigms that devise these limitations, and pinpoint the existing cultural democratization barriers that these nations withstand. Moreover, it hopes to acknowledge the value of ethical cultural democratization projects and mindful partnerships between organizations, governments, and institutions as potentiators of equality, and economic and social growth.

That being said, grounded on a Design Science Research Methodology, the main objective of this research is the construction of an inclusive framework that aids in the democratization of access to cultural assets in “underdeveloped countries”. Essentially, this artifact should function as an accessible tool that supports decision-makers in the creation of cultural democratization projects, by providing them strategies for problem-solving through innovative approaches and recommending the available technological solutions for mitigating cultural democratization barriers. All throughout contemplating the capacities and necessities of each setting.

Additionally, this study acknowledges the prevailing power dynamics and oppressive colonial control that looms over underdeveloped nations. With that in mind, it entirely rejects the ideals of cultural dominance in favor of supporting the democratic principles of cultural reciprocity.

KEYWORDS

Cultural Management; Cultural and Creative Industries; Democratization Barriers; Information and Communication Technologies

Sustainable Development Goals (SGD):



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LIST OF ABBREVIATIONS AND ACRONYMS

AI	Artificial Intelligence
AR	Augmented Reality
ATS	Automatic Text Summarization
EU	European Union
GDP	Gross Domestic Product
GNI	Gross National Income
HDI	Human Development Index
ICT	Information and Communication Technologies
IMF	International Monetary Fund
IP	Intellectual Property
LDCs	Least Developed Countries
MT	Machine Translation
NFT	Non-Fungible Tokens
TM	Text Mining
UN	United Nations
VPN	Virtual Private Networks
VR	Virtual Reality
WEO	World Economic Outlook

1. INTRODUCTION

1.1. BACKGROUND

Cultural identity is expressed through human artistry and creativity, which materialize as cultural assets. These assets, tangible or intangible, arise as products, goods, or heritage, which promote education, disseminate knowledge, and potentiate freedom.

In the current international conjuncture, access to these valuable assets is sometimes restricted, obstructed, or suppressed in countless nations, as their communities are vulnerable to threats such as political and social oppression (Ebbutt, 1998) generally stemming from a history of colonialism and post-coloniality (Rodney, 1972a).

In non-democratic systems, there is no guarantee of freedom of speech and expression, and, in some cases, the political and social context either disallows cultural creation and diffusion (Dietler, 2018; Rosenstein, 2018) or the economic context inhibits that creation and diffusion due to insufficient funds or ineffective policies and tools.

As new technological tools and approaches emerge, concepts like cultural accessibility and democratization expand. And although none of the 17 Sustainable Development Goals (United Nations, 2015) are directly involved with cultural production, protection, or dissemination (Santos, 2016), and economic support to culture has been on the decline (Mulcahy, 2006) the dialogue for cultural development and democratization is grounded in the theory that valuable cultural projects would allow to further strengthen partnerships between organizations, governments, and institutions, fostering economic growth and reachable knowledge, with the final purpose of reducing inequalities.

1.2. MOTIVATION

Nevertheless, to achieve such valuable cultural projects, collaborations and results, decision-makers must acknowledge which errors and inaccuracies still occur, and which policies, approaches, and technologies are available to pilot such endeavors.

The reason to conduct this research arises from the notion that cultural democratization (i.e., strategies and policies that intend to grant everyone equal access to culture) potentiates knowledge, empowering democracy, and growth and, yet, in underdeveloped economies, cultural democratization projects seem to be insufficient or inefficient.

To understand this phenomenon and advance in ways that are feasible and beneficial, one must acknowledge the dynamics of international cultural policy and address the reasons for project implementation issues, some being inadequate communication, lack of cultural knowledge, inept management or practices (Schuppan 2009; Ebbutt 1998) and other potential challenges such as cultural and intellectual exploitation (Little, 2005; Rodney, 1972a).

Culture should not be a gatekept sphere of reality, and the need for cultural democratization and protection follows the current state of inequality that looms over millions of people worldwide. If successful, cultural democratization would allow individuals and communities to access national and international cultural assets; organizations, governments, and institutions would provide actions and

funds to incentivize cultural production; and protection policies and tools would preserve the artists' intellectual property and artworks. Furthermore, these ambitions coincide with some of the 17 Sustainable Development Goals created by the United Nations for the 2030 Agenda for Sustainable Development (United Nations, 2015).

Hence, the key motivation for this dissertation is to propose an inclusive approach to guide decision-making in cultural democratization projects, promoting accessible and feasible methods for culture creation and dissemination, focusing on the potential of technology, cultural democracy, international cooperation, and public funding.

A final encouragement is this project's fundamental need for interdisciplinary research, as it requires a deep knowledge of cultural management, development studies, historical data, social-economic and political understanding, cultural contexts, international policy, and new technologies.

1.3. OBJECTIVES

After acknowledging these motivations, the main objective of this study surfaces - to create a framework that assists cultural democratization and access to cultural assets in “underdeveloped countries”.

This artifact purposes to be an accessible and inclusive tool to aid decision-makers, such as governments or organizations, in designing, preparing, and implementing cultural development projects by providing them with information and guidelines for problem-solving, through innovative approaches and technologies. Notwithstanding, this framework must acknowledge the social and ethical implications that can arise when dealing with underprivileged contexts, by providing a multilateral logic to cultural transmission, rejecting the ideals of cultural dominance presented by certain multicultural political discourses. Instead, this project expects to emphasize democratic ideals of cultural reciprocity, that intend to afford power and recognition to minority communities (Song, 2020).

With that in mind, identifying prior mismanagements and challenges, reviewing what has been done to democratize and enhance cultural access, and compiling which tools and approaches are viable to implement, are intermediate steps to ground the design and development of the framework.

2. METHODOLOGY

As the main research goal of this dissertation is the creation of a cultural democratization framework to aid decision-making through problem-solving solutions, the best methodological approach is the Design Science Research Methodology (DSRM), as it provides the methodological support to create the desired output, an artefact in the form of a framework (Hevner et al., 2004).

So, for the purpose of this research, Design Science Research Methodology (DSRM) will be put into practice to recognize the cultural context of “underdeveloped countries”, to identify challenges and issues, and to collect insights on opportunities, approaches, and tools for cultural democratization. Later, this knowledge will ground the design and development of the framework.

To build a valuable output one must possess extensive knowledge, acquired through literature review and environment research (Hevner et al., 2004), and the choice of this methodology had that in main consideration. Furthermore, the scrutiny that the output must go through with the demonstration and evaluation processes, (Peffer, Tuunanen, Rothenberger, & Chatterjee, 2007) allows for the creation of feasible and contributive scientific knowledge.

2.1. DESIGN SCIENCE RESEARCH METHODOLOGY

Design Science Research is a proven and innovative methodology for the design, development, and evaluation of artefacts – products of purposeful design - with due and valuable scientific rigor (Peffer, Tuunanen, Rothenberger, & Chatterjee, 2007; Hevner, March, Park, & Ram, 2004). It allows for a deep interdisciplinary understanding, directing researchers to thoroughly comprehend prior academic research, with the added benefit of having a systematic approach through its Iteration Process (Peffer, Tuunanen, Rothenberger, & Chatterjee, 2007).

Peffer, Tuunanen, Rothenberger, & Chatterjee (2007) establish that Design Science Research Methodology consists in a sequential process divided into six main steps: 1) Problem Identification; 2) Objective Definition; 3) Design and Development; 4) Demonstration; 5) Evaluation; and 6) Communication.

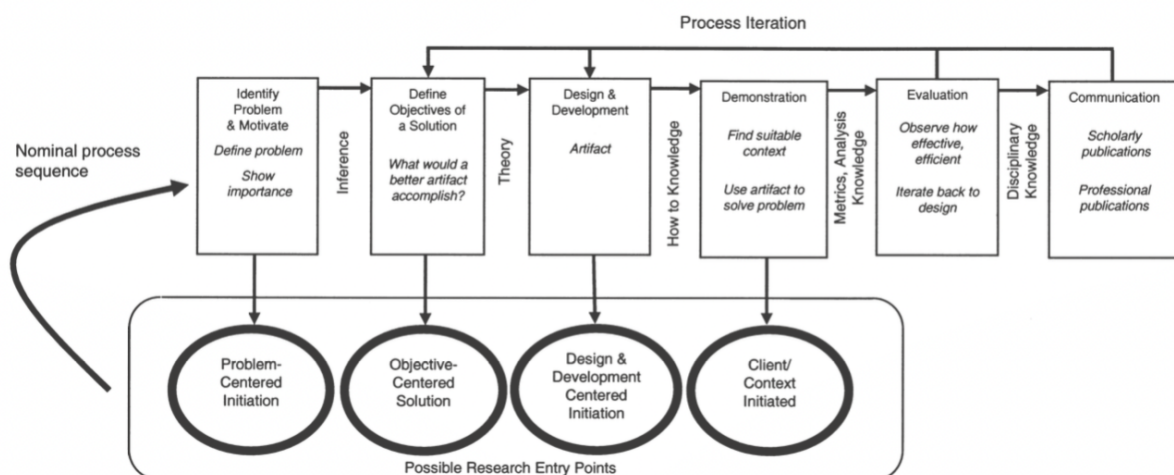


Figure 1 - DSRM Process Model (Peffer, Tuunanen, Rothenberger, & Chatterjee, 2007)

These steps will be thoroughly adapted to this research (Table 1).

2.2. RESEARCH STRATEGY

Given the breakdown of the DSRM Process Model (Peffer, Tuunanen, Rothenberger, & Chatterjee, 2007), the research strategy stands as an adaptation of this process (Table 1). Following the designated steps, the **Problem Identification** is the starting point. In this first step, the research question is defined, as well as the research gap, and motivation; in this case the motivation arises from the possibility of creating a framework that will aid cultural development, and in turn boost education and freedom.

PROBLEM IDENTIFICATION	<ul style="list-style-type: none"> Identify the problem; Define the research question; Justify importance and motivation;
OBJECTIVE DEFINITION	<ul style="list-style-type: none"> Infer objectives - Research and Solution; Review literature and State of the Art; Pinpoint prior challenges and practices;
DESIGN AND DEVELOPMENT	<ul style="list-style-type: none"> Compile ideas and draft examples; Design the Artifact Anchor design and development in literature review;
DEMONSTRATION	<ul style="list-style-type: none"> Test the Artifact in a Simulation, Case Study or Experimentation; Verify the validity and feasibility of the Artifact;
EVALUATION	<ul style="list-style-type: none"> Compare results gathered in Step Four (Demonstration) to the objectives defined in Step Two (Objective Definition); Present and discuss Artifact with experts in the field;
COMMUNICATION	<ul style="list-style-type: none"> Present, share and publish research results and final output; Suggest guidelines and address prior challenges for subsequent research and projects;

Table 1 - DSRM Process Model (Peffer, Tuunanen, Rothenberger, & Chatterjee, 2007) Adaptation

As per the second step - **Objective Definition** - the literature review should be of utmost importance, for the purpose of understanding the state of the art in order to infer both the research objectives, as well as possible solutions. In this stage, the literature review will follow Hevner's (2004) Research Cycles in order to trace the environmental context in question, in addition to the knowledge base of scientific theory (Figure 2). Furthermore, the methodology and research requirements are acknowledged and justified.

In the third step - **Design and Development** - the artefact is designed and developed, anchored in the insights from the previous stage. To further clarify, as the goal output is a framework the established artifact will either be a construct or a model (Hevner, March, Park, & Ram, 2004).

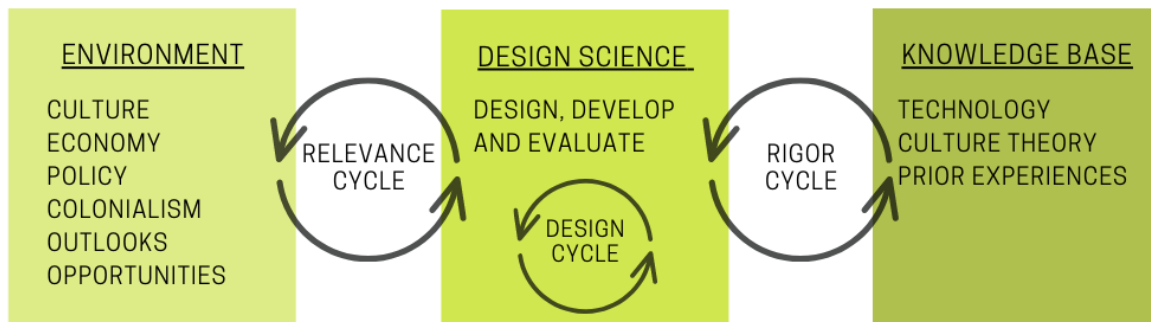


Figure 2 – Design Science Research Cycles Adaptation (Hevner, 2004)

Steps four - **Demonstration** – and five – **Evaluation** - proceed with the testing and evaluation of the artifact in order to prove its validity. In this stage the framework should be presented and discussed with experts in order to obtain their judgements regarding feasibility, availability, and validity. Afterward, the artifact can be revised and adjusted through the DSRM's Iteration Process.

In the sixth and final step – **Communication** - the research, the completed artifact, and the results can be presented and published as thorough scientific knowledge. Research challenges should be disclosed, as should guidelines for subsequent projects. (Peffer, Tuunanen, Rothenberger, & Chatterjee, 2007).

3. THE CULTURAL CONTEXT

In this chapter an in-depth analysis of the cultural, historical, and international environment is carried out.

First, we evaluate the role of culture and economy as the foundational concepts of democratic development, as well as their implications in the subject matter. Followed by an overall explanation of cultural policy, cultural democracy, and cultural democratization, and their theoretical differences. Additionally, the topics of cultural economy and cultural funding are also explored.

Afterwards, the focus shifts to the particular context in hand - “underdeveloped countries” - as we discuss the controversies surrounding this terminology, providing an historical contextualization, and thoroughly analyzing the existing systems of classification for international development. To reach meaningful insights and understand these nations’ economic situation and resource availability, several statistics are presented and considered. Nevertheless, a degree of generalization is maintained, that will allow for the reasonable creation of the framework.

Then, a meticulous analysis on the topics of colonialism, capitalism and racism is rendered, addressing the structural challenges that impeded fair economic growth and political independence. Finally, the outlooks and opportunities for cultural development projects in “underdeveloped countries” are analyzed, following the theoretical grounds of impartial and unprejudiced multiculturalism.

3.1. CULTURE, ECONOMY, AND DEMOCRACY

Societies are ruled by sets of social norms, codes of conduct and cultural values that guide behaviors inside communities (Lapinski & Rimal, 2005). Throughout the years, it was argued that these norms, codes, and values are also the social structure in which political and economic systems rise and are subsequently maintained (Guiso et al. 2006).

Inglehart (2000) and Ruck et. all (2019) evaluate how cultural values are within the origins of democratic development, arguing that societies which foster self-expression values, rather than survivalist ones, are more susceptible to economic development and, in turn, to become democracies. This theory goes in hand with Guiso et. all. (2006), that points to cultural values being influencers of economic trading decisions and political believes. In essence, culture and economy influence each other, as culture influences economy through a structural belief system, and economic settings alter social relations and behaviors (Rodney, 1972a).

Here, we discuss democracy as a political system that promotes and protects the citizens’ right to participation, fostering inclusion, and safeguarding society’s freedom of speech, expression, and association (Dahl, 2021).

Economic development is also pointed as a conductor to democracy, as it improves citizens’ quality-of-life and well-being through better access to education, health and services while affording financial stability, ultimately encouraging the diffusion of democratic values such as trust, self-expression, and tolerance, that incentivize and aid the democratic process. It is also vital to note that capitalism, as an economic system, is a double-edge sword in democratic establishment: while it promotes democracy

through individualist and self-determination ideals, it also increases labor exploitation and social inequalities (Rodney, 1972a).

These valuable insights indicate that cultural principles precede the establishment of democracies and that societies with higher economic power are more receptive to liberal values, predisposing them to democratic thinking (Inglehart, 2000). Nevertheless, nations with repressive power structures, such as totalitarian or authoritarian systems, led by political elites that defy the uproaring demand for democratization (Inglehart, 2000; Rodney, 1972a) are more prone to political instability.

3.2. CULTURAL POLICY, CULTURAL DEMOCRATIZATION AND CULTURAL DEMOCRACY

“At root, a cultural policy is about creating public spheres that are not dependent on profit motives nor validated by commercial values. As political democracy is dependent on the existence of civil society and socioeconomic pluralism, cultural policy stands as an essential public commitment”

(Mulcahy, 2006: 329)

As previously established, culture and politics bear a symbiotic relationship within societal structures. Nevertheless, since political systems define formal codes of conduct, through laws and authority structures (Heslop, 2020), governments hold the power of decision on cultural and artistic matters. Therefore, each country's government establishes its cultural policies according to their particular belief systems.

Within democratic systems that foster individual freedom, most manifestations of art and culture are allowed and protected without constraints (Rosenstein, 2018). Yet, many communities' political traditions and economic conditions disallow the freedom of expression needed for unrestricted access to- and dissemination of- culture (Rosenstein, 2018).

The broad definition of cultural policy entails the set of decisions, actions, and strategies that each government defines concerning its national arts, humanities, and heritage (Mulcany 2006). In essence, these decisions include budgeting, diffusion, and promotions strategies – dictating who gets paid to produce cultural assets and who is targeted to consume them. To further comprehend cultural policy, it is fundamental to examine the differences and effects of cultural democratization and cultural democracy.

Fundamentally, culture has a budget issue embedded in the economic power discourse ever-present in cultural patronage, where cultural funds solely manifest the taste of the elite. Even though in democratic states, the arts and heritage should not be a gatekept sphere of reality, nor only reproduce the wishes of the elite (Inglehart, 2000), most cultural policies foster that pattern.

Mulcany (2006) acknowledges this argument, stating that this cultural and economic power discourse maintains itself until today, as governments budget culture and introduce policies to promote the dominant "high" culture, diffusing it through education, seldom within the educational system itself.

In theory, this predominant interest in “high” culture leverages intentions in manipulative cultural transitions, where governments restrain cultural manifestations to what they deem as aesthetically prestigious, and that brings “aesthetic enlightenment, enhanced dignity, and educational

development” (Mulcahy, 2006: 324) to society. Thus, encouraging only cultural expressions that reflect the reality of privileged groups and not necessarily the entire community (Mulcahy, 2006).

In practice, this cultural elitism is bound to be exploited through the structured system of cultural diffusion known as **cultural democratization**, which ensures equal access to culture through accessibility and affordability strategies.

In contrast, the notion of **cultural democracy** supports a participatory approach to culture, underlying the belief that culture should not only be entirely accessible, but furnish equal opportunities in cultural production and consumption. Realistically, governments should be partially responsible when establishing a cultural democracy, promoting widespread entertainment and art, rather than supporting cultural elitism, fundamentally decentralizing culture (Mulcahy, 2006).

3.3. CULTURAL FUNDING

In the midst of designing any cultural project, budgeting is routinely a central talking point. Especially due to the decreasing number of subsidies allocated to cultural institutions and productions, or the strict public and private policies to which cultural funding is usually subjected (Lewis, 2021; Mulcahy, 2006).

Firstly, most funding originates either from **grants** - "*an amount of money given for a particular purpose*" (Cambridge Dictionary, 2021) such as awards or temporary tenders; or **funds** - "*an amount of money saved for a particular purpose*" (Cambridge Dictionary, 2021) set to establish or maintain a cultural institution.

Secondly, although cultural funding is getting increasingly scantier (Lewis, 2021; Mulcahy, 2006), various international organizations are either creating or contributing to new cultural projects. For instance, the IFCD (International Fund for Cultural Diversity) and UNESCO (United Nations Educational, Scientific and Cultural Organization) have funded numerous cultural projects through the years, aiming to “enhance cultural professional’s skills and knowledge, boost cultural entrepreneurship, promote creative networks and mobility, gather data, and support the development and implementation of cultural policies and measures.” (UNESCO, n.d).

Thirdly, considering geographical disposition, Mulcahy (2006) observes that Europe has a greater understanding of the importance of preserving and promoting cultural identity and, for that reason, projects such as “Creative Europe” (a grant of 2.24b euros to “support cultural diversity and cultural heritage in Europe” (EU Funding for Culture 2021–2027, 2020: 6) are currently being established.

In the United States of America, cultural funding varies greatly, as most subsidies follow the theory of Cultural Utilitarianism (Mulcahy, 2006), which dictates that art and culture must have a useful purpose. In other words, principles of commerce are applied to arts and culture, requiring the direct production of revenue or other benefits (National Endowment for the Arts, 2004).

In African nations cultural funding is generally subsidized through organizations and private enterprises. For instance, situated within the continent, the African Culture Fund promotes artistic creation through realistic resources, vitally supporting fundamental rights, diversity, and equity (The African Culture Fund). Additionally, there are several bilateral cooperation funds and international

organizations that focus on African cultural and artistic production (Art Moves Africa, The British Council, & ON THE MOVE, 2018).

In the Middle East and Asia various fellowships and grants are also provided by national and international organizations, such as the Asian Cultural Council (2022), the Asia-Europe Foundation (2021), the Japan Foundation (2021), the Saudi Arabia's Art Residency (Saudi Arabia Ministry of Culture, 2022), and the Sharjah Art Foundation Production Programme (Sharjah Art Foundation, 2022), just to name a few.

3.4. "UNDERDEVELOPED COUNTRIES"

3.4.1. Terminology

When deciding upon the correct terminology for this research an etymological issue arose - the suitable designation for the collection of countries that would be the reference point for this study. Considering the scientific purpose of this research there is statistical necessity for categorization, as international data is frequently structured through particular criteria, and posteriorly given a nomination.

Throughout the years, numerous nominations have been given to the context at hand, however most induced an assumption of hierarchy and submission. For instance, the term "Third World" was mostly used in the second half of the twentieth century, emerging from the international economic insecurity that preceded the Cold War (1947-1941), where recently independent Asian and African countries exhibited signs of economic dependence resulting from colonization (Tomlinson, 2003). Decades later, in 1964, certain Asian, African, and Latin American countries declared themselves as "developing countries", in an attempt to reform the structure of the international economy. Later, with the economic crash of the early 1970s and the continuous rise of political tension, international economic aid programs divided once again the international paradigm into "Global North" and "Global South" (Tomlinson, 2003).

The main issue with these designations is the inherently negative perspective they entail, encompassing countries into categories without any specific criteria. It was only until the release of the United Nations' first "Standard Country or Area Codes for Statistics Use" (Statistical Office of the United Nations - Department of Economic and Social Affairs, 1970) that the nomenclature "Developed Market Economies" or "Developing Market Economies" was instated, inspiring contemporary denominations.

All in all, the decision to employ the term "underdeveloped countries" in this research originates from Walter Rodney's (1972a) studies on underdevelopment, where the author states that international analysis is anchored in comparisons, namely between North America and Europe, on one hand; and Africa, Asia, the Caribbean, and Latin America, on the other (Rodney, 1972a). According to the author, the latter group developed independently until colonialist forces, empowered by capitalist notions, took over, and that contemporary dependence steams from the neo-colonialist and non-industrialized reality these countries live in, relying mostly on traditional production, such as agriculture, livestock, and fishing (Rodney, 1972a).

Thereupon, the term “underdeveloped” should solely be applied in data-driven comparisons, particularly in economic and political matters, as well as in social analysis surrounding education and health (Rodney, 1972a), and it should, in no way, implicate a negative connotation to the cultural beliefs and values of any nation.

Presented with the intricacies of choosing an inclusive name, the next step in this research is to analyze the current international nomenclatures and indexes that categorize countries, as well as the statistical data that supports them. Nevertheless, broad data does not appropriately reflect the true nature of inequalities, as averages don’t distinguish both extremes (Rodney, 1972a) and don’t expose historical and political nuances.

3.4.2. Classifications and Development Indicators

As aforementioned, this section consists in the analysis of current international indexes and their supporting data, and it is carried out with the goal of substantiating the clustering proposed in this research.

Today, there are four main classifications stipulated by international organizations: two are based on economic and financial indicators, from the International Monetary Fund and The World Bank; and the other two are based on social-economic indicators, set by the United Nations.

3.4.2.1. Financial and Economical Based Classifications

Following the worldwide economic instability that accompanied the Great Depression (1929-1939) it bearded essential the creation of the International Monetary Fund (IMF), in 1944, to oversee financial exchanges and ensure monetary stability (International Monetary Fund, 2021a) around the globe. Ever since, the IMF has gathered countless financial data, keeping tabs on Gross Domestic Product (GDP), Inflation, World Trade Volume, and Net Capital Flows.

In 1999, the IMF released the first “World Economic Outlook” (WEO) (International Monetary Fund, 1999) entitled “*Safeguarding Macroeconomic Stability at Low Inflation*” where they classified countries by geographical region and “level of development” while disclosing future monetary projections (International Monetary Fund, 1999). The structure of the WEO was organized in financial indexes, and clustered countries into two major groups: “Advance Economies” and “Emerging Market and Developing Economies”; the latter group was then split into “Emerging Market and Middle-Income Economies” and “Low-Income Developing Countries”.

The yearly report exposes significant issues that intertwine with their projections. For instance, the 1999’ WEO referenced the impact of Y2K (the common acronym given to the turn of the century), and in 2021 the WEO addressed the financial impacts of the Covid-19 pandemic. In recent years, the climate crisis has also been a topic of increased interest, as it is pinpointed as a cause of economic divergencies (International Monetary Fund, 2021b). That said, the main goal of the report is quite clear - it accounts on international financial transitions, spikes, reforms, and debt in quarterly reports, in order to oversee the economic stability of nations.

These reports are immensely significant to this study, as they allow a deeper understanding of international financial instabilities and crises from a chronological perspective. As per the 2021 report, only 40 countries were considered Advanced Economies (considering Real GDP) - the United States,

Japan, Korea, Canada, Australia, Taiwan, the Province of China, Singapore, Hong Kong, Israel, Puerto Rico, Macao, New Zealand and 27 European Countries; the other 158 are still considered “Emerging Market and Developing Economies” (International Monetary Fund, 2021b).

Later, in 1966, The World Bank organization followed suit and published a report entitled “*Atlas of Per Capital Product and Population*” (International Bank for Reconstruction and Development - The World Bank, 1966) that organized countries by total population and Gross National Product per capita (GNP). This report recognized the alarming number of people living in poverty and addressed the need for fair international economic relations. In 1978, the “World Development Report” (The International Bank for Reconstruction and Development - The World Bank, 1978) also demonstrated these worries, recognizing that around 800 million people lived in poverty, perpetually submitted to hunger, early mortality, illiteracy, and disease, mentioning, yet again, the need to accelerate economic growth in these countries.

Since then, the World Bank defined strict standards for their thresholds, classifying countries into low income, lower-middle income, upper-middle income, and high income. Nevertheless, The World Bank continues to employ the Gross National Income (GNI) per capita as their sole criteria (The World Bank, 2021a).

3.4.2.2. Socio-Economical Based Classifications

As aforementioned, the standard to designate groups of countries for statistical purposes began with the UN’s first “*Standard Country or Area Codes for Statistics Use*” (Statistical Office of the United Nations - Department of Economic and Social Affairs, 1970) where countries were sorted as “Developed Market Economies” and “Developing Market Economies”. In the last “*Standard Country or Area Codes for Statistics Use*” (Statistical Office of the United Nations - Department of Economic and Social Affairs, 1999) the distribution was first made through alphabetical order, then geographical region, then economical groupings - such as the European Union (EU), the North American Free Trade Agreement (NAFTA), the Organization for Economic Cooperation and Development (OECD), the Least Developed Countries (LDCs, established in 1971) – and lastly the “Developing Regions” (Statistical Office of the United Nations - Department of Economic and Social Affairs, 1999).

As per 2021, 46 nations were identified as Least Developed Countries (LDCs) where around 84% of the population lived below the 5.50\$/day international poverty line, and 35% lived below the extreme poverty line of 1.90\$/day (United Nations, 2021). The LDCs inclusion criteria (Table 2) has changed throughout the years, becoming more inclusive and extensive given the rising challenges of development in the globalized world. The criteria are divided into 3 categories: Income Criterion, Human Assets Index, and Economic and Environmental Vulnerability Index, demonstrating a broad preoccupation with social factors and allowing for a more accurate depiction of collective issues. Furthermore, the LDC’s criteria shares some similarities with the Human Development Index (HDI).

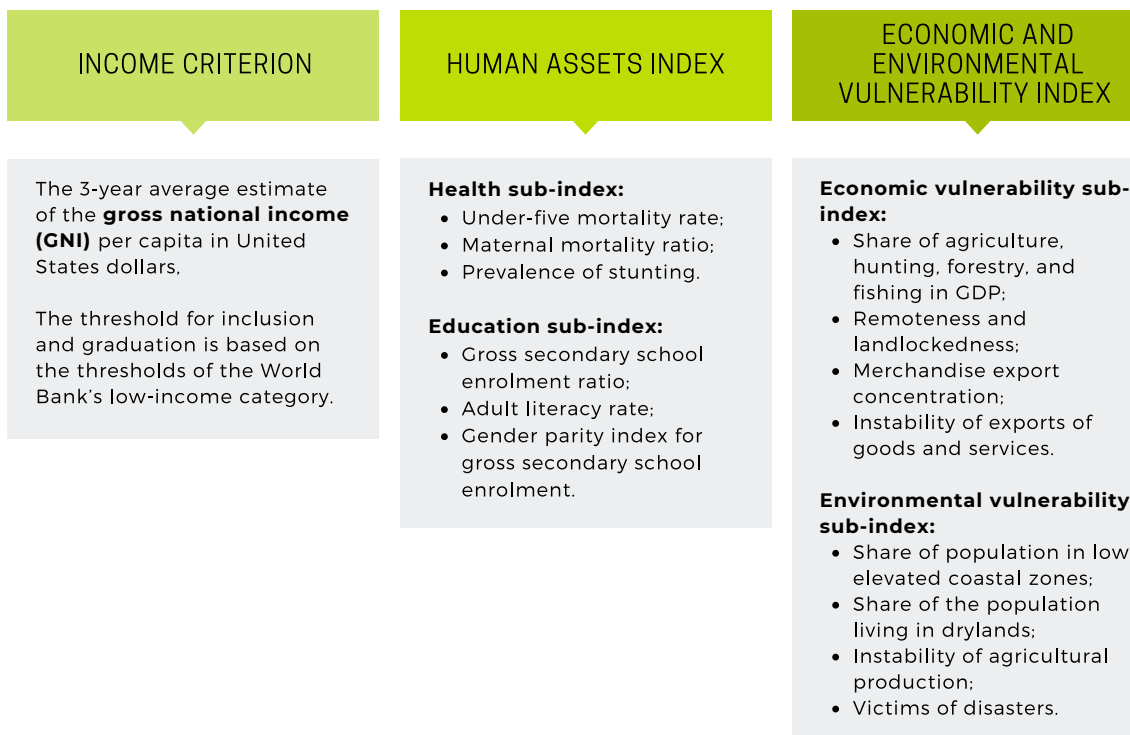


Table 2 - Least Developed Countries Criteria (United Nations, 2021)

The UN’s Human Development Index (HDI) was first introduced in 1990 with the purpose of creating a metric that would measure human development through well-being indicators, shedding light on the capacities of the social services available, particularly concerning health and education (Rodney, 1972a), challenging the existing metrics that solely explored economic resources (United Nations Development Programme, 1990).

The HDI (Table 3) is composed of three elements - longevity (life expectancy at birth, as an indicator for health and nutrition), knowledge (literacy rate as an indicator for education), and economic resources (real GNI per capita, as an indicator of income) (United Nations Development Programme, 1990). However, even with this inclusive criterion averages still conceal disparities (Rodney, 1972a), specifically between genders and social groups.

The latest Human Development Report (United Nations, 2021a) addresses the climate crisis, the Covid-19 pandemic, and social change. Recently, new Indexes have been established to strengthen the findings and conceptions of “Human Development”, such as the Gender Inequality Index and the Multidimensional Poverty Index, explained below (Table 4). To go along with these indexes the 2021 HDR also presents dashboards on quality of human development, woman’s empowerment, and environmental sustainability (United Nations, 2021a).

Given these extensive research indicators the UN’s Human Development Report (2020) signals 151 “underdeveloped countries” (including the LDCs), that will be used as a baseline for this study.

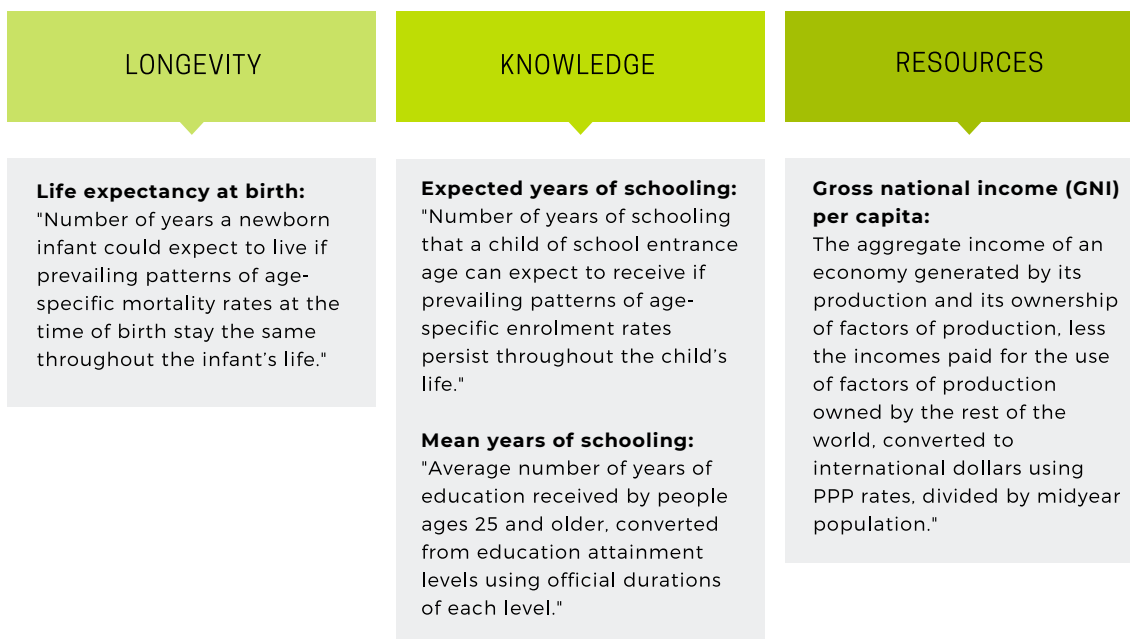


Table 3 - Human Development Index Criteria (United Nations, 2021a:346)

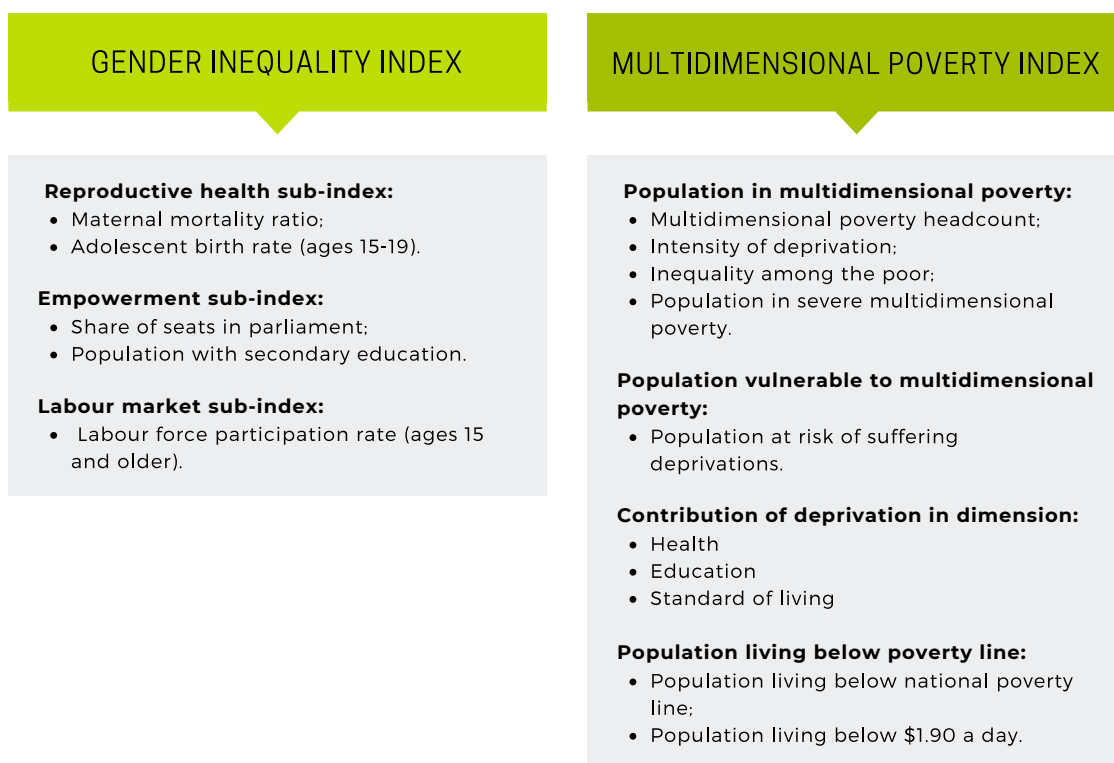


Table 4 - Gender Inequality Index and Multidimensional Poverty Index (United Nations, 2021a:364,367)

3.4.3. Data Analysis

In order to gain a deeper understanding of the realities in “underdeveloped countries”, one must carefully analyze their placement in the aforementioned international development indexes. As a first step, the database of 151 countries was sorted by their Human Development Index scores, followed by their World Bank Income Classification rankings, and lastly, by the geographical distribution of electricity and internet access.

According to Table 5, even though 151 countries are considered undeveloped by the United Nations, some rank high in the Human Development Index, possibly reflecting greater literacy and economic capabilities. A similar pattern can be seen in Table 6, in which some “underdeveloped countries” also score relatively high on The World Bank's World Development Indicators ranked by Gross National Income (GNI).

Therefore, it becomes evident that a country's development in one area does not necessarily equate to its overall stability since different countries place very differently on both indexes.

VERY HIGH HUMAN DEVELOPMENT		HIGH HUMAN DEVELOPMENT		MEDIUM HUMAN DEVELOPMENT		LOW HUMAN DEVELOPMENT	
Argentina	Oman	Albania	Mexico	Angola	Lao	Afghanistan	Liberia
Bahamas	Palau	Algeria	Mongolia	Bangladesh	Morocco	Benin	Madagascar
Bahrain	Panama	Antigua and N. Macedonia		Bhutan	Myanmar	Burkina Faso	Malawi
Barbados	Qatar	Barbuda	Paraguay	Cabo Verde	Namibia	Burundi	Mali
Belarus	Saudi Arabia	Armenia	Peru	Cambodia	Nepal	C. A. Rep.	Mauritania
Brunei	Serbia	Azerbaijan	Philippines	Cameroon	Nicaragua	Chad	Mozambique
Chile	Singapore	Belize	Bolivia,	Comoros	Pakistan	Côte d'Ivoire	Niger
Costa Rica	Turkey	Bosnia and Iran		Congo	Papua New	Congo (Rep.)	Nigeria
Georgia	U. A. Emirates	Herzegovina	Moldova	El Salvador	Guinea	Djibouti	Rwanda
Kazakhstan	Uruguay	Botswana	Saint Kitts	Equatorial - Sao Tome and		Eritrea	Senegal
Kuwait		Brazil	and Nevis	Guinea	Principe	Ethiopia	Sierra Leone
Malaysia		China	Saint Lucia	Micronesia	Solomon	Gambia	South Sudan
Mauritius		Colombia	Saint Vincent	Ghana	Islands	Guinea	Sudan
Montenegro		Cuba	Samoa	Guatemala	Syria	Guinea - Togo	
		Dominica	Seychelles	Guyana	Tajikistan	Bissau	Uganda
		Dominican	South Africa	Honduras	Timor-Leste	Haiti	Tanzania
		Republic	Sri Lanka	India	Vanuatu	Lesotho	Yemen
		Ecuador	Palestine,	Iraq	Zambia		
		Egypt	Suriname	Kenya	Zimbabwe		
		Fiji	Thailand	Eswatini			
		Gabon	Tonga	Kiribati			
		Grenada	Trinidad and	Kyrgyzstan			
		Indonesia	Tobago				
		Jamaica	Tunisia				
		Jordan	Turkmenistan				
		Lebanon	Ukraine				
		Libya	Uzbekistan				
		Maldives	Venezuela				
		Marshalls	Viet Nam				

No data:
Democratic People's Republic of Korea,
Nauru
Somalia
Tuvalu

Table 5 - “Underdeveloped countries” placement on the Human Development Index (United Nations, 2021a)

HIGH-INCOME ECONOMIES	UPPER-MIDDLE-INCOME ECONOMIES	LOWER-MIDDLE INCOME ECONOMIES	LOW-INCOME ECONOMIES
Antigua and Barbuda	Albania	Algeria	Afghanistan
Saint Kitts and Nevis	Argentina	Angola	Mozambique
Bahamas	Armenia	Bangladesh	Burkina Faso
Saudi Arabia	Azerbaijan	Morocco	Burundi
Seychelles	Belarus	Belize	Rwanda
Bahrain	Malaysia	Myanmar	C. A. Rep.
Singapore	Bosnia and Herzegovina	Nepal	Sierra Leone
Brunei	Marshall Islands	Nicaragua	Chad
Trinidad and Tobago	Mauritius	Nigeria	Somalia
Darussalam	Mexico	Pakistan	Congo (Rep.)
Tobago	Brazil	Papua New Guinea	South Sudan
Chile	Moldova	Cameroon	Sudan
U. A. Emirates	China	Comoros	Eritrea
Kuwait	Montenegro	Congo	Ethiopia
Uruguay	Colombia	Côte d'Ivoire	Gambia
	N. Macedonia	São Tomé and Príncipe	Guinea
	Cuba	Senegal	Guinea - Bissau
	Panama	Solomon Islands	Yemen
	Paraguay	Sri Lanka	
	Peru	Tajikistan	Liberia
	Saint Lucia	Tanzania	Madagascar
	Saint Vincent and the Grenadines	Timor-Leste	Malawi
	Serbia	Tunisia	Mali
	South Africa	Ukraine	
	Suriname	Uzbekistan	
	Thailand	Vanuatu	
	Tonga	Vietnam	
	Turkey	Zambia	
	Turkmenistan	Zimbabwe	
	Tuvalu		
	Jordan		

No data:
Democratic People's Republic of Korea,
Palestine
Venezuela

Table 6 – “Underdeveloped Countries” placement on the World Bank’s Income Classification (The World Bank, 2021a); The World Bank, 2021b)

The tables shown above demonstrate an existing resource scarcity in “underdeveloped countries”, which affects the population’s access to vital infrastructures, such as electricity and internet services. Thus, given the technological underpinning of this research it is essential to analyze electricity and internet availability in order to understand the feasibility of technology-based solutions for cultural democratization.

In regard to electricity, The World Bank’s Access to Electricity database (The World Bank, 2019) shows significant disparities in availability between global regions (Table 7), as well as between income groups (Table 8). As portrayed, these discrepancies solely affect the most impoverished geographical areas and lower income groups.

All in all, it is presumed that 13% of the world population, around 940 million people, do not have access to electricity (Ritchie, H., & Roser, M. 2020). Nevertheless, the number of people with access to electricity has been steadily increasing.

Following a similar trend to electricity availability, lower internet penetration predominantly affects underdeveloped and impoverished regions, as shown in Table 9 (Statista, 2021).

Central Europe and the Baltics	100%
European Union	100%
North America	100%
Europe & Central Asia	99%
Caribbean small states	98%
East Asia & Pacific	98%
Latin America & Caribbean	98%
Middle East & North Africa	97%
Arab World	89%
Pacific island small states	86%
Africa Western and Central	51%
Sub-Saharan Africa	46%
Africa Eastern and Southern	43%

Table 7 - Access to electricity (% of population) by region (The World Bank, 2019)

High Income	99%
Upper-Middle Income	99%
Middle Income	93%
Lower-Middle Income	89%
Low Income	40%

Table 8 - Access to electricity (% of population) by income groups (The World Bank, 2019)

Northern Europe	97%
Western Europe	93%
Northern America	90%
Southern Europe	85%
Eastern Europe	82%
Western Asia	73%
Southern America	72%
Oceania	71%
Eastern Asia	70%
South-Eastern Asia	69%
Central America	66%
Southern Africa	62%
Caribbean	61%

Table 9 - Global internet penetration rate as of April 2021, by region (Statista, 2021)

In recent years, online restrictions and censorship have become more prevalent, threatening individual freedoms worldwide (Warf, 2010). The following insights derive from recent research performed by Comparitech (Bischoff, 2022) at a global level:

Europe	<ul style="list-style-type: none"> • 12 countries restrict political media and 2 countries censor political media - Belarus and Turkey; • 5 countries restrict social media - Belarus, Montenegro, Spain, Turkey, and Ukraine; • No country bans social media.
Central America	<ul style="list-style-type: none"> • 6 countries restrict political media - El Salvador, Guatemala, Honduras, Mexico, Nicaragua, and Panama - while only Cuba censors it; • 2 countries restrict social media - Cuba and Honduras; • No country bans social media
South America	<ul style="list-style-type: none"> • 6 countries restrict political media, while only Venezuela censors it • 2 countries have social media restrictions - Ecuador and Venezuela; • No country bans social media
Asia	<ul style="list-style-type: none"> • 43 countries either restrict or fully censor political media; • 32 countries restrict social media; • 4 countries ban social media - China, Iran, North Korea, and Turkmenistan;
Africa	<ul style="list-style-type: none"> • 43 countries restrict political media and 11 countries censor it; • 31 countries restrict social media ; • Only Eritrea bans social media.
Oceania	<ul style="list-style-type: none"> • 5 countries restrict political media - Fiji, Papua New Guinea, Samoa, and Tonga - but none censor it • Only Papua New Guinea restricts social media;

Table 10 - Online Censorship by Geographical Region (Bischoff, 2022)

Overall, countries as North Korea, China, Vietnam, Iran, Russia, Belarus, Pakistan, Qatar, Syria, Thailand, Turkmenistan, UAE, and Saudi Arabia rank the highest in online censorship (Bischoff, 2022; Warf, 2010).

The freedom of thought that the internet represents led repressive governments to apply this method of censorship, using morality as an excuse to suppress freedom of speech, political beliefs and religious self-determination online (Warf, 2010). Furthermore, new issues regarding data security, digital privacy and surveillance are on the rise (Bischoff, 2022; Warf, 2010).

3.5. COLONIALISM AND FURTHER CHALLENGES

First and foremost, to fully understand the statistics given above, one has to recognize how they came to be.

Development is, in essence, a social process where a society utilizes their resources to advance scientifically and technologically (Rodney, 1972a). It is a process that has been present in human life since the beginning and allowed humans to build the world we see today. Nevertheless, the development rate of two nations is never equal, in part due to the sets of beliefs and values that dictate each's behavior and social relations (Rodney, 1972a).

That being considered, once in conflict, the less technologically advanced nations are bound to become subservient to the dominant ones, leading to relations of exploitation and oppression (Rodney, 1972a), either through direct ownership of means of production and land, or indirect control of trades and markets (Rodney, 1972a).

Colonialism, Imperialism and Capitalism are, therefore, major creators of relationships of exploitation and dependence. Colonialism and imperialism are the sovereignty and control of a nation by another, either by direct or indirect ruling (Stanford University, 2017); while capitalism is an economic system characterized by the accumulation of capital by the proprietors of the means of production, and subsequent disproportion of wealth distribution to the labor workers (Rodney, 1972a).

These concepts intersect and generate various challenges:

First, capitalism turns labor into a product that can be bought and sold (Rodney, 1972a), indifferent to the needs of labor workers.

Secondly, it potentiates further exploitation of the subservient nation's natural resources, as Rodney (1972a:45) points out "*foreign investment ensures that the natural resources and the labor of Africa produce economic value which is lost to the continent.*". To make matters worse, even private investments prove to be troublesome long-term (Rodney, 1972a) as private development is shown to either negatively impact or disregard locals (Graeff, 2020).

Lastly, colonization and imperialism ensure the maintenance of racist and xenophobic speech (Rodney, 1972a), reinforced by biased academic work that proposes scientific and biological reasons for a nation's underdevelopment (Rodney, 1972a). A conundrum arises here, in which science aligned with and underpinned by power structures merely reinforces those structures, only recognizing the dominant narratives (Alcoff, 1992).

As aforementioned, economics and culture contribute greatly to the development of democratic nations (Guiso et al, 2006; Inglehart, 2000) and, from a classical social theory standpoint, they also determine national power and political structures (Guiso et al, 2006). Based on this logic, Rodney (1972a) asserts that political instability in “underdeveloped countries” is actually the result of colonialism, which strengthens the hegemonic structures.

These dynamics undeniably impact cultural development since non-democratic governments disallow social change (Rodney, 1972a) and, to an extent, cultural creation (Dietler, 2018) out of fear of rebellion. Even when cultural creation is permitted, it tends to maintain the power discourses in place (Mulcany 2006), as cultural features may be used as a method of domination (Rodney, 1972a).

Some controversial opinions over the benefits of colonialism were expressed, particularly regarding infrastructure creation, in the form of roads, schools, and hospitals. Regardless, the developments are minor and skewed (Rodney, 1972b) and do not outweigh the negative impacts of decades of dominance. Even the adoption of capitalist ideals such as the “*private ownership of the other means of production*” (Rodney, 1972b:198) is argued as a positive demeanor of colonialism (Rodney, 1972b) disregarding that only a minor portion of the population has that financial power.

International organizations have shed light on the many issues that underdeveloped nations face, such as extreme poverty, market stress, and natural disasters (International Bank for Reconstruction and Development, 2021). Nonetheless these organizations tend to be “*dominated by Western capitalist powers*” (Rodney, 1972a:48) and fail to acknowledge the destructive history that led to this reality. For that reason, international development projects have repeatedly failed due to improper management, cultural overlooks, disregard for local communities (Ebbutt, 1998), inadequate communication, unqualified personnel (Rodney, 1972a), and insufficient infrastructure - specifically road distribution (Schuppan, 2009; Rodney, 1972b).

So, as long as these dynamics exist, “*dependent nations can never be considered developed*” (Rodney, 1972a:48). Thus, only the dominant states can end this cycle.

From a point of reflection, when speaking of “underdeveloped countries”, one must realize the raw reality faced in these contexts, from wars, censorship, extreme poverty, hunger, homelessness, unemployment, and living in fear for themselves and their loved ones. With this in mind, the proposed framework by no means intends to further strengthen unfair relations, but rather allow communities to benefit from cultural development, since promoting culture and education is only a small step for international equality, inclusion, and well-being.

3.6. OUTLOOKS AND OPPORTUNITIES

As the world recovers from the Covid-19 pandemic, the Global Economic Prospects Report of 2021 (International Bank for Reconstruction and Development) concluded that future economic development will likely remain below pre-pandemic results and that growth in underdeveloped regions will be slow. Nevertheless, cultural development is one approach to creating sustainable growth and ensuring long-term positive effects. For this reason, decision-makers and authorities need to recognize the best practices, strategies, and opportunities for cultural development.

The report *“How to design cultural development strategies to boost local and regional competitiveness and comparative advantage: overview of good practices”* (Commission for Social Policy, Education, Employment, Research and Culture, 2018) outlines a set cultural development strategies and tools to boost cultural democratization, some of which are considerable recommendations for this project. Although the report focuses on European research, a few strategies and practices can be acknowledged and applied to underdeveloped regions.

Some recommendations (Commission for Social Policy, Education, Employment, Research and Culture, 2018) are:

- To utilize culture as a resource for development, through the promotion of multicultural production and participation;
- To explore local cooperation opportunities;
- To create institutions for cultural management, since most independent management entities are temporary and play a major role as the “intermediaries between policymakers and recipients of cultural policies” (Commission for Social Policy, Education, Employment, Research and Culture, 2018:57), meaning they pay closer attention to the locals’ needs;
- To provide physical spaces for cultural projects, as these facilitate cultural participation and allow for creativity to thrive;
- To develop a sustainable use for assets by exploring their social and economic purposes.

The report (Commission for Social Policy, Education, Employment, Research and Culture, 2018) also recognizes different types of instruments present in cultural development projects, such as: the development plans themselves, as they that monitor budget, activities, and procedures; national awards and grants; partnerships; and calls for projects. As a result, these strategies and tools are proven to increase the value of- and access to- existing cultural assets, as well as support the creation of new ones (Commission for Social Policy, Education, Employment, Research and Culture, 2018).

Another opportunity for the democratization of culture in underdeveloped contexts is that cultural democratization aligns with some of the 17 Sustainable Development Goals set by the United Nations (2015). Firstly, it contributes to providing education on sustainable development and cultural diversity (Goal 4.7). Secondly, it promotes inclusion and cultural empowerment (Goal 10.2). Thirdly, it contributes to globally protect cultural heritage (Goal 11.4). Fourthly, as a set of practices, it helps to ensure inclusive and participatory decision-making (Goal 16.7). And lastly, it supports policy coherence for sustainable development (17.14).

In conclusion, although the world is still recovering from a global pandemic and there are numerous challenges for underdeveloped regions, many established practices and opportunities foster the potential for sustainable cultural democratization.

4. LITERATURE REVIEW

Following along, the Literature Review chapter is organized into two sections that focus on foundational concepts.

First, we explore the puzzling concept of culture, and its double meaning. Next, an analysis of modern cultural notions is carried out, delving into subjects as the Cultural Economy, Cultural and Creative Industries, and Cultural Products. As a result of these insights, we define a set of cultural assets to be incorporated into the framework.

Afterwards, the focus shifts to cultural accessibility and cultural barriers, where some technological solutions are introduced. Using an historical perspective, these solutions are then examined to determine the extent to which they can promote cultural democratization and inclusion. Lastly, the available technologies are scrutinized and classified into categories of action, addressing their advantages and disadvantages towards implementation in underdeveloped contexts.

4.1. CULTURE

Culture is a concept that is exceptionally difficult to define, since it is neither static nor linear (Jackson, 2006; Throsby, 2001) owing to the plasticity (Jahoda, 2012) to englobe different meanings and connotations throughout time. For this reason, different definitions of culture were proposed throughout the centuries, and even today several definitions are accepted. For instance, in the 18th and 19th century, the term culture referred to the *“training or refinement of the mind”* (Jahoda, 2012:290) and the *“intellectual and spiritual development of civilization”* (Throsby, 2001:3).

But then, what is culture?

In a broader sense, it is defined by Cambridge Dictionary (2021) as *“the way of life, especially the general customs and beliefs, of a particular group of people at a particular time”*. Nevertheless, a concept such as culture cannot be outlined solely by a dictionary entry, but this definition does point to the particularity of culture – it belongs to a specific community, at a specific time.

Culture is in itself a social construct that refers to a *“vastly complex set of phenomena”* (Jahoda, 2012:300) that unconsciously orients humans in their way of being in the world (Jackson, 2006), providing them with a value system (Lenard 2020). From a philosophical standpoint, T.S. Eliot argues it *“may even be described simply as that which makes life worth living”* (Eliot, 1948:27).

Consequently, culture is not deliberate, but rather a natural product of human activity (Eliot, 1948). It does not reflect individual traits such as race or nationality, but rather the ideas, beliefs, values, and practices that construct identity, transmitted within a group, from generation to generation (Jackson, 2006; Lenard, 2020). That being said, individuals display their cultural identities, either internally through their behavior, attitudes, and beliefs, or externally through heritage.

Throsby (2001) illustrates these two traits of culture particularly well. On one hand, the author describes culture as the *“set of attitudes, beliefs, mores, customs, values and practices which are common to or shared by any group”* (2001:4) that may be displayed in the form of *“signs, symbols, texts, language, artefacts, oral and written tradition”* (2001:4) which establish a shared identity

between individuals. On the other hand, he defines culture as functional entities, encompassing the *“activities that are undertaken by people, and the products of those activities, which have to do with the intellectual, moral and artistic aspects of human life”* (Throsby, 2001:4).

To consider the latter definition, a cultural activity must abide to three criteria (Throsby, 2001): it has to involve creativity, it has to communicate symbolic meaning, and it has to embody intellectual property.

Considering the criteria given, Throsby (2001) suggests that cultural activities include traditional and fine arts such as *“music, literature, poetry, dance, drama, visual art”* (2001:5), as well as *“film-making, story-telling, festivals, journalism, publishing, television and radio and some aspects of design”* (2001:5). Therefore, another way to view culture is as an *“inventory of objects”* (Throsby, 2001:7) which produces numerous physical outputs that hold the possibility of being displayed and marketed, turning them into the cornerstone of the cultural economy.

4.1.1. Cultural Concepts

4.1.1.1. Cultural Economy, and Cultural and Creative Industries

The emergence of cultural and creative industries followed the rise of the bourgeoisie and the capitalist system (Vilar, 2007) that envisioned the opportunity to industrialize and market cultural products on an international scale, ultimately establishing a global cultural economy. This progress was facilitated by the surge of private cultural enterprises, whose focus on a market-driven mindset supplied the working class with cultural products that suited their demand (Educult, 2015). As time went by, this one-sided structure collapsed as the working class demanded fair participation and access to the cultural resources available (Educult, 2015).

Nowadays, cultural and creative industries are enclosed in the global cultural economy and are responsible for the creation, production, and commercialization of cultural and creative outputs (Vilar, 2007; UNESCO, 2007). In practice, the European Commission (2006) separates the **cultural sector** - composed of *“non-industrial”* cultural events, original artworks, and heritage, and *“industrial”* reproducible cultural goods, such as movies, music, and books - from the **creative sector** - comprised by the production of non-cultural goods focusing only on creativity as a resource as in design, architecture, and advertising.

The present-day discourse perceives cultural and creative industries as potential economic boosters (European Commission, 2006) fostering sustainable human development and contributing to the wellbeing of individuals and communities worldwide, through the creation of income sources for cultural workers (Beukelaer, 2015) and the empowerment of communities through the *“use of local resources, skills, and knowledge.”* (UNESCO and UNDP, 2013:17).

In practice, cultural and creative industries operate on human-centered models, which are not typically prepared to deal with the existing disparities between developed and underdeveloped contexts. That being said, *“underdeveloped countries” “seek to reshape prevailing models to suit the reality of their local context”* (UNESCO and UNDP, 2013:21). To achieve successful outcomes some insights should be recognized:

Firstly, there is an immediate need to recognize the overwhelming presence of informal cultural and creative industries - that stem from the low capacity that governments have over industry regulation - and to include them in the global discourse of cultural economy (Beukelaer, 2015).

Secondly, it must be universally acknowledged that cultural practices are embedded in webs of cultural meaning. Therefore, models should be context-specific, framed within indigenous and local knowledge (Beukelaer, 2015), and steer away from archaic tendencies to replicate western industry models. In order to do so, decision-makers must comprehend local capacities, limitations, and resources.

Lastly, cultural policy reforms must be put into practice to deal with the structural and geographical contingencies that cultural and creative industries have in underdeveloped contexts (Beukelaer, 2015). For instance, political interference and international economic agendas heavily constrain creative outputs, and their market viability (UNESCO and UNDP, 2013).

4.1.1.2. Cultural Products

Deriving from the interchangeability of arts and culture, the concept of cultural products encompasses a collection of meanings. According to Throsby (2001), these products originate from cultural practices and reflect the creativity and symbolism of communities, incorporating both traditional and fine arts. Throughout the years, cultural institutions have not only proposed new classification systems for cultural products but established a new concern for the functioning of the cultural cycle.

The cultural cycle, conceptualized by the UNESCO's Institute for Statistics in 2009, provides a framework to thoroughly examine the different steps in the "*creation, production, and dissemination of culture*" (2009:19), shedding light on the lifespan of cultural products and analyzing how individuals interact with them.

In short, the culture cycle (Figure 3) is composed of (1) the **creation** of ideas and individual products, (2) the **production** of "reproducible cultural forms" (UNESCO Institute for Statistics, 2009:19), (3) the **dissemination** of industrialized and digital cultural products, (4) the **exhibition, reception, and transmission** of cultural experiences and cultural activities and (5) the **consumption** of cultural products, and participation in cultural activities and experiences, that communicate knowledge and skills.

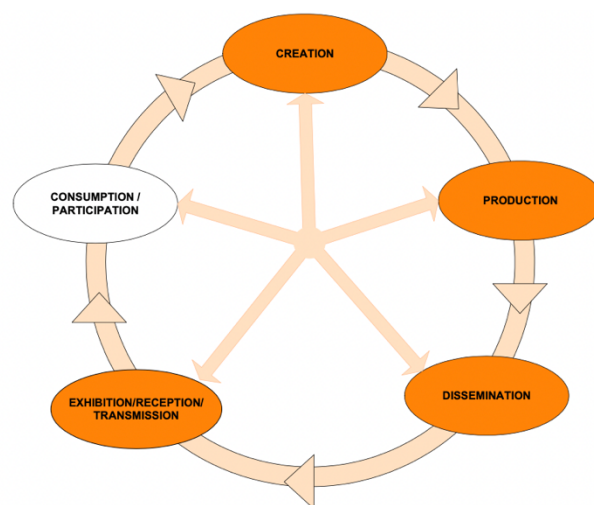


Figure 3 - Culture Cycle (UNESCO Institute for Statistics,2009:20)

Due to the evolution of cultural and creative industries and the establishment of a cultural economy, cultural products became widely accessible to consumers. Besides, technological advancements have transformed the creation and production of cultural products, as well as the way consumers interact with them.

Considering this framework, the concept of cultural products appears to be rather flexible and, apart from the criteria established by Throsby (2001), they exist in a multitude of manners - from materialized and industrialized products to one-time experiences. As cultural products also possess marketable traits they may be contemplated as cultural assets, further detailed in the following section - 4.1.2. Classification of Cultural Assets.

4.1.2. Classification of Cultural Assets

First and foremost, cultural assets lack an established definition, much like the concept of culture, and are only referred to in broad terms. For instance, the 2013' Creative Economic Report (UNESCO and UNDP) illustrates this, stating that cultural assets include the practices, traditions, heritage, landscapes, and the products originating from them, material or immaterial. Moreover, this description is deepened by the Australian Department of Finance and Administration (2005), which describes cultural assets as holders of intrinsic value, capable of producing economic benefits and functioning as a resource.

Following that explanation, a clear connection between cultural assets and the cultural economy starts coming into view, as assets ought to be considered the outputs of cultural and creative industries (Vilar, 2007; UNESCO, 2007), endowed with marketable features. As to further comprehend this linkage, the Creative Economic Report (UNESCO and UNDP, 2013) provided in Table 11, displays six classification systems established by various cultural entities. Included are The Department for Digital, Culture, Media & Sport (DCMS), the World Intellectual Property Organization (WIPO) and the United Nations Educational, Scientific and Cultural Organization (UNESCO).

An analysis of Table 11 illustrates the complexity surrounding the categorization of cultural and creative industries and, consequently, the multitude of cultural assets they create. It should be noted that these classification systems consider both cultural and creative sectors, despite exhibiting them in different configurations, highlighting three crucial features: firstly, they embody the concurrent historical, cultural, and political standpoint of each particular background at the time of the model's creation (Gaudêncio, 2019); secondly, they demonstrate the influence that marketability and consumer behavior have on the conceptualization of cultural assets; and lastly, they approach technological development, tools and services at distinct levels.

1. DCMS Model

Advertising
Architecture
Art and antiques market
Crafts
Design
Fashion
Film and video
Music
Performing arts
Publishing
Software
Television and radio
Video and computer games

2. Symbolic Texts Model

Core cultural industries
Advertising
Film
Internet
Music
Publishing
Television and radio
Video and computer games

Peripheral cultural industries
Creative arts

Borderline cultural industries
Consumer electronics
Fashion
Software
Sport

3. Concentric Circles Model

Core creative arts	Wider cultural industries
Literature	Heritage services
Music	Publishing
Performing arts	Sound recording
Visual arts	Television and radio
	Video and computer games
Other core cultural industries	Related industries
Film	Advertising
Museums and libraries	Architecture
	Design
	Fashion

4. WIPO Copyright Model

Core copyright industries	Interdependent copyright industries
Advertising	Blank recording material
Collecting societies	Consumer electronics
Film and video	Musical instruments
Music	Paper
Performing arts	Photocopiers, photographic equipment
Publishing	
Software	
Television and radio	
Visual and graphic art	
Partial copyright industries	
Architecture	
Clothing, footwear	
Design	
Fashion	
Household goods	
Toys	

5. UNESCO Institute for Statistics Model

Industries in core cultural domains
Museums, galleries, libraries
Performing arts
Festivals
Visual arts, crafts
Design
Publishing
Television, radio
Film and video
Photography
Interactive media

Industries in expanded cultural domains
Musical instruments
Sound equipment
Architecture
Advertising
Printing equipment
Software
Audiovisual hardware

6. Americans for the Arts Model

Advertising
Architecture
Arts schools and services
Design
Film
Museums, zoos
Music
Performing arts
Publishing
Television and radio
Visual arts

Table 11 - "Different classification systems for the cultural and creative industries" (UNESCO and UNDP, 2013:22)

Upon careful consideration of the previous systems, the 2009' Framework for Cultural Statistics (UNESCO Institute for Statistics) (Figure 4) provides a broader and more inclusive understanding of cultural assets, grounded in the notion of cultural domains - "*common set of culturally productive industries, activities and practices*" (UNESCO Institute for Statistics, 2009:23). Here, the inclusion of Natural and Cultural Heritage as an independent domain, and Intangible Cultural Heritage as a transversal domain, validate a wider spectrum of cultural assets, reinforcing the idea that these go beyond industrial creation.

Furthermore, UNESCO's "Framework for cultural statistics domains" (2009:24) also incorporates the transversal domain of "Equipment and Supporting Materials". This domain covers cultural production tools and services that "*facilitate or enable the creation, production and distribution of cultural products*" (UNESCO Institute for Statistics, 2009:30), such as software, hardware, internet, and production equipment.

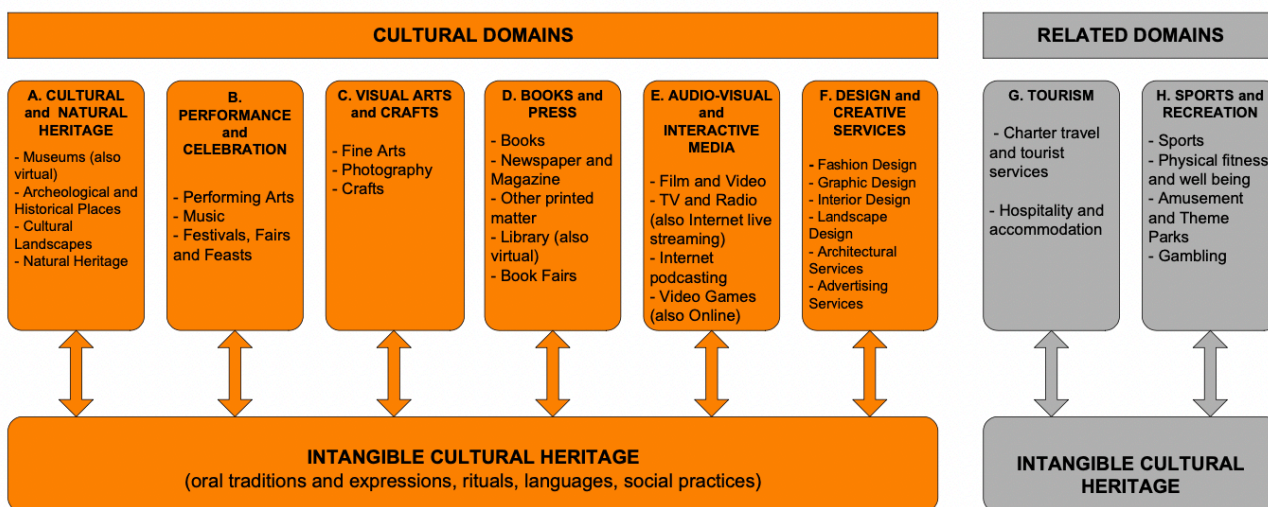


Figure 4 - “Framework for cultural statistics domains” (UNESCO Institute for Statistics, 2009:24)

Taking this into consideration, cultural assets should be understood as tangible or intangible goods and products that allow the preservation and dissemination of culture, as well as its commercialization. That said, cultural services, tools, and technologies should not be accounted as cultural assets but as Information and Communication Technologies (ICT) that support cultural democratization.

Assuming this criteria, Table 12 proposes a standard set of cultural assets, separated according to their cultural domain, that shall be the foreground for our cultural democratization framework.

CULTURAL AND NATURAL HERITAGE	PERFORMANCE AND CELEBRATION	VISUAL ARTS AND CRAFTS	BOOKS AND PRESS
<ul style="list-style-type: none"> - MUSEUMS - ARTEFACTS - MONUMENTS - LANDSCAPES - NATURAL HERITAGE (NATURE PARKS, RESERVES, ZOOS, AQUARIA, AND BOTANICAL GARDENS) 	<ul style="list-style-type: none"> - PERFORMING ARTS (THEATRE, DANCE, OPERA) - CULTURAL EVENTS (FESTIVALS, FEASTS AND FAIRS) - MUSIC (PERFORMANCES, COMPOSITIONS, RECORDINGS, AND MUSICAL INSTRUMENTS) 	<ul style="list-style-type: none"> - FINE ARTS (PAINTING, DRAWING, SCULPTURE) - CRAFTS - PHOTOGRAPHY - ART GALLERIES 	<ul style="list-style-type: none"> - BOOKS - NEWSPAPERS - VIRTUAL PUBLISHING - LIBRARIES - BOOK FAIRS
AUDIO-VISUAL AND INTERACTIVE MEDIA	DESIGN AND CREATIVE SERVICES	INTANGIBLE CULTURAL HERITAGE	
<ul style="list-style-type: none"> - RADIO - TELEVISION - INTERNET STREAMING - FILM AND VIDEO - INTERACTIVE MEDIA (VIDEO GAMES, WEBSITES, SOCIAL NETWORKS) 	<ul style="list-style-type: none"> - FASHION DESIGN - GRAPHIC DESIGN - INTERIOR DESIGN - LANDSCAPE DESIGN 	<ul style="list-style-type: none"> - ORAL TRADITIONS, EXPRESSIONS, AND LANGUAGE - PERFORMING ARTS - SOCIAL PRACTICES, RITUALS AND FESTIVE EVENTS - KNOWLEDGE AND PRACTICES - TRADITIONAL CRAFTSMANSHIP. 	

Table 12 - Standard Set of Cultural Assets

Due to their nature, these cultural assets are the most prevalent and conventionally managed by both cultural and governmental institutions which, combined with recent digital and technological advancements (Vilar, 2007; Colbert and Courchesne, 2012), make them prime examples for our framework.

4.1.3. Cultural Accessibility

As aforementioned, globalization has been a double-edged sword in terms of diversity and proliferation of cultural assets. For instance, the uprising demand of cultural products from “underdeveloped countries” (UNESCO Institute for Statistics, 2009; Vilar, 2007) expanded the cultural market beyond the barriers of western and high culture (Colbert and Courchesne 2012). Yet, countless individuals still face difficulties when accessing cultural assets.

In essence, cultural accessibility strives for the unrestricted access to cultural assets, resources, and activities - either individually or in a group, on-site or remotely, with or without direct participation - and the freedom to explore, interpret and share them (Educult, 2015).

The emergence of this concept followed the uprising demand for cultural democratization led by the working class (Educult, 2015), which ensured a broader availability of cultural resources and products to the majority of the population. That said, cultural accessibility lives in symbiosis with democracy - only through free participation in cultural affairs and freedom of expression can one truly access the cultural sphere. In turn, this accessibility also fosters democratic values, such as tolerance and inclusion (Educult, 2015), as advocated by the Council of Europe - “participation in culture is vital for democracy” (Educult, 2015:49).

Nonetheless, as the Access to Culture report (Educult, 2015) points out, “*enabling participation to culture means more than the democratization of culture—that is to say, removal of barriers to culture*” (p.51). These barriers are presented in multiple forms and tend to affect those who live at the edge of the hegemonic culture, mainly ethnic minorities, people with disabilities, indigenous people, and rural inhabitants. Fundamentally, eliminating these obstacles requires policy efforts that strive to diminish the access limitations to cultural assets and cultural participation, whilst considering strategies to tackle geographical, linguistic, educational, political, disability, and socio-economic barriers. (Educult, 2015).

Given the setting of this research outlining geographical, linguistic, political, and socio-economical barriers seems to be paramount.

Geographical barriers, alongside socio-economic barriers, are perhaps the most prevalent, affecting the cultural accessibility of millions of people. Although culture exists beyond urban surroundings (UNESCO and UNDP, 2013), cultural institutions, industries and activities are increasingly concentrated in urban settings, alienating individuals and communities who are located outside these contexts (Educult, 2015).

That being said, remoteness is a prime obstacle to cultural participation, as the latter entails traveling costs, access to transportation (Gaudêncio, 2019), and functioning infrastructure such as electricity and internet access (Warf, 2010) to reach cultural spaces and activities. Moreover, these disadvantages manifest themselves predominantly in “underdeveloped countries”, as transportation infrastructure,

mainly built in colonial settings, is insufficient and skewed towards regions of economic interest (Rodney, 1972b).

As for **linguistic barriers**, and according to the “*Access to Culture*” report (Educult, 2015), cultural minorities must, not only have the right to express themselves in their native language but should also be provided broader and more inclusive access to cultural assets and education in their mother tongue. The leading constraint to linguistic inclusion emerges from cultural elitism, entailing that, cultural endeavors reflect solely the realities of hegemonic groups (Mulcahy, 2006), disregarding minority knowledge and experiences.

In respects to **political barriers**, they are most rampant in underdeveloped nations in which citizens face direct threats to their freedom of expression. As previously approached, in non-democratic countries, political structures may fully disallow cultural creation (Dietler, 2018), or, at most, authorize cultural production that aligns with their discourses (Mulcahy 2006).

Withal, political obstacles transpose to the digital sphere, as online restrictions, and online censorship (Warf, 2010) are common tools repressive governments use to limit and control online access (Bischoff, 2022), impeding citizens’ digital access to cultural assets.

Lastly, **socio-economic barriers** unmistakably effect all aspects of cultural accessibility, moving beyond sole individual struggles. In particular, due to the budgeting issues (Lewis, 2021; Mulcahy, 2006) accessing cultural assets comes at great cost, even amid cultural democratization strategies.

The reality of socioeconomic struggles is widespread, especially in “underdeveloped countries” where an immense part of the population subsists near the international poverty line (United Nations, 2021). Besides, culture tends to maintain hegemonic discourses (Mulcahy, 2006), so low-income households may not be able to associate and connect with cultural activities or products (Gaudêncio, 2019), ultimately displaying a lower propensity to participate and consume culturally.

Solutions

In the last two decades, multiple authors have suggested that Information and Communication Technologies (ICTs) and digitalization are the two most effective means of responding to cultural accessibility challenges (Vilar, 2007; Colbert and Courchesne, 2012; UNESCO and UNDP, 2013; Educult, 2015). That is due to the fact that “*new technologies tend to break down the barriers between creation and consumption*” (p. 279), acting as a “*cultural mediator*” (Colbert and Courchesne, 2012:279) at a reasonable price point.

Recent technologies also support cultural transactions (Vilar, 2007; UNESCO and UNDP, 2013) and allow digital co-creation and cultural participation that promotes original, inclusive, and diverse cultural messages (Colbert and Courchesne, 2012) which may dialogue with non-hegemonic realities.

On a similar notion, digitalization provides fresh perspectives on how consumers engage with cultural products - either by complimenting in-person experiences or as a method of reaching remote individuals (Colbert and Courchesne, 2012). This is by virtue of the autonomy that the digital domain grants when accessing culture, enabling the creation of unbound cultural spaces and platforms (Educult, 2015).

In Europe, some cultural institutions have started using digitalization to their advantage, actively investing in online content creation, and developing digital collections of cultural assets, which has enabled widespread visibility of their cultural possessions (Educult, 2015).

Alternatively, digitalization also functions as a tool to strategically market cultural products either by targeting potential consumers through social media platforms or by promoting cultural assets through interactive means, such as in videogames or mobile applications (Colbert and Courchesne, 2012).

Nevertheless, one other possibility to defy cultural barriers is tourism investment - as cultural heritage and sustainability are increasingly gathering reputation and popularity. Therefore, historical buildings, monuments, and museums are proposing new accessibility strategies (UNESCO and UNDP, 2013) to attract new consumers.

4.2. TECHNOLOGIES FOR CULTURE

In overview, technologies play an increasingly significant role in culture since they are intertwined with the social and economic spheres of society (Schroeder & Borgerson, 2002, Feigenbaum, 2004), having innately transformed human interaction, communication, and cultural consumption patterns (Bakhshi & Throsby, 2012).

From a historical perspective, earlier forms of technology relate to an ancient artistic realm of society, where traditional art diffused societal ideals and transmitted cultural doctrines as a direct result of artistic patronage (Schroeder & Borgerson, 2002). In time, technological advancements, supported by democratic ideals, began to convey a renewed outlook that envisioned the protection and diffusion of cultural belongings, as acknowledged by the European Union - "democratization of goods that have value for all humanity should be ensured through digitization, accessibility, and interoperability to enable sharing of both information and responsibilities aimed at conserving cultural identity and awareness" (Bekele et. all, 2018:7:2).

Thence in the 1990s, Information and Communication Technologies (ICTs) began to be conveyed as a *"catalyst for development"* (Touray et. all, 2013:1) given their scope of capabilities, which encompasses *"accessing, gathering, manipulating and presenting or communicating information"* (Touray et. all, 2013:2). Essentially, these technologies comprehend both hardware and software, and employ the Internet as their main platform (Touray et. all, 2013).

Nowadays, these systems are present worldwide at any time, and individuals interact with them daily through mass media, telecommunications, and internet applications (Schroeder, & Borgerson, 2002). In consequence, ICTs inevitably transformed the means by which individuals and institutions experience cultural creation, distribution, and reception (Bakhshi & Throsby, 2012), and provided economic growth to the cultural and creative sectors (Bakhshi & Throsby, 2012). Although these transformations institute unique opportunities for cultural democratization, they also highlight challenges anchored in structural inequalities (Touray et. all, 2013).

4.2.1. Available Technologies for Cultural Democratization

The swift growth and expansion of ICTs brought about fundamental changes in the fields of cultural accessibility and democratization.

Primarily, rapid technological advancements led to a major decline in costs associated with cultural creation, production, and dissemination (Feigenbaum, 2004; Styliani et. all, 2009), which widened their accessibility to previously excluded groups of people (Bali moune-Lutz, 2013).

Secondly, ICTs transformed cultural consumption and interaction patterns, steering cultural institutions into adopting new digital strategies and employing them as a method to reach their audiences, and interact with other institutions, creators, and consumers (Bekele, Pierdicca, Frontoni, Malinverni, & Gain, 2018; Arts Council England & Nesta, 2017; Bakhshi & Throsby, 2012; Styliani et. all, 2009).

At last, as global cultural markets face unpredictable fluctuations, it is essential to highlight the importance of protecting cultural heritage and intellectual property rights (Lenzerini, 2011; UNESCO Institute for Statistics, 2009), as well as the potential role of ICTs in the authentication, preservation, and protection of cultural assets.

4.2.1.1. AI-Based Automated Technologies

As interpersonal and multicultural communication is increasingly shifting to the digital realm, multiple linguistic and cultural barriers start to manifest (Karakanta, et. all, 2021). In order to tackle these obstacles, automated technologies, provided by artificial intelligence (AI), are being explored and implemented.

A key example of an AI-based automated technology is **Machine Translation (MT)**. This type of technology has multiple applications, such as live subtitling, simultaneous speech translation, speech-to-text translation, or automatic dubbing, ergo offering automated solutions to real-time language translations and immediate access to interlingual information (Karakanta, et. all, 2021; Fantinuoli & Prandi, 2021; Precup-Stiegelbauer, 2013). In practice, Google Translate is perhaps the most common and accessible form of MT (Precup-Stiegelbauer, 2013), yet it still exhibits some prominent issues.

For once, Fantinuoli & Prandi (2021) and Precup-Stiegelbauer (2013) demonstrate that Machine Translation has one inherent flaw: the inability of situating and understanding cultural context when translating particular expressions and terminologies. Seeing that language is greatly mutable and carries a high degree of ambiguity, MT typically produces subpar translations. This is attributed to its “one-to-one substitution of words” (Precup-Stiegelbauer, 2013:1770) and low degree of fluency, in comparison to Human Translation. Thus, when MT is externally evaluated it accomplishes high ranks in informativeness, accuracy, and verbosity control (Lakew et. all, 2021) whilst performing dissatisfactory in terms of intelligibility.

Regardless, recent advancements and investments in MT have proven that automated real-time translations are in high demand, especially given their manifold opportunities – ranging from meetings and conferences (Zoom, 2022) to live cultural events and lectures (Karakanta, et. all, 2021; Fantinuoli & Prandi, 2021).

Another AI-based automated technology that ought to be considered is **Automatic Text Summarization (ATS)**, which stems from the combined process of Natural Language Processing and AI (El-Kassas et. all, 2021).

Technically, ATS has been proven to be an incredibly useful tool in summarizing the ever-growing amount of online text, ranging from news articles to scientific papers, and within search engine interfaces (Spärck Jones, 2007). When compared to manual text summarization, ATS displays satisfactory results at a lower cost and effort (El-Kassas et. all, 2021). In practice, this technology employs both extractive or abstractive methods to recognize, interpret and transform the main ideas of a text into an automatic generated summary (Spärck Jones, 2007), all without losing the purpose of the original transcript (Widyassari et. all, 2022).

Nevertheless, ATS experiences similar hurdles to Machine Translation since it is unable to fully contextualize the subject matters, particularly when applied to lengthy writings, or when dealing with non-English languages (El-Kassas et. all, 2021). This renders complications when applying it to cultural assets and, in turn, cultural democratization.

Alike the previously mentioned technologies, **Text Mining (TM)** is a practice of Natural Language Processing, that consists in the automated analysis of written documents and textual databases. Its purpose is to automatically extract unknown “*valuable hidden patterns*” (Rahimi, Mozhdehi & Abdolahi, 2017: 0054; Gupta, & Lehal, 2009) of information, through the use of logical links, connections, and classifications (Rahimi, Mozhdehi & Abdolahi, 2017).

As a whole, TM is a variant of Data Mining, which explores statistical methods, machine learning, and AI (Gupta, & Lehal, 2009) to search, retrieve, cluster, and classify text. Additionally, it possesses the capacity of summarization, word reduction and grammatical correction.

Lastly, according to Rahimi, Mozhdehi & Abdolahi (2017) and Gupta & Lehal (2009) the application of TM retains the same issues of MT and ATS – the ineffectiveness in perceiving the contextual meaning that natural language devises. Nonetheless, these impediments may be improved through interdisciplinary work and future technological advancements (Rahimi, Mozhdehi & Abdolahi, 2017:0055).

4.2.1.2. Digitization Technologies, Digital Presence, and Interaction

Digitization is the process of converting a physical asset into a digital one (Merriam Webster Dictionary, 2022), and it is thought to be the main technological tool for cultural democratization, as it yields the ability to store and reproduce cultural assets with minimal effort and expense. As a result, cultural institutions are currently assessing how to exploit the digital realm and digitization in order to protect and display their cultural possessions, and to efficiently present them to consumers (Arts Council England & Nesta, 2017; Bakhshi & Throsby, 2012).

It is evident that technological innovations, particularly digitization, provided new methods of artistic creation, notably in the fields of audiovisual media, performance, and visual arts (Bakhshi & Throsby, 2012). A primary example was the widespread commercialization of the digital video camera. Since it was rather inexpensive when compared to analogic film, it granted amateur and underprivileged filmmakers the opportunity to create audiovisual cultural assets (Feigenbaum, 2004).

Still, the major advancements in digitization followed the proliferation of internet services, which brought along **digital and live broadcasting** (Vilar, 2007), allowing the possibility of viewing cultural works on a global scale, either on television, online or in theaters. Livestreaming broadcasts of

performances became vastly popular (Arts Council England & Nesta, 2017) along with the distribution of movies and video entertainment through streaming platforms (Feigenbaum, 2004). An example of the enormous scope that streaming services achieve is offered by Netflix, which is available in “*over 190 countries*” (Netflix, 2022) and provides low-cost access to entertainment and information content online.

Considering these progresses, it became imperative that cultural institutions caught on with modern technologies, fully grasping their opportunities, and adapting to the novel digital interaction and consumption patterns that surfaced (Bakhshi & Throsby, 2012; Arts Council England & Nesta, 2017; Vilar, 2007; Colbert and Courchesne, 2012). Therefore, cultural institutions began to transition their presence into the digital realm through **social media**.

The 2017’ Digital Culture report (Arts Council England & Nesta) seamlessly illustrates this statement, as it details how England-based cultural institutions dealt with the digital transition and which strategies were applied to engage with consumers.

In general, these institutions increased their presence in social media platforms, such as Facebook, Twitter, and Instagram, and thereafter used these platforms to engage in digital activities. These range from marketing initiatives - as e-mail marketing and advertising -, content sharing - like publishing multimedia and blog content -, or economic campaigns - as selling tickets and accepting donations (Arts Council England & Nesta, 2017:12). Furthermore, institutions also acknowledged that social media serves as a networking platform, which allows them to connect with industry professionals as well as mediate interactions between audiences, cultural creators, and producers (Arts Council England & Nesta, 2017; Colbert and Courchesne, 2012)

Nevertheless, the 2017’ Digital Culture report (Arts Council England & Nesta) also reveals the most prevalent challenges certain cultural institutions face in the digital transition – such as limited financial resources, insufficient IT infrastructures, inadequate data analysis skills, absence of expert advice, and an overall disregard to the value of digitization (Arts Council England & Nesta, 2017).

4.2.1.3. Virtual Museums and Immersive Technologies

In view of the capabilities of digitization, cultural entities welcomed the creation of **digital cultural asset collections**, as these entertained two main proposes. For once, these digital collections offer a place to safeguard and preserve cultural assets (Styliani et. all, 2009) whilst being able to showcase them to the public in dynamic ways through 3-D visualization and immersive reality technologies (Bekele, Pierdicca, Frontoni, Malinverni, & Gain, 2018).

The creation of these digital collections functioned as the forefront for the contemporary conceptualization of **virtual museums**. Inspired by André Malraux’s notion of imaginary museums, these consist in institutions “*without walls, location or spatial boundaries, (...) made accessible across the planet.*” (Styliani et. all, 2009:521).

These digital institutions can either portray a reconstruction of a physical museum or embody an entirely original setting, ultimately providing new benefits to museology and cultural democratization, as they grant visitors the freedom to explore and/or participate in the exhibitions (Styliani et. all, 2009).

Furthermore, they offer the means to display artifacts in ways that resemble in-person exhibitions, additionally providing solutions to spatial issues and exhibition costs (Styliani et. all, 2009).

The technologies applied in the construction of virtual museums were greatly driven by advancements in cultural computing - the application of computer technologies and methodologies to the arts and culture - which rendered a revolution in cultural creation and production through the “*manipulation of three-dimensional (3D) data*” (Bekele et. all, 2018:7:2). In practice, this led to the creation of three major immersive technologies that provide digital dynamization to material and immaterial cultural heritage: Virtual Reality (VR), Augmented Reality (AR) (Bekele et. all, 2018), and Web3D exhibitions (Styliani et. all, 2009).

Virtual Reality (VR) consists in the “*simulation of a real or imaginary environment generated in 3D by digital technologies*” (Styliani et. all, 2009:522). Similarly, to other ICTs, VR modeling software has becoming increasingly inexpensive making the creation of virtual exhibitions accessible and feasible (Styliani et. all, 2009). Yet, while the creation process is relatively inexpensive, the storing of digital artefacts may be straining for small cultural institutions (Styliani et. all, 2009).

Augmented Reality (AR) goes one step further regarding interactivity, as it allows visitors to interact and navigate within virtual environments. Although more challenging to accomplish than VR and Web3D exhibitions, AR offers a more realistic, enriched, and authentic experience (Styliani et. all, 2009).

Taking this into consideration, immersion and interactive technologies are becoming increasingly prevailing and powerful, and currently enable the virtual attendance of large groups in digital exhibitions. Additionally, these technologies are progressively supporting high-resolution text and audio-visual content, which is essential to the validity of virtual museums, as it increases the trustworthiness of the displayed artifacts (Styliani et. all, 2009).

Modern advancements in immersive technologies have sparked a multitude of discussions on the creation and proper functioning of metaverses, since they are seen as another alternative for enhancing interactivity between individuals.

In short, the **metaverse** is a virtual environment, provided by AR and VR technologies, that functions as an extension of the physical world, as a “*new iteration of the internet*” (Dwivedi et. all., 2022:2), which allows individuals to interact and experience reality through a virtual setting. In practice, the background to this immense all-encompassing virtual environment expands on the existing concepts of human-computer interaction (Prieto et. all., 2022) and has been available for a while on a smaller scale, such as in videogames and interactive media (Dwivedi et. all., 2022).

The applications of the metaverse are manifold, ranging from healthcare to education and commerce (Dwivedi et. all., 2022). Yet, the appropriate establishment of a cross-platform metaverse raises many social and legal implications that are presently being reviewed, particularly in matters of privacy, data security, ethics, addiction, and harassment (Dwivedi et. all., 2022). Plus, given its governmental decentralization and “*lack of a common protocol*” (Prieto et. all., 2022:10), regulatory measures to combat these issues may not be possible, leading to further uncertainties (Dwivedi et. all., 2022: Prieto et. all., 2022).

Nevertheless, when applied to cultural and creative settings, the metaverse provides innumerable opportunities to cultural production, diffusion, and education. Since the employed technology enables “users to fully experience (...) high levels of interaction and immersive experience” (Dwivedi et. all., 2022:2), it holds an extraordinary social value anchored on knowledge transmission, collaboration, and dialogue. One of the primary examples of the junction between metaverses and cultural and creative industries is the Google Arts & Culture project (Prieto et. all., 2022; Google Arts and Culture, n.d.), which allows individuals to explore a massive collection of historical artworks and cultural artifacts through a modern and participatory interface, ultimately contributing to a more accessible and democratic education (Prieto et. all., 2022).

One last concern arises when examining metaverse interfaces from a creative perspective - existing technologies do not yet support “the degree of creative freedom and interaction” (Prieto et. all., 2022:9) that new generations expect. Therefore, for a metaverse to be feasible, this issue needs to be addressed.

4.2.1.4. Cultural Protection Technologies

As previously mentioned, culture is not a static concept, it is mutable in nature and inherently vulnerable to erosion (Lenard 2020). With that in mind, the loss of cultural heritage, either through historical change or through cultural homogenization, presents itself as a major contemporary issue that will eventually lead to “the progressive impoverishment of human society” (Lenzerini, 2011:102).

While cultural protection efforts occasionally clash with economic interests (Feigenbaum, 2004), political measures are often established by governments to preserve multiculturalism. For instance, some countries have implemented quota systems that regulate the amount of public space reserved to exhibit local productions or have designed promotion strategies to endorse both national and local cultural products (Feigenbaum, 2004).

Since technology is inherently sustained by globalization, it presents itself as a double-edged sword in the discourses of cultural protectionism and cultural homogenization. That is due to the acceleration in the distribution of cultural products, which is potentiated by technology and reflects the skewed advantages of richer countries, triggering the dispersal and assimilation of dominant cultural ideals and standards through the cultural market (Feigenbaum, 2004).

To counteract this problem **Intellectual Property Rights (IP)** have been established either through national or international institutions. These ensure the recognition and subsequent protection of ideas, products, and assets, certifying their authenticity and their ownership to the rightful creator(s) (UNESCO Institute for Statistics, 2009). In essence, these systems are indispensable tools for the sustainable functioning of cultural and creative economies, as they “add value and facilitate trade in cultural goods and services” (UNESCO and UNDP, 2013:92), ultimately allowing safe revenue streams and encouraging foreign investment (UNESCO and UNDP, 2013).

Additionally, IP systems tackle the unfair exploitation or outright theft of intellectual property (UNESCO Institute for Statistics, 2009), by providing creators and communities methods of legal protection over their work. Nevertheless, IP frameworks “are not designed to protect many kinds of non-industrial creative endeavors” (UNESCO and UNDP, 2013:26), leaving informal cultural creators incapable of copywriting their intellectual property (Pratt, 2012). A possible solution for this particular

issue is the creation of local societies that manage IP systems, yet these inadvertently face resource and expertise scarcity (UNESCO and UNDP, 2013).

Another technological tool that has been put into practice in cultural protection settings is **authentication systems**. These employ cryptographic techniques, such as encryption, steganography or blockchain (Mostarda, 2008) to secure and verify the authenticity - a requirement to determine true value (Lenzerini, 2011) - of cultural assets. Said technology is exceptionally significant when dealing with the illegal practice of counterfeiting, as these systems establish digital signatures that guarantee the veracity of the authentication data (Mostarda, 2008).

Following a similar logic, **Non-Fungible Tokens (NFTs)** are “*blockchain-enabled cryptographic assets*” (Chalmers et. all, 2022: e00309) that have been gaining recognition since 2020 (Bao & Roubaud, 2022). These assets materialize as digital creative objects (Chalmers et. all, 2022: e00309) and represent new opportunities for both cultural and creative industries and individuals.

The leading investment in NFTs is warranted by creative industry entrepreneurs, either from individual creators (e.g., artists) or enterprises (e.g., galleries, publishers, or production companies) who benefit from the security and anonymity of the “*decentralized transactions*” (Chalmers et. all, 2022: e00309) supported by blockchain. A major value of **blockchain** technology is its ability to verify ownership of cultural assets (Mostarda, 2008), which prevents counterfeiting and illegal distribution.

Considering the novelty of NFTs their status as cultural assets is yet to be determined. This is particularly due to concerns over their legal and financial regulations (Chalmers et. all, 2022). Also, the NFT market is saturated and highly volatile, leaving investors at risk of fraud and speculation (Chalmers et. all, 2022; Bao & Roubaud, 2022).

On a positive note, NFTs “*may be precursors of a more effective, ethical, and sustainable set of technologies*” (Chalmers et. all, 2022: e00309). Even blockchain is capable of promoting cultural democratization through diminishing the barriers to access, thereby reducing “*third-party players, increasing efficiency and cutting costs*” (Bao & Roubaud, 2022:2).

As aforementioned, a strict impediment to cultural democratization is online censorship, imposed by non-democratic governments to inhibit citizens’ access to digital information (Hobbs & Roberts, 2018; Warf, 2010). While these governments trust that blocking digital access obstructs citizens from reaching digitized knowledge, Hobbs & Roberts (2018) demonstrate that it may have a contrary turnout to government expectations. In reality the blockade only incentivizes citizens to approach methods of censorship evasion.

A particularly controversial technology that has been massively used to circumvents censorship is **Virtual Private Networks (VPNs)**. Fundamentally, VPNs allow millions of people unrestricted access to the internet in a fairly easy manner (Hobbs & Roberts, 2018), and for this reason, they ought to be considered a cultural democratization and protection tool. Nevertheless, the legal frameworks involving VPN usage are specific to each country, falling beyond the scope of this research.

4.2.2. Challenges

It is well established that ICTs can enrich cultural affairs, still there are numerous challenges associated with their successful implementation worldwide. For instance, since technological advancements

reflect the existing power dynamics of globalization, they tend to disproportionately exclude citizens of “underdeveloped countries” (Touray et. al, 2013), ultimately generating a digital divide (Baliamoune-Lutz, 2013).

All in all, Touray et. al (2013:9) proposes an exceptionally inclusive framing of the most prevalent barriers to the implementation and acceptance of ICTs:

Political Factors	<ul style="list-style-type: none"> • Political stability; • Level of freedom; • Administrative, operational and bureaucratic challenges.
Social and Cultural Factors	<ul style="list-style-type: none"> • Cultural and religious limitations; • Fear of technology and change.
Infrastructural and Technical Factors	<ul style="list-style-type: none"> • Insufficient software and hardware; • Inadequate electricity infrastructures; • Unreliable Internet Services (bandwidth/connection).
Educational Factors	<ul style="list-style-type: none"> • Level of literacy; • Technological proficiency (computer skills / digital proficiency); • Educational capacities on technological matters.
Economic Factors	<ul style="list-style-type: none"> • Lack of financial resources; • Lack of investment; • Costs of infrastructures.
Security and Legal Factors	<ul style="list-style-type: none"> • Threats to ownership; • Privacy risks; • Absence of national and international legal frameworks.

Table 13 - Adapted ICT Barriers (Touray et. all, 2013)

Similar to Touray et. al’s (2013) perspective, Baliamoune-Lutz (2013) concluded that a nation's income, infrastructure, and financial resources notably influence the diffusion of ICTs. Further inferring that context determines the successful implementation and acceptance of technology. Moreover, in line with previous arguments, political freedom and openness are associated with the adoption of these technologies, circularly fostering “economic development and enhance(ing) political rights and civil liberties” (Baliamoune-Lutz, 2013:166).

The formerly presented list of barriers recognizes certain fundamental constraints to the development of a cultural democratization framework. Nonetheless, given that some of the challenges displayed fall under the category of structural issues, that may only be tackled by governments and investors, they will not be further addressed.

5. CONCEPTUAL FRAMEWORK

5.1. ASSUMPTIONS

Based on what was gathered in the previous chapters, managing resources, cultural backgrounds, and technological tools are all essential to the successful design and implementation of cultural democratization projects. Therefore, the assumptions must be divided into 3 categories: Cultural Assumptions; Resource Management Assumptions; and Technological Assumptions.

Additionally, the literature review highlighted the most widespread cultural accessibility barriers and the various technologies that may mitigate them. As an illustration of how this knowledge can be utilized, Table 1 presents a logical correspondence between both these variables.

5.1.1. Cultural Assumptions

1a. Economic development improves citizens' quality of life and well-being through better access to education, health, and services.

1b. Depending on a nation's economic resources, cultural creation and diffusion may be hindered due to insufficient funding.

1c. Technologies play an increasingly significant role in culture since they are intertwined with the social and economic spheres of society (Schroeder & Borgerson, 2002, Feigenbaum, 2004), having innately transformed human interaction, communication, and cultural consumption patterns (Bakhshi & Throsby, 2012).

1d. It is vital to note that capitalism, as an economic system, is a double-edged sword in democratic establishment: while promoting democracy through individualist and self-determination ideals, it also increases labor exploitation and social inequalities (Rodney, 1972a).

1e. Totalitarian systems that defy the uprearing demand for democratization (Inglehart, 2000; Rodney, 1972a) are more prone to political instability.

1f. National governments hold the power of decision over cultural and artistic matters, and cultural policy is established according to their particular belief systems (Heslop, 2020). Therefore, the dissemination of certain cultural topics may be restricted (Dietler, 2018; Rosenstein, 2018) or biased towards the hegemonic discourse (Mulcany 2006). Furthermore, in nations with repressive power structures, access to cultural assets may be restricted, obstructed, or suppressed (Ebbutt, 1998).

1g. Democratic nations promote and protect their citizens' right to cultural participation; fostering inclusion, and safeguarding society's freedom of speech, expression, and association (Dahl, 2021). Therefore, within democratic systems, most manifestations of art and culture are allowed and protected without constraints (Rosenstein, 2018).

1h. Culture carries remarkably distinct meanings between societies and may be displayed in the form of *"signs, symbols, texts, language, artefacts, oral and written tradition"* (Throsby, 2001:4) or by the *"activities that are undertaken by people, and the products of those activities, which have to do with the intellectual, moral and artistic aspects of human life"* (Throsby, 2001:4).

1i. Social norms, codes of conduct, and cultural values govern collective behavior in societies (Lapinski & Rimal, 2005). These are also within the origins of democratic development (Inglehart, 2000; Ruck et. all, 2019) and influence economic trading decisions and political beliefs (Guiso et. all, 2006).

1j. Colonialism heavily prejudiced certain nations' development rates, due to exploitation and oppression (Rodney, 1972a). This occurred through direct ownership of means of production and natural resources, indirect control of trades and markets, and disproportionate wealth distribution (Rodney, 1972a).

1k. Managers and decision-makers must account for the existence of racist and xenophobic speech (Rodney, 1972a), which is typically reinforced by biased academic work, founded on colonialist thinking. These narratives must be repudiated as to ensure an ethical and inclusive cultural democratization project.

1l. Cultural democratization projects must follow the principles of cultural democracy and support a participatory approach to culture. Realistically, governments should be partially responsible in the establishment of this democracy, by promoting widespread entertainment and art, rather than supporting cultural elitism (Mulcahy, 2006).

1m. Cultural assets are tangible or intangible goods and products that allow for the preservation and dissemination of culture. They are the outputs of cultural activities (Throsby, 2001) and hold the possibility of being displayed and marketed (Figure 16).

1n. Decision-makers must recognize that Intangible Cultural Heritage is a transversal domain that transpires through other cultural assets that materialize its knowledge.

5.1.2. Resource Management Assumptions

2a. Cultural funding is usually subjected to strict public and private policies (Lewis, 2021; Mulcahy, 2006).

2b. Multiple funding options are available for cultural democratization projects in "underdeveloped countries", from public funding to international cooperation funds (e.g., the IFCD, UNESCO, The African Culture Fund, and the Asian Cultural Council).

2c. Economic support towards culture has been declining due to the decreasing number of subsidies allocated to cultural institutions and productions (Lewis, 2021; Mulcahy, 2006).

2d. Oftentimes private investments are troublesome long-term (Rodney, 1972a), as they are shown to either negatively impact or disregard local communities (Graeff, 2020).

2e. A country's placement on the international development indexes reveals its available resources, specifically educational and financial, and exposes development disparities. This data can be found in Table 5 - "*underdeveloped countries*" placement on the *Human Development Index (United Nations, 2021a)* – and Table 6 - "*underdeveloped countries*" placement on the *World Bank's Income Classification (The World Bank, 2021a); The World Bank, 2021b*).

2f. Electricity and internet access differ significantly between contexts, negatively affecting the most impoverished geographical areas and lowest income groups. This data can be found in Table 7 - Access

to electricity (% of population) by region (The World Bank, 2019) – Table 8 - *Access to electricity (% of population) by income groups (The World Bank, 2019)* and Table 9 - *Global internet penetration rate as of April 2021, by region (Statista, 2021)*.

2g. Terminologies carry underlying meanings; therefore, correctly naming contexts is essential. For instance, the expression “*underdeveloped countries*” should solely be applied in data-driven comparisons (Rodney, 1972a), and should, in no way, implicate a negative connotation to the cultural beliefs and values of any nation.

2h. It is imperative to acknowledge colonialist history and its repercussions, particularly in countries that have been consistently subjected to exploitation and oppression (Rodney, 1972a).

2i. International economic agendas heavily constrain creative outputs and influence their market viability (UNESCO and UNDP, 2013).

2j. International organizations tend to be “*dominated by Western capitalist powers*” (Rodney, 1972a:48).

2k. Cultural and creative industries operate on human-centered models which are unprepared to deal with the realities of underdeveloped contexts. It is therefore (1) necessary to reshape models to fit local settings (UNESCO and UNDP, 2013); (2) recognize their capacities, limitations, and resources; and (3) avoid tendencies to replicate western industry models.

2l. Informal cultural and creative industries should be incorporated into global discourses of cultural economy due to their overwhelming presence in underdeveloped contexts (Beukelaer, 2015).

2m. Cultural institutions must adapt to new realities and fully grasp the myriad of opportunities that modern technologies and business strategies provide. For example: marketing and advertisement, content creation, networking, and sales (Arts Council England & Nesta, 2017; Colbert and Courchesne, 2012).

2n. Resource management must consider the frequent challenges that cultural institutions face during the digital transition, such as limited financial resources, insufficient IT infrastructure, inadequate data analysis skills, and absence of expert advice (Arts Council England & Nesta, 2017).

2o. Acknowledging the reasons why international development projects have repeatedly failed in “*underdeveloped countries*” is crucial. Some identified reasons are: improper management; cultural overlooks; disregard for local communities (Ebbutt, 1998); inadequate communication; unqualified personnel (1972, 2018a); and insufficient infrastructure - specifically road distribution (Schuppan, 2009; Rodney, 1972b). Another possible reason is cultural and intellectual exploitation (Little, 2005; Rodney, 1972a).

2p. Cultural democratization projects must abide by a multilateral logic. They should emphasize democratic ideals of cultural reciprocity, that intend to afford power and recognition to minority communities (Song, 2020) while rejecting the ideals of cultural dominance.

2q. Cultural democratization aligns with some of the 17 Sustainable Development Goals set by the United Nations (2015), which may aid in their funding and implementation.

2r. Cultural and creative industries function as economic boosters (European Commission, 2006), ultimately creating income sources (Beukelaer, 2015) and empowering communities (UNESCO and UNDP, 2013). For that reason, decision-makers should explore their various advantages.

2s. There are innumerable barriers that impede cultural accessibility, which must be had in account all throughout cultural democratization projects. For better understanding of the particularities of each barrier, Table 14 details their specificities and proposes solutions that may aid in their diminishing.

2t. While selecting cultural assets as outputs of cultural democratization projects, any existing challenges and barriers must be identified according to their particular setting. Cultural values are also a crucial element to the thought over.

2u. When deciding upon the desired outputs of a cultural democratization project, managers and decision-makers should account for the nature of the cultural assets, their position within the cultural sector (industrial or non-industrial) and the creative resources they utilize.

2v. In order to establish step-by-step strategies, managers and decision-makers should consider the cultural cycle (UNESCO Institute for Statistics, 2009) and interpret how cultural products/outputs fit into each section.

5.1.3. Technological Assumptions

3a. Technologies are not cultural assets but are rather a transversal domain that covers cultural production tools and services that *“facilitate or enable the creation, production and distribution of cultural products”* (UNESCO Institute for Statistics, 2009:30). Their wide scope of capabilities encompasses *“accessing, gathering, manipulating and presenting or communicating information”* (Touray et. all, 2013:2).

3b. *“New technologies tend to break down the barriers between creation and consumption”* (Colbert and Courchesne, 2012: 279), since they support cultural transactions (Vilar, 2007; UNESCO and UNDP, 2013), and serve as a *“cultural mediator”* (Colbert and Courchesne, 2012:279).

3c. Digital co-creation and cultural participation promote original, inclusive, and diverse cultural messages (Colbert and Courchesne, 2012) which may dialogue with non-hegemonic realities.

3d. Technological advancements, supported by democratic ideals, began to convey a renewed outlook that envisioned the protection and diffusion of cultural belongings (Bekele et. all, 2018).

3e. Information and Communication Technologies are the furthestmost response to innumerable barriers that impede cultural accessibility (Vilar, 2007; Colbert and Courchesne, 2012; UNESCO and UNDP, 2013; Educult, 2015), as they facilitate access to knowledge at a fairly inexpensive price point. For that reason, they are potential solutions for most cultural democratization barriers (See table 14).

3f. ICTs transformed the means by which individuals and institutions experience cultural creation, distribution, and reception (Bakhshi & Throsby, 2012), and provided economic growth to the cultural and creative sectors (Bakhshi & Throsby, 2012).

3g. The diffusion of ICTs is determined by income, infrastructure, and financial resources, implying that the successful implementation, accessibility, and acceptance of such technologies is context specific

(Bali moune-Lutz, 2013). This data can be found in Table 13 – “Adapted ICT Barriers (Touray et. all, 2013)”.

3h. Technological advancements led to a major decline in costs associated with cultural creation, production, and dissemination (Feigenbaum, 2004; Styliani et. all, 2009), which widened the accessibility of these technologies to previously excluded groups of people (Bali moune-Lutz, 2013).

5.1.4. Proposed Mitigation Technologies and Strategies for Common Cultural Democratization Barriers

Factoring in these assumptions, and following the perspective that technology is instrumental, various tools and strategies are bound to be considered as solutions for cultural democratization, even in the most challenging settings.

Since cultural development is a proven approach to sustainable growth, decision-makers and authorities need to recognize the best practices, strategies, and opportunities for its accomplishment (Commission for Social Policy, Education, Employment, Research and Culture, 2018). To reach this goal some transversal challenges are pinpointed and must be accounted for with due diligence throughout the cultural democratization project, and whilst implementing these mitigation technologies and strategies. For instance, since technology is partially blamed for cultural homogenization (Feigenbaum, 2004), decision-makers must acknowledge its influence and instead use it for the dispersal of democratic ideals of cultural reciprocity.

Another transversal requirement is the fulfillment of the working class’s demand for fair participation and equal access to cultural resources (Educult, 2015). Therefore, when applying these cultural democratization tools and strategies, decision-makers must do their utmost to establish a decentralized practice to cultural management, which directly empowers communities and includes them in the discourses of cultural economy.

Lastly, since culture is inherently vulnerable to erosion (Lenard 2020), these solutions must envision the protection of cultural heritage and multiculturalism, in order to avoid its disappearance.

In order to mitigate cultural democratization barriers, the following technological solutions are proposed:

CULTURAL DEMOCRATIZATION BARRIERS	PARTICULAR PROBLEMS	POTENTIAL MITIGATION SOLUTIONS
Geographical	Remoteness	<ul style="list-style-type: none"> • Digital and Live Broadcasting; • Social Media; • Digital Cultural Asset Collections; • Virtual Museums, Virtual Reality (VR), Augmented Reality (AR) and the Metaverse; • Local Cultural Management; • Itinerant Cultural Projects.
	Absence of Electricity/Internet Services	<ul style="list-style-type: none"> • Local Cultural Management; • Itinerant Cultural Projects.
Linguistic	Protection of Native Languages	<ul style="list-style-type: none"> • Digital Cultural Asset Collections; • Intellectual Property Rights (IP).
	Access to Cultural Assets in Native Languages	<ul style="list-style-type: none"> • Digital Cultural Asset Collections; • Automatic Text Summarization (ATS); • Machine Translation (MT).
Political	Online Censorship	<ul style="list-style-type: none"> • Virtual Private Networks (VPNs).
	Restrictions to Cultural Creation	<ul style="list-style-type: none"> • Social Media; • Digital Cultural Asset Collections; • Virtual Private Networks (VPNs).
	Risk of Intellectual Exploitation	<ul style="list-style-type: none"> • Digital Cultural Asset Collections; • Intellectual Property Rights (IP) and Local IP Management; • Authentication Systems and Blockchain.
Socio-Economic	Lack of Financial Resources	<ul style="list-style-type: none"> • Digital and Live Broadcasting; • Social Media; • Digital Cultural Asset Collections; • Virtual Museums, Virtual Reality (VR), Augmented Reality (AR) and the Metaverse; • Ticket Deductions.
	Low Propensity to Participate and Consume Culturally	<ul style="list-style-type: none"> • Ticket Deductions; • Cultural Inclusivity Projects.

Table 14 - Proposed Mitigation Technologies and Strategies for Common Cultural Democratization Barriers

Digital and Live Broadcasting

Digital and live broadcasting or streaming are technological tools that enable individuals to view cultural productions online (Vilar, 2007) or through television. In essence, these solutions mitigate geographical barriers to cultural democratization, as they can be accessed at a global scale through an internet connection.

Streaming can also be an option when dealing with socio-economic barriers (Arts Council England & Nesta, 2017; Feigenbaum, 2004) as it entails low costs for its consumption, and waives additional costs of transportation to in-location cultural events or tickets to live events.

Social Media

Social media imposes identical requirements as the aforementioned technology: access to internet services and to a technological device that supports it. If these requirements are met, social media can mitigate remoteness and socio-economic impediments to cultural democratization as it connects individuals to cultural goods without further expenses.

Another solution provided by this technology is the support and protection of cultural creation. Social media, even in settings where it is restricted or banned (Figure 12), provides a platform to safeguard cultural assets while maintaining a certain level of anonymity for its creators, protecting them from repercussions. However, anonymity's downside is the identity concealment of hate speech creators.

Digital Cultural Asset Collections

Digital cultural asset collections yield the ability to safeguard and display cultural assets (Styliani et. al, 2009) through an online interface, along with their informative data (Bekele, Pierdicca, Frontoni, Malinverni, & Gain, 2018). Given its online availability it facilitates cultural participation in geographically constrained areas (Bakhshi & Throsby, 2012).

Akin to social media, digital cultural asset collections sustain a significant role in lessening political obstacles to cultural democratization as they hold the ability of protecting the creator's anonymity or their intellectual property.

Furthermore, this technology also guarantees the protection and dissemination of native languages, inevitably mitigating linguistic barriers to culture.

Virtual Museums, Virtual Reality (VR), Augmented Reality (AR) and the Metaverse

Virtual museums are another technological tool that can be implemented to mitigate both geographical and socio-economic barriers, as they grant visitors the freedom to explore and/or participate in the exhibitions of cultural assets (Styliani et. al, 2009) at a low price point. Plus, similarly to the abovementioned technology, they also allow individuals to access cultural artifacts and trustworthy information (Styliani et. al, 2009).

VR and AR technologies are not necessarily required to exist within virtual museums; however, they provide further immersive and interactive experiences to visitors.

Following a similar logic, the Metaverse utilizes these immersive technologies to generate a platform that grants individuals the chance to explore and interact with collections of cultural assets in a virtual setting (Dwivedi et. al., 2022)

Automatic Text Summarization (ATS) and Machine Translation (MT)

Automatic Text Summarization (ATS) and Machine Translation (MT) are AI-based automated technologies that tackle mostly linguist and educational barriers to cultural democratization by facilitating knowledge transmission.

Essentially, MT affords automated solutions to real-time language translations, granting immediate access to interlingual information (Karakanta, et. all, 2021; Fantinuoli & Prandi, 2021; Precup-Stiegelbauer, 2013); meanwhile ATS encapsulates the main ideas of a text into an automatic generated summary, and it can be applied in news articles, novels, scientific papers, and within search engine interfaces (Spärck Jones, 2007).

Intellectual Property Rights (IP) and Local IP Management

Systems of Intellectual Property Rights (IP) ensure the recognition and subsequent legal protection of ideas, products, and assets, certifying their authenticity and their ownership to the rightful creator(s) (UNESCO Institute for Statistics, 2009), ultimately minimizing the risks of intellectual exploitation or theft of intellectual property. For this reason, this technology may be considered as a solution to tackle political barriers to cultural democratization.

Nevertheless, these systems are only prepared to deal with industrial cultural creation (UNESCO and UNDP, 2013:26), leaving informal cultural creators at a higher risk of exploitation (Pratt, 2012). A possible solution to this issue would be the creation of Local IP Management societies, that would operate at a smaller scale and report back to authorities once an infringement is witnessed.

Authentication Systems and Blockchain

Authentication systems and blockchain function as cultural protection technologies that mitigate the risks of intellectual exploitation. They do this through methods of encryption that secure and verify the authenticity and ownership of cultural assets through digital signatures (Mostarda, 2008), preventing their counterfeiting and subsequent illegal distribution.

Virtual Private Networks (VPNs)

Virtual Private Networks (VPNs) are a technological tool widely used to circumvent online censorship (Hobbs & Roberts, 2018). Fundamentally, they mitigate political barriers to cultural democratization by protecting individual online freedom, enabling users to reach multicultural content. In turn, VPNs also foster cultural creation and dissemination by providing access to multiple online platforms that protect cultural assets.

In settings where technological solutions cannot be implemented, other strategies may be employed. The proposed ones are:

Local Cultural Management

Aiming at non-digital strategies, Local Cultural Management yields innumerable possibilities for cultural cooperation in isolated locations with high infrastructure scarcity.

Through local cooperation projects that explore communal spaces and the work of resident cultural creators (Commission for Social Policy, Education, Employment, Research and Culture, 2018), many projects can be created beyond the scope of the online realm.

These projects should mostly be managed through local and decentralized cultural institutions to ensure proper communication with the residents and proper management of the available resources.

Itinerant Cultural Projects

Another cultural democratization strategy is the creation of itinerant cultural projects. These projects alleviate remoteness, specifically in areas with high infrastructure scarcity, by providing communities the access to travelling exhibitions of cultural assets.

In practice, they must be planned with a flexible design in mind, providing them the mobility to roam between locations and the plasticity to be displayed in simple spaces.

Ticket Deductions

Monetary discounts are another cultural democratization strategy that may mitigate socio-economic barriers to culture.

In theory, by deducting the entrance fees of lower-income households, they may become more propense to participate culturally, specifically when insufficient financial resources are the issue. A 2007' French study supports this argument, affirming that free admissions improve cultural accessibility by simplifying the decision-making process on whether to visit a cultural heritage site (Le Gall-Ely, Urbain, Gombault, Bourgeon-Renault & Petr, 2007).

Ticket deductions strategies can also be incorporated in Cultural Inclusivity Projects, as these should always acknowledge and include lower-income individuals, particularly in spaces where knowledge is shared.

Cultural Inclusivity Projects

Cultural Inclusivity Projects offer a plethora of opportunities. In essence, they should mitigate socio-economic barriers by encouraging individuals to participate in appealing cultural events; they should also focus on decentralizing cultural discourses, by including different narratives and cultural realities.

There are multiple ways to implement these projects. For instance: (1) the creation of clubs or groups of interest where individuals can communicate and share ideas; (2) the promotion of events and debates over shared issues; (3) and the creation of multicultural fairs and markets.

These projects go in line with certain political measures that a few governments have already established, such as the implementation of quota systems for local exhibitions and productions, and the promotion of national or local cultural products (Feigenbaum, 2004).

5.2. CONCEPTUAL FRAMEWORK

Based on previously acquired knowledge, the following conceptual framework aims to contribute to cultural democratization and access to cultural assets in “underdeveloped countries”. Figure 5 presents an overview of the framework and delineates each phase of project development.

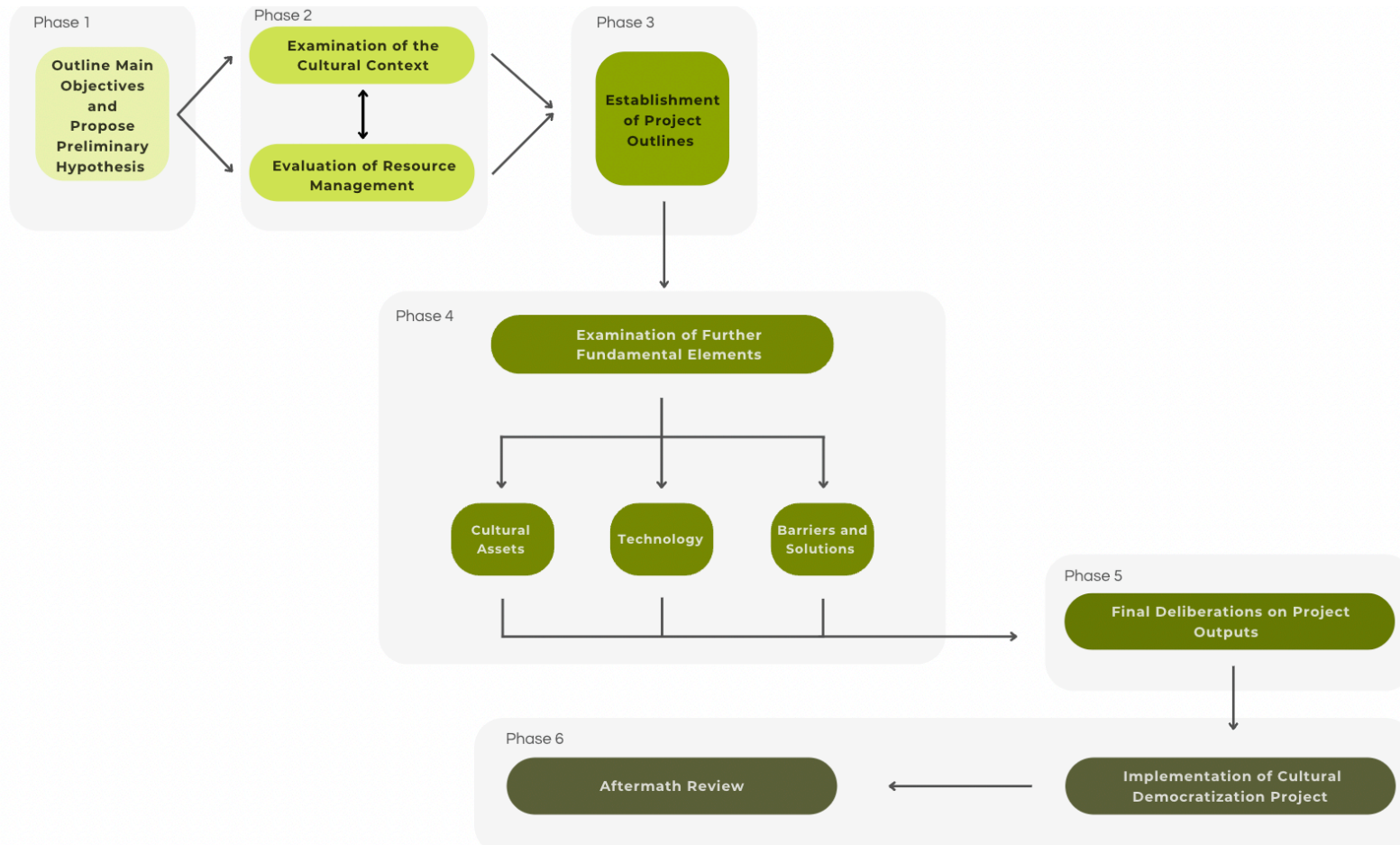


Figure 5 – Conceptual Framework

5.3. IMPLEMENTATION GUIDELINES

First and foremost, it is fundamental to clarify that the application of this framework requires considerable attention to detail, since each of the proposed phases are comprised of small demanding tasks.

Secondly, although the framework approaches ethics in specific stages, ethical integrity should always be integral in every step of the development and implementation of any democratization framework; if not, the project falls at the risk of mimicking frequent failures.

Lastly, this phased proposal follows a specific logic, but it is flexible, in that it may be adapted to meet the requirements of different cultural democratization projects. Nevertheless, decision-makers should keep in mind the proposed steps and research themes, as they are shown to be critical for the successful outcome of cultural democratization projects.

For starters, **Phase 1** (Figure 6) comprehends the delineation of the project's main objectives. Here, decision-makers are responsible for elaborating a rough design of the proposal: outlining the contexts that will be involved in the project, along with the goals it's attempting to accomplish.

In this first phase, the responsible entities should also deliberate over the required infrastructures and funding and elect the preferred methods for project development.

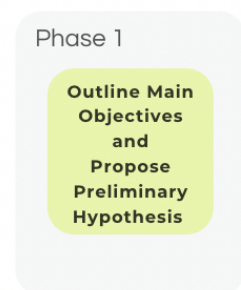


Fig. 6 – Implementation Phase 1

Next, **Phase 2** is separated into two segments that function as the first theoretical foundations of the cultural democratization project; both segments require detailed investigations over the resource management background and the cultural settings of the context at hand. This stage is the most meticulous and demanding of the proposed framework since each segment requires deep analysis of multiple knowledge fragments (Figure 7).

Essentially, Phase 2A consists in the thorough examination of the cultural context, touching upon the fundamental realities of the geographical setting and the communities that will be affected by the project. In this step, the local communities and entities should be contacted, in order to extract important information and to create bonds that would later be used in the project.

Meanwhile, Phase 2B consists in the analysis of the structural realities of the context, particularly the existing infrastructures, cultural entities and the historical and external influences that may sway the project's outcomes. In this stage, decision-makers must also consider the available funding options and address social and ethical concerns, mainly in matters related to terminology and unbiasedness.

Phase 2

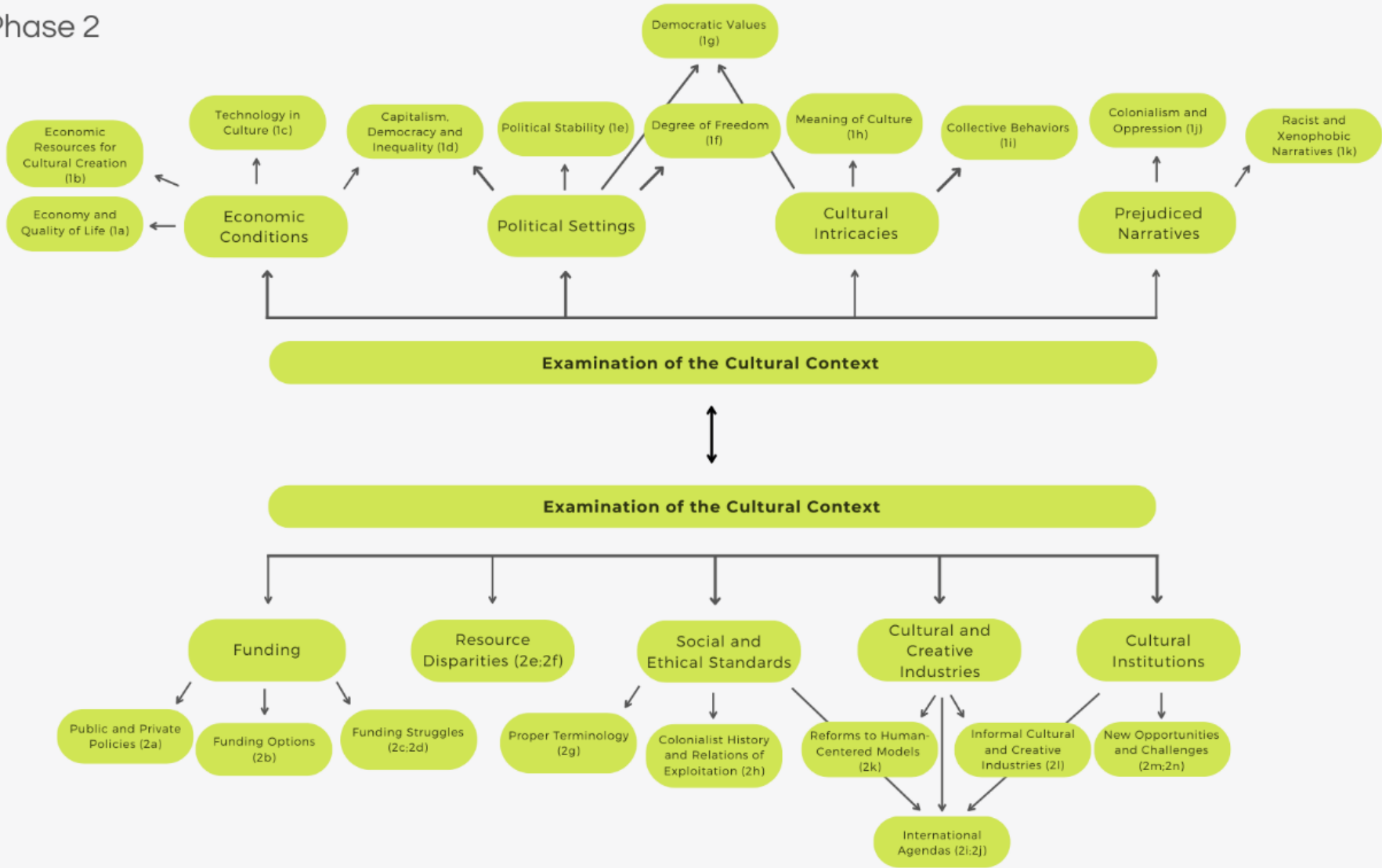


Figure 7 – Implementation Phase 2

Bearing in mind the information attained in the previous stage, **Phase 3** is composed of a set of suggested guidelines (Figure 8) that direct the acquired knowledge into formal procedures. In this phase, the responsible entities should review previous cultural projects – particularly their sets of management practices and regular failures – and assure project funding. Furthermore, by this stage, the cooperation between decision-makers, cultural institutions and local communities should also be secured.

Phase 3 also devises a profound ethical segment, where decision-makers must ensure the principles of cultural democracy and a multilateral logic to cultural reciprocity.



Figure 8 – Implementation Phase 3

Subsequently, **Phase 4** (Figure 9) consists in the examination of other fundamental elements that will support the cultural democratization project's outputs. This stage is characterized by a certain level of flexibility, meaning that decision-makers may include other fundamental elements to fit their particular research. Nonetheless, the 3 proposed elements should be considered as valuable research sections and integrate all cultural democratization projects.

Moreover, the 3 recommended elements - Cultural Assets; Technologies; and Existing Barriers and Potential Solutions – all have transversal connections, which indicate that these should be thought of in junction as to mitigate cultural democratization issues and facilitate project development.

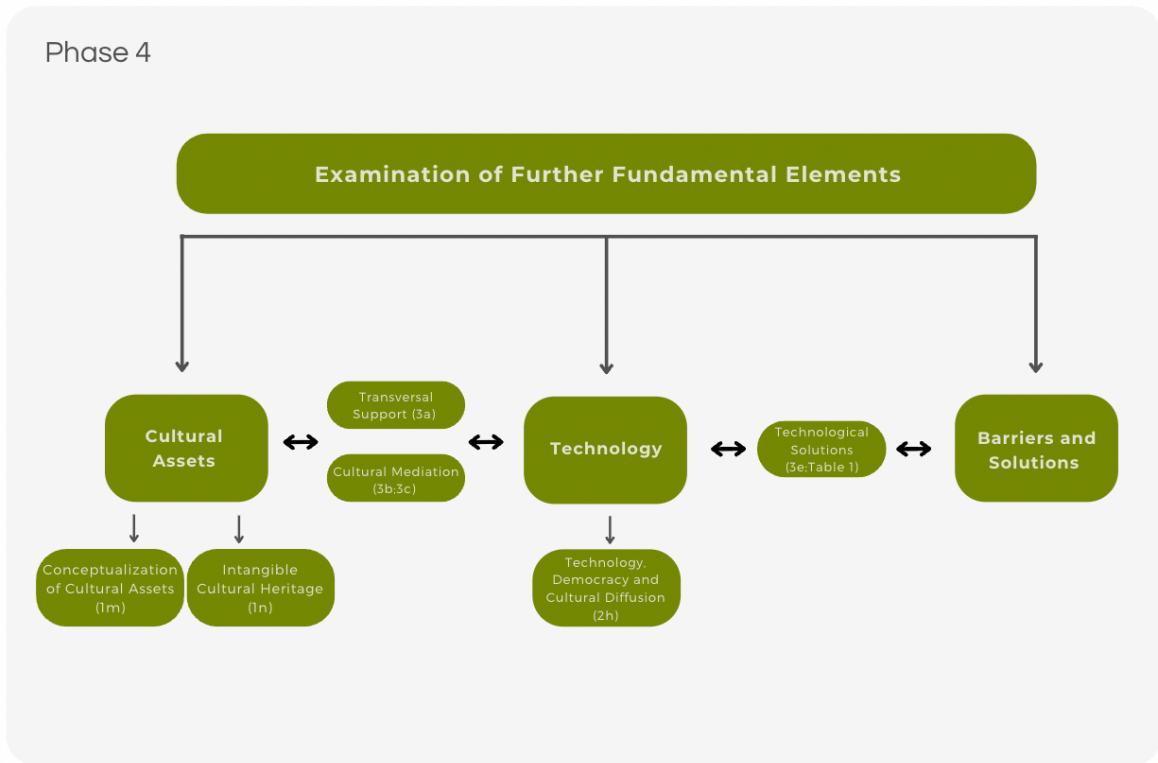


Figure 9 – Implementation Phase 4

Following along, **Phase 5** (Figure 10) comprises the final deliberations over the outputs of the cultural democratization project. Here, decision-makers must contemplate the opportunities that cultural and creative sectors, technologies and cultural entities endow. For instance, when deciding upon which cultural assets should be the outputs of the project, decision-makers must consider each context’s specific requirements, as to ensure the successful implementation of technological solutions and mitigation strategies to cultural democratization barriers.

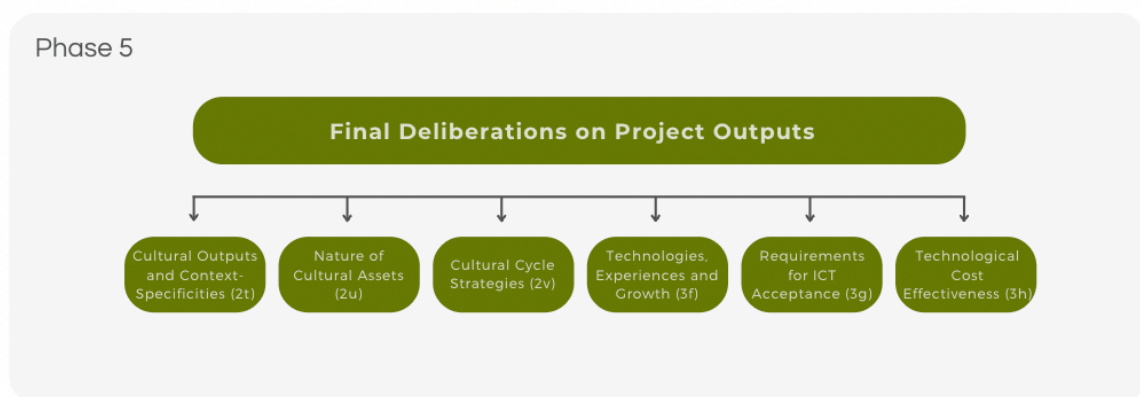


Figure 10 – Implementation Phase 5

In **Phase 6** (Figure 11) the cultural democratization project is implemented, ensuing the chosen project outputs. Thereafter, a review of the outcomes should be completed and possibly published, in order to improve future democratization projects.

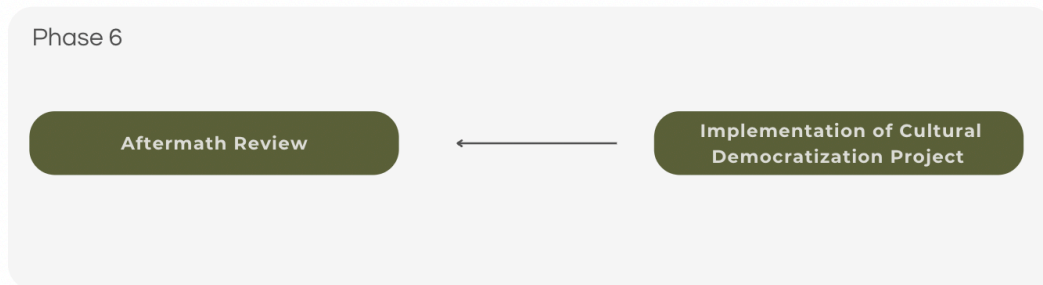


Figure 11 – Implementation Phase 6

5.4. USE CASE

For the purpose of this research, exercising a use case allows for the theoretical exemplification of the proposed cultural democratization framework, highlighting how it may aid in the successful development and implementation of these projects in underdeveloped contexts.

The hypothetical nation cogitated for this exercise is an underdeveloped country, positioned as a higher-middle income economy. Concerning infrastructures, it is imagined most of the nation's population has an average access to electricity but inferior internet services. As a whole, there is a satisfactory road distribution.

In this hypothetical context, the government is considered anocratic¹ (Colomer, Banerjea & Mello, 2016), meaning that it might allow demonstrations of cultural creation, as long as they fit within the ideology of the regime. Nevertheless, the government imposes some barriers to online freedom, restricting certain websites and social media platforms. In terms of political relations, the nation maintains good contact with countries that foster similar political regimes, promoting cultural interchangeability with these nations.

Considering this hypothetical case, some measures may be taken to improve cultural democratization:

Governmental Outputs

1a. Postulating that the government supports some cultural manifestations, it may put into practice systems of quotas that support national culture, incorporating the multiple realities of its citizens.

¹ Anocracy – a political regime described as a neither fully democratic nor fully authoritarian. It is commonly seen as a highly unstable political system (Colomer, Banerjea & Mello, 2016).

1b. To foster national cultural democratization, the government may propose the creation of a digital cultural asset collection. Furthermore, it may also create a national broadcast channel or a national academy of the arts.

1c. The implementation of IP systems within governmental management may provide the nation and its citizens the protection of their intellectual property.

Private or Individual Outputs

2b. Since the citizens of this hypothetical nation have some internet access, there is the possibility of incorporating VPNs as a method of mitigating political barriers to cultural democratization;

2b. Non-governmental cultural institutions may improve cultural democratization through the implementation of cultural inclusivity projects;

2c. Local communities may integrate their cultural creations into informal cultural and creative industries, empowering their heritage and narratives and fostering their freedom;

2d. Local cultural management institutions may be established to foster cultural cooperation between remote communities, particularly through the exploration of communal spaces and the work of resident cultural creators;

2e. Considering the available social media platforms, cultural creators may use them to expose and protect their work, anonymously or otherwise.

Overall Outputs

3a. Both governments and private institutions may explore cultural interchangeability projects through associations with the embassies of foreign nations. Additionally, they can foster the creation of international cultural institutions;

3b. Project managers should consider the varied sustainable opportunities of cultural democratization, as this is proven to function as an economy booster and foster sustainable development;

3c. Considering the sufficient road infrastructure, itinerant cultural projects may be a possible output of cultural democratization projects in this nation;

3d. Since technology is a potentiator of democracy and requires necessary infrastructures, ICT implementation may be challenging due to insufficient internet services and the existence of political restrictions;

3e. The cultural assets that may act as a cultural democratization project's outputs fall within: the use of cultural and natural heritage assets, such as museums and monuments; the establishment of performance and celebration-based events; and the creation of collections of visual arts and crafts, which hold the capacity of being exhibited in-location or online, and possibly integrating an itinerant exhibition;

3f. Audio-visual and interactive media outputs as well as books and press outputs would be challenging to implement, given the existent infrastructures and political restrictions.

These recommendations demonstrate the numerous variables that decision-makers must account for when dealing with the intricacies of each nation. This particular use case also intends to demonstrate that the proposed framework was projected with a great flexibility and thoroughness, in the attempt to guide project managers through vital research subjects and owning them the possibility to add other fundamental elements that fit their particular research.

Also, this use case considers a highly specific political system with the intent of reaffirming the need to reflect upon a countries' political stances, and therefore their level of freedom, with a high degree of ethics, logic, and integrity. For this reason, even though the proposed framework contemplates other technological solutions and strategies that could function as project outputs, these were not included, choosing only the most feasible ones.

5.5. VALIDATION

Following the construction of the framework, the validation was carried out to assess the feasibility and the validity of the artifact, with the added intent of obtaining feedback for future improvements. With that in mind, the validation was performed by interviewing two experts – Dr. João Leal, who is a Full Professor at the Department of Anthropology at NOVA University of Lisbon and Dr. António Marcelino, who is a Municipal Director for Social Cohesion and an expert in Educational Management.

Both gatherings began with a brief contextualization of the research matter, followed by a detailed explanation of the cultural democratization framework and the implementation guidelines. In the end, three questions were asked in order to attain their professional opinion and their personal thoughts on the subject.

The three queries focused on their considerations over the usefulness, the feasibility, and the validity of the framework, as well as the proposed implementation process, along with any other critics or thoughts over the research project. Since the questions were answered during a fluid dialogue, their inputs were as follows:

Professor Dr. João Leal

Dr. Leal's main considerations focused on the addition of "Cultural Barriers" into the Cultural Democratization Barriers that crossover with the technological solutions and mitigation strategies proposed in the framework. In essence, since multiple cultural communities share diverse views over particular topics, cultural democratization may be hindered according to their level of openness. Furthermore, another cultural barrier that should be considered is the under-representativeness that particular communities endure in national and international cultural dialogues.

Another topic of discussion was over the cultural goods and assets that were appropriated during the height of colonization, mainly acquired through unfair trading, and that now sit mostly in the west. Fundamentally, these objects are "cultural instruments" that carry an immense cultural importance and should be returned to their lawful homes. This matter is massively significant, and it should be properly solved in order to reach a fairer starting point for cultural democratization and cultural dialogues.

The role of social sciences in the creation of valuable knowledge was also discussed, particularly in terms of returning practical knowledge to communities. Essentially, academic research outputs are usually gatekept, either through paywalls or due to their complex nature. Therefore, cultural democratization projects should recognize this issue and provide individuals and communities with an accessible report of the gathered knowledge.

Lastly, Dr. Leal remarked that the terminology “underdeveloped countries” is outdated in social sciences and should not be employed in future research projects. As discussed throughout this research, the application of this term is solely justified through its literary standing in relation to Walter Rodney's theorizations on underdevelopment. In future cultural democratization projects, it will be necessary to review other terminologies in light of the prejudice associated with this term.

Dr. António Marcelino

Dr. Marcelino's experience with cultural and educational management provided numerous perspectives over the value of the proposed cultural democratization framework. For context, his municipality gathers dozens of cultural communities, both foreign and national, which generates a double-edged understanding: attending to diverse communities' realities and needs poses a challenge, but also enriches the municipality's multiculturalism.

In his experience, when intervening in particular communities, understanding their cultural realities and behaviors is the most complex section of management projects, especially when there are intense cultural shocks. Therefore, the main benefit of this framework, according to the expert, is that it contemplates the cultural realities of communities from an ethical and unbiased standpoint, recognizing the significance of “dominant cultures” as a delicate subject.

Similar to Dr. Leal, Dr. Marcelino also considers that culture stands as a barrier of its own, particularly when communities do not accept the beliefs and values of others. According to the expert, these cultural barriers stem from the lack of justice, freedom, and democratic values, which should be transversal to all cultural democratization projects.

Another topic that was discussed was cultural accessibility, which the expert believes should be a human right and should not be gatekept through paywalls. Furthermore, he believes that the UN's Sustainable Development Goals value human interactions and cultural accessibility, adding that this research aligns with a number of these goals, thus increasing its validity.

The final considerations over the framework were in respects to its processual logic and phased approach, which were deemed as a strength, supporting its practical implementation and overall validity. Furthermore, the academic background of this artifact increases the possibility of it being a trustworthy tool. Notwithstanding, the main setback of this proposal is the absence of a chronological timeframe which is typically required in any management project.

6. CONCLUSIONS

6.1. SYNTHESIS OF THE DEVELOPED WORK

The nature of this research required the exploration of two sections - Cultural Context and Literature Review - which were thoroughly studied as to provide a scientific baseline to the construction of the framework. The proposed framework was then segmented into guidelines to facilitate its implementation and was exemplified through the exercise of a use case.

That being said, the main objective of this research was positively achieved with the construction of an inclusive framework that aids the democratization of access to cultural assets in “underdeveloped countries”. In essence, this artifact should function as an accessible tool that supports decision-makers, such as governments or organizations, when designing and implementing cultural democratization projects, as it provides them the strategies for problem-solving through innovative approaches and solutions.

Furthermore, the pursued scientific investigation corroborates the envisioned bilateral transmission of cultural knowledge established within the cultural democratization framework, which intends to assure the protection and diffusion of all cultural creation. Since this research holds a degree of generalization, as it comprises an in-depth analysis of the shared realities and challenges of “underdeveloped countries”, it has the potential to be implemented in significantly diverse settings; notwithstanding, it thoroughly highlights the responsibility of considering the individualized necessities and capabilities of each nation.

Lastly, it is vital to notice that, since “underdeveloped countries” face enormous challenges, promoting culture and education is only a short step toward international equality, inclusion, and well-being.

6.2. RESEARCH LIMITATIONS

Unfortunately, within the timeframe of this research, it was not possible to fully perform the Evaluation phase, contemplated in the Design Science Research Methodology.

For instance, the proposed cultural democratization framework was only presented to two experts and, although it received thoughtful feedback, it was not possible to improve the artifact through the DSRM’s Iteration Process. Furthermore, since the practical implementation and assessment of the framework in a real-life setting was unachievable, the proposed framework functions only as a conceptual guideline.

6.3. FUTURE WORK

It is crucial to note that a selection of information applied in this research was derived from international organizations, which Walter Rodney argues are widely dominated by Western powers. Thus, it is to be expected a potential partiality from that data. That being said, as a reference point for future work, it is advised the investigation and promotion of decentralized queries and data collection on the topic of underdevelopment.

Furthermore, given the controversy and prejudice surrounding the term “underdeveloped countries”, it is essential to advise against the use of such an umbrella-term. While it was chosen for this research

with proper reasoning, the term encompasses manifold assumptions, disregarding that a variety of nations considered “underdeveloped” hold large multicultural communities, democratic political systems, and individual freedoms. Therefore, there is a fundamental need to recognize “underdeveloped countries” as living entities and respect their communities, especially when democratization is the main ambition in mind. Taking this into consideration, both the theoretical research and the proposed framework were devised to hold the possibility of being applied into any context that endures cultural democratization barriers.

Optimistically, the future holds the opportunity of executing the proposed cultural democratization framework in a real-life setting, and hopefully improve upon it with new knowledge gathered from practical experiences.

BIBLIOGRAPHY

- Alcoff, L. (1992). How is Epistemology Political. In *Feminist Epistemologies* (pp. 705–718). Routledge.
- Art Moves Africa, The British Council, & ON THE MOVE. (2018). An online cultural mobility funding guide for Africa.
https://onthemove.org/files/AMA.Mobility%20Funding_2018_1_singlepages_final.pdf
- Arts Council England & Nesta. (2017). Digital Culture Report. Nesta.
https://media.nesta.org.uk/documents/digital_culture_2017.pdf
- Asia-Europe Foundation (ASEF). (2021). ASEF'S WORK IN CULTURE. <https://asef.org/themes/culture/>
- Asian Cultural Council. (2022). Fellowships & Grants. <https://www.asianculturalcouncil.org/our-work/programs/fellowships-and-grants>
- Australian Department of Finance and Administration. (2005). Heritage And Cultural Assets: Accounting and Reporting a Different Perspective.
- Bakhshi, H., & Throsby, D. (2012). New technologies in cultural institutions: Theory, evidence and policy implications. *International Journal of Cultural Policy*, 18(2), 205–222.
- Baliamoune-Lutz, M. (2003). An analysis of the determinants and effects of ICT diffusion in developing countries. 10(3), 151–169. doi:10.1002/itdj.1590100303
- Bao, H., & Roubaud, D. (2022). Non-Fungible Token: A Systematic Review and Research Agenda. *Journal of Risk and Financial Management*, 15(5), 215. <https://doi.org/10.3390/jrfm15050215>
- Bekele, M.K. and Pierdicca, R. and Frontoni, E. and Malinverni, E.S. and Gain, J. 2018. A survey of augmented, virtual, and mixed reality for cultural heritage. *Journal on Computing and Cultural Heritage*. 11 (2).
- Beukelaer, C (2015) Chapter 5 - The “Development” of Cultural Industries In “Developing cultural industries: learning from the palimpsest of practice”. European Cultural Foundation, Amsterdam
- Bischoff, P. (2022). Internet Censorship 2022: A Global Map of Internet Restrictions. Comparitech. <https://www.comparitech.com/blog/vpn-privacy/internet-censorship-map/>
- Cambridge Dictionary. (2021). Grant <https://dictionary.cambridge.org/pt/dicionario/ingles/grant>
- Cambridge Dictionary. (2021a). Fund. <https://dictionary.cambridge.org/pt/dicionario/ingles/fund>
- Cambridge Dictionary. (2022). Culture. <https://dictionary.cambridge.org/dictionary/english/culture>
- Chalmers, D., Fisch, C., Matthews, R., Quinn, W., & Recker, J. (2022). Beyond the bubble: Will NFTs and digital proof of ownership empower creative industry entrepreneurs? *Journal of Business Venturing Insights*, 17, e00309. <https://doi.org/10.1016/j.jbvi.2022.e00309>

- Colbert, F., Courchesne, A. (2012) Critical issues in the marketing of cultural goods: The decisive influence of cultural transmission. *City, Culture and Society*, Volume 3, Issue 4, Pages 275-280, <https://doi.org/10.1016/j.ccs.2012.11.006>.
- Cole, R., Puroo, S., Rossi, M., & Sein, M. (2005). Being Proactive: Where Action Research Meets Design Research. *ICIS 2005 Proceedings.*, 27.
- Colomer, J.; Banerjea, D. & Mello, F. (2016). To Democracy Through Anocracy. *Democracy & Society*. 13. 1-25.
- Commission for Social Policy, Education, Employment, Research and Culture & European Committee of the Regions. (2018). How to design cultural development strategies to boost local and regional competitiveness and comparative advantage: Overview of good practices. European Union. doi: <https://doi.org/10.2863/666915>
- Dahl, R. A. (2021). Democracy. *Encyclopedia Britannica*. <https://www.britannica.com/topic/democracy>
- Dietler, M. (2018). Chapter 8 - Consumption. Em D. Hicks, & M. C. Beaudry, *The Oxford handbook of material culture studies* (pp. 209-228).
- Dwivedi, Y. K, et. all. (2022). Metaverse beyond the hype: Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy. *International Journal of Information Management*, 66, 102542. <https://doi.org/10.1016/j.ijinfomgt.2022.102542>
- Ebbutt, D. (1998). Evaluation of projects in the developing world: Some cultural and methodological issues. *International Journal of Educational Development*, 415–424. doi: [https://doi.org/10.1016/s0738-0593\(98\)00038-8](https://doi.org/10.1016/s0738-0593(98)00038-8)
- Educult. (2015). Access To Culture - Policy Analysis. https://educult.at/wp-content/uploads/2013/04/Final_Report_Print.pdf
- Eliot, T. S. (1948). *Notes Towards the Definition of Culture*. Faber and Faber Limited, London.
- EU Funding for Culture 2021–2027. (2020). CREATIVE EUROPE DESK KULTUR.
- European Commission (Directorate-General for Education and Culture), 2006, *The Economy of Culture in Europe*
- European Global Navigation Satellite Systems Agency. (2018). CUSPIS - Cultural heritage space identification system. Obtido de European Global Navigation Satellite Systems Agency: <https://www.gsa.europa.eu/cultural-heritage-space-identification-system-0>
- Evrard, Y. (1997). Democratizing Culture or Cultural Democracy? *The Journal of Arts Management, Law, and Society*, 27(3), 167–175. <https://doi.org/10.1080/10632929709596961>
- Gaudêncio, H. (2019). *CULTURE ACCESS AND TECHNOLOGY* (Dissertation). NOVA Information Management School.

- Google Arts and Culture. (n.d.). Google Arts and Culture. Retrieved 2022, from <https://artsandculture.google.com/>
- Government Information Quarterly, 118–127. doi: <https://doi.org/10.1016/j.giq.2008.01.006>
- UNESCO. (2009). THE 2009 UNESCO FRAMEWORK FOR CULTURAL STATISTICS (FCS).
- Graeff, B. G. (2020). The closer to danger, farther from harm? The impact of sport mega events in communities affected by infrastructure associated with the FIFA World Cup 2014 in Porto Alegre. *Geoforum*, 113, 146–153. doi:<https://doi.org/10.1016/j.geoforum.2020.04.018>
- Gregor, S., & Hevner, A. R. (2013). Positioning and Presenting Design Science Research for Maximum Impact. *MIS Quarterly* Vol. 37 No. 2, 337-355.
- Guiso, L., Paola S., and Luigi Z.. 2006. "How Does Culture Affect Economic Outcomes?" *Journal of Economic Perspectives*, 20 (2): 23-48. DOI: 10.1257/jep.20.2.23
- Harding, S. (2006). Introduction: Science and Inequality: Controversial Issues. In *Science and Inequality: Feminist and Postcolonial Issues* (pp. 1-13). University of Illinois Press.
- Harvey Feigenbaum (2004) Is technology the enemy of culture? *International Journal of Cultural Policy*, 10:3, 251-263, DOI: 10.1080/1028663042000255763
- Heslop, D. Alan (2020, October 30). political system. *Encyclopedia Britannica*. <https://www.britannica.com/topic/political-system>
- Hevner, A., March, S., Park, J., & Ram, S. (2004). Design Science in Information Systems Research. *MIS Quarterly*, 28, 75-105.
- Hobbs, W., & Roberts, M. (2018). How Sudden Censorship Can Increase Access to Information. *American Political Science Review*, 112(3), 621-636. doi:10.1017/S0003055418000084
- Inglehart, R. (2001). Culture and Democracy. In L. E. Harrison & S. P. Huntington (Eds.), *Culture Matters: How Values Shape Human Progress* (pp. 80–97). Basic Books.
- International Bank for Reconstruction and Development - The World Bank. (1966). *World Bank Atlas of Per Capita Product and Population*. <https://issuu.com/world.bank.publications/docs/9780101010101>
- International Bank for Reconstruction and Development. (2021). *Global Economic Prospects*. The World Bank. <https://thedocs.worldbank.org/en/doc/600223300a3685fe68016a484ee867fb-0350012021/original/Global-Economic-Prospects-June-2021.pdf>
- International Fund for Cultural Diversity (https://en.unesco.org/creativity/sites/creativity/files/eng-full_booklet_0.pdf). (2012). UNESCO.
- International Monetary Fund. (1999). *WORLD ECONOMIC OUTLOOK: Safeguarding Macroeconomic Stability at Low Inflation*. <https://www.imf.org/en/Publications/WEO/Issues/2016/12/31/Safeguarding-Macroeconomic-Stability-at-Low-Inflation>

- International Monetary Fund. (2021a). About the IMF: History: Cooperation and reconstruction (1944–71). Retrieved November 18, 2021, from <https://www.imf.org/external/about/histcoop.htm>
- International Monetary Fund. (2021b). WORLD ECONOMIC OUTLOOK - Recovery During a Pandemic.
- Jackson, Y. (Ed.). (2006). Culture. In *Encyclopedia of Multicultural Psychology* (pp. 129–130). SAGE Publications.
- Jahoda, G. (2012). Critical reflections on some recent definitions of “culture.” *Culture & Psychology*, 18(3), 289–303. <https://doi.org/10.1177/1354067X12446229>
- Lapinski, Maria & Rimal, Rajiv. (2005). An Explication of Social Norms. *Communication Theory*. 15. 127 - 147. [10.1111/j.1468-2885.2005.tb00329.x](https://doi.org/10.1111/j.1468-2885.2005.tb00329.x).
- Le Gall-Ely, M.; Urbain, C.; Gombault, A.; Bourgeon-Renault, D.; Petr, C. (2007). An Exploratory Study of the Implications of Free Admission to Museums and Monuments: The Public's Perceptions and Effects on Their Visiting Behavior. *Recherche et Applications en Marketing (English Edition)*, 22(2), 23–36. [doi:10.1177/205157070702200202](https://doi.org/10.1177/205157070702200202)
- Lenard, P. (2020) "Culture", *The Stanford Encyclopedia of Philosophy*, Edward N. Zalta (ed.), <https://plato.stanford.edu/archives/win2020/entries/culture>
- Lenzerini, F. (2011). Intangible Cultural Heritage: The Living Culture of Peoples. *European Journal of International Law*, 22(1), 101–120. <https://doi.org/10.1093/ejil/chr006>
- Lewis, G. D. (2021, March 11). museum. *Encyclopedia Britannica*. <https://www.britannica.com/topic/museum-cultural-institution>
- Little, P. D. (2005). "Anthropology and Development". Em S. Kedia, & J. Van Willigen, *Applied anthropology: domains of application*. (pp. 33-59). London: Praeger.
- Merriam Webster Dictionary. (2022). Digitization. *The Merriam-Webster Dictionary*. <https://www.merriam-webster.com/dictionary/digitization>
- Mostarda, L. D. (2008). Place and Time Authentication of Cultural Assets. *IFIP – The International Federation for Information Processing*, 279–294. [doi:https://doi.org/10.1007/978-0-38709428-1_18](https://doi.org/10.1007/978-0-38709428-1_18)
- Mulcahy, K. (2006). Cultural Policy: Definitions and Theoretical Approaches. *The Journal of Arts Management, Law, and Society*, 35(4), 319–330. <https://doi.org/10.3200/JAML.35.4.319-330>
- National Endowment for the Arts. (2004). How the United States Funds the Arts. *National Endowment for the Arts - Office of Research and Analysis*. https://www.americansforthearts.org/sites/default/files/how_0.pdf
- Netflix. (2022). Where is Netflix available? Retrieved 2022, from <https://help.netflix.com/en/node/14164>

- Peppers, K., Tuunanen, T., Rothenberger, M., & Chatterjee, S. (2007). Journal of Management Information Systems. A design science research methodology for information systems research, 24(3), 45–77. doi:<https://doi.org/10.2753/MIS0742-1222240302>
- Pratt, A. (2012). Creative industries and development: Culture in development, or the cultures of development? In C. Jones, M. Lorenzen, & J. Sapsed (Eds.), *Handbook of creative industries*. Oxford: Oxford University Press.
- Prieto, J. D. L. F., Lacasa, P., & Martínez-Borda, R. (2022). Approaching metaverses: Mixed reality interfaces in youth media platforms. *New Techno Humanities*.<https://doi.org/10.1016/j.techum.2022.04.004>
- Rashid, Y., Rashid, A., Warraich, M., & Sabir, S. (2019). Case Study Method: A Step-by-Step Guide for Business Researchers. *International Journal of Qualitative Methods*. doi:<https://doi.org/10.1177/1609406919862424>
- Ritchie, H., & Roser, M. (2020). Access to Energy. *Our World in Data*. <https://ourworldindata.org/energy-access>
- Rodney, W. (1972a). Some Questions on Development. In *How Europe Underdeveloped Africa* (pp. 27–49). Verso.
- Rodney, W. (1972b). Colonialism as a System for Underdeveloping Africa. In *How Europe Underdeveloped Africa* (pp. 192–209). Verso.
- Rosenstein, C. (2018). *Understanding Cultural Policy* (1st ed.). Routledge.
- Ruck, D. J., Matthews, L. J., Kyritsis, T., Atkinson, Q. D., & Bentley, R. A. (2019). The cultural foundations of modern democracies. *Nature Human Behaviour*, 4(3), 265–269. <https://doi.org/10.1038/s41562-019-0769-1>
- Santos, V. (2016). *As Tecnologias da Informação e a Democratização Cultural*. Obtido de https://www.researchgate.net/publication/307935105_As_Tecnologias_da_Informacao_e_a_Democratizacao_Cultural
- Saudi Arabia Ministry of Culture. (2022). Saudi Arabia Ministry of Culture: Art Residency | Albalad. On the Move. <https://on-the-move.org/news/saudi-arabia-ministry-culture-art-residency-albalad-0>
- Schroeder, J. E., & Borgerson, J. L. (2002). Innovations in Information Technology: Insights from Italian Renaissance Art. *Consumption Markets & Culture*, 5(2), 153–169. <https://doi.org/10.1080/1025386029001559>
- Schuppan, T. (2009). *E-Government in developing countries: Experiences from sub-Saharan Africa*.
- Sharjah Art Foundation. (2022). Sharjah Art Foundation Production Programme (UAE). On the Move. <https://on-the-move.org/news/sharjah-art-foundation-production-programme-uae>
- Song, S. (2020) "Multiculturalism". In *The Stanford Encyclopedia of Philosophy*. <https://plato.stanford.edu/archives/fall2020/entries/multiculturalism/>

- Stanford University. (2017). Colonialism. Stanford Encyclopedia of Philosophy. Retrieved January 22, 2022, from <https://plato.stanford.edu/entries/colonialism/>
- Statista. (2021). Internet penetration rate worldwide 2021, by region. <https://www.statista.com/statistics/269329/penetration-rate-of-the-internet-by-region/>
- Statistical Office of the United Nations - Department of Economic and Social Affairs. (1970). Standard Country or Area Codes for Statistics Use (No. 49). United Nations. <https://unstats.un.org/unsd/publications/catalogue?selectID=2583>
- Statistical Office of the United Nations - Department of Economic and Social Affairs. (1999). Standard Country or Area Codes for Statistics Use (No. 49/Rev.4). United Nations. [https://unstats.un.org/unsd/publication/SeriesM/Series_M49_Rev4\(1999\)_en.pdf](https://unstats.un.org/unsd/publication/SeriesM/Series_M49_Rev4(1999)_en.pdf)
- Styliani, S., Fotis, L., Kostas, K., & Petros, P. (2009). Virtual museums, a survey and some issues for consideration. *Journal of Cultural Heritage*, 10(4), 520–528. <https://doi.org/10.1016/j.culher.2009.03.003>
- The African Culture Fund (ACF) | Financing cultural projects. (n.d.). The African Culture Fund. Retrieved October 2021, from <https://www.africanculturefund.net/en/>
- The International Bank for Reconstruction and Development - The World Bank. (1978). World Development Report.
- The Japan Foundation. (2021). Grants for Arts & Cultural Exchange. The Japan Foundation, New York. <https://www.jfnf.org/grants/grants/>
- The World Bank. (2019). Access to electricity (% of population). <https://data.worldbank.org/indicator/EG.ELC.ACCS.ZS>
- The World Bank. (2021). The World by Income and Region. Retrieved November 17, 2021, from <https://datatopics.worldbank.org/world-development-indicators/the-world-by-income-and-region.html>
- The World Bank. (2021a). The World by Income and Region. Retrieved November 17, 2021, from <https://datatopics.worldbank.org/world-development-indicators/the-world-by-income-and-region.html>
- The World Bank. (2021b). World Bank - Country and Lending Groups. <https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups>
- Throsby, D. (2001). Introduction. In *Economics and Culture* (pp. 1–17). Cambridge University Press.
- Tomlinson, B. R. (2003). What Was the Third World? *Journal of Contemporary History*, 38(2), 307–321. <http://www.jstor.org/stable/3180660>
- Touray, Almamy; Salminen, Airi; Mursu, Anja (2013). ICT Barriers and Critical Success Factors in Developing Countries. *The Electronic Journal of Information Systems in Developing Countries*, 56(1), 1–17. doi:10.1002/j.1681-4835.2013.tb00401.x

- UNESCO Institute for Statistics. (2009). The 2009 UNESCO Framework for Cultural Statistics (FCS). UNESCO
- UNESCO, UNDP. (2013). Creative Economy Report: Widening Local Development Pathways. Paris and New York. ISBN 978-92-3-001211-3
- UNESCO. (2003). Convention for the Safeguarding of the Intangible Cultural Heritage. <https://ich.unesco.org/en/convention>
- UNESCO. (2007). Statistics On Cultural Industries: Framework for the Elaboration of National Data Capacity Building Projects.
- UNESCO. (s.d.). UNESCO funds nine new projects to support culture in developing countries. Obtido em 7 de 4 de 2021, de UNESCO: <https://en.unesco.org/news/unesco-funds-nine-newprojects-support-culture-developing-countries>
- United Nations Development Programme. (1990). Human Development Report 1990. Oxford University Press.
- United Nations. (2015). 17 Sustainable Development Goals. Obtido de United Nations: <https://unric.org/en/united-nations-sustainable-development-goals/>
- United Nations. (2021). The Least Developed Countries Report 2021: The Least Developed Countries in the Post-covid World – Learning From 50 Years of Experience. United Nations. <https://unctad.org/webflyer/least-developed-countries-report-2021>
- United Nations. (2021a). Human Development Report 2020. United Nations Development Programme.
- Vickery, J. (2015). Creative Economy Report 2013 Special Edition: Widening local development pathways. *Cultural Trends*, 24(2), 189–193. <https://doi.org/10.1080/09548963.2015.1031487>
- Vilar, E. R. (2007). Sobre a economia da cultura. *Comunicação & Cultura*, (3), 131-144. <https://doi.org/10.34632/comunicacaoecultura.2007.443>
- Warf, B. (2010). Geographies of global Internet censorship. *GeoJournal*, 76(1), 1–23. <https://doi.org/10.1007/s10708-010-9393-3>
- World Bank Project. (s.d.). Cultural Heritage and Urban Development Project - P050529. Obtido em 7 de 4 de 2021, de World Bank Project: <https://projects.worldbank.org/en/projectsoperations/project-detail/P050529>