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Culture, place, and innovation in the use and appropriation processes of information and communication technologies in the metropolitan region of Salvador

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ARTICLE

CULTURE, PLACE, AND INNOVATION IN THE USE AND APPROPRIATION PROCESSES OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN THE METROPOLITAN REGION OF SALVADOR

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Abstract

This article seeks to relate culture, place, innovation, and the use of Information and Communication Technologies (ICT) by cultural institutions in the municipalities of Salvador, Camaçari, and Lauro de Freitas, located in the Metropolitan Region of Salvador (RMS), Bahia, Brazil, based on the assumption that the cultural field has the potential for innovation using ICT on a broader scale than the individual or household. The research, carried out between 2022 and 2024, was based on systematizing secondary and primary data, focusing on the incorporation of the analyzed institutions in the virtual universe, as well as on what their representatives' understanding of innovation and their use of ICT. The secondary data were systematized at the national and municipal/metropolitan scale to provide for the sampling of cultural institutions in the three municipalities where questionnaires were applied, and qualitative interviews were conducted with managers/coordinators. The collected interviews reveal that the pandemic forced changes in the technical/technological structure of communication, initially temporary, and have been incorporated into the daily lives of institutions. Currently, ICT is seen as a possible way to interact with the staff, the public, and the places where they are embedded, including expanding their reach to other spatial scales. Finally, the study elucidated the difficulty of defining which and what are innovative practices, since, in the cultural field, innovation can take on as many meanings as the objects studied. The interviewees in this research hold different and sometimes contradictory notions of what innovation means, being easily attributed to the use of technology and the automation of human work. However, the incorporation of innovative practices goes beyond this, as shown by the results presented in this article.

Keywords: Culture, Place, Innovation, Information and Communication Technologies, Metropolitan Region of Salvador, Cultural Institutions.

Resumo / Resumen

CULTURA, LUGAR E INOVAÇÃO EM PROCESSOS DE USO E APROPRIAÇÃO DE TECNOLOGIAS DE INFORMAÇÃO E COMUNICAÇÃO NA REGIÃO METROPOLITANA DE SALVADOR (RMS)

Nesse artigo busca-se relacionar cultura, lugar, inovação e uso de Tecnologias de Informação e Comunicação (TIC) por instituições culturais nos municípios de Salvador, Camaçari e Lauro de Freitas, localizados na Região Metropolitana de Salvador (RMS), partindo-se do pressuposto de que o campo cultural guarda um potencial de inovação com o uso de TIC em uma escala mais abrangente que o individual ou o domiciliar. A pesquisa, realizada entre 2022 e 2024, se baseou na sistematização de dados secundários e primários, com foco na inserção das instituições analisadas no universo virtual, bem como no que seus(suas) porta-vozes compreendem por inovação e no uso que fazem das TIC. Os dados secundários foram sistematizados na escala nacional e municipal/metropolitana fornecendo o contexto para a amostragem de equipamentos culturais nos três municípios onde foram aplicados formulários e realizadas entrevistas de cunho qualitativo com os/as gestores/as/coordenadores/as. Os depoimentos colhidos revelam que o contexto pandêmico foi responsável por forçar mudanças na estrutura técnica/tecnológica no tocante à comunicação, de início temporárias e que foram sendo incorporadas ao cotidiano das instituições, hoje se mostrando como uma possibilidade de diálogo entre os equipamentos, o público e os lugares onde estão inseridos, inclusive ampliando sua inserção para outras escalas espaciais. Por fim, constata-se que é difícil definir quais e o que são práticas inovadoras, já que, no campo cultural, inovação pode assumir tantos significados quanto são os objetos estudados: entre os/as entrevistados/as alcançados/as por nossas pesquisas, a noção de inovação apresenta significados diferentes e por vezes contraditórios, sendo facilmente atribuída ao uso da tecnologia e à automação do trabalho humano. No entanto, a incorporação de práticas inovadoras vai além disso, como mostram os resultados apresentados nesse artigo.

Palavras-chave: Cultura, Lugar, Inovação, Tecnologias de Informação e Comunicação, Região Metropolitana de Salvador, Instituições Culturais.

CULTURA, LUGAR E INNOVACIÓN EM PROCESOS DE USO Y APROPIACIÓN DE TECNOLOGÍAS DE INFORMACIÓN Y COMUNICACIÓN EN LA REGIÓN METROPOLITANA DE SALVADOR (RMS)

El artículo busca relacionar cultura, lugar, innovación y uso de Tecnologías de Información y Comunicación (TIC) por instituciones culturales en los municipios de Salvador, Camaçari y Lauro de Freitas, localizados en la Región Metropolitana de Salvador. Parte del presupuesto que el campo cultural guarda un potencial de innovación con el uso de TIC en una escala más amplia que la individual o domiciliar. La investigación, realizada entre 2022 y 2024, se basó en la sistematización de datos primarios y secundarios, con foco en la inserción de las instituciones analizadas en el universo virtual, como también en la comprensión sobre innovación y usos de las TIC de sus portavoces. Los datos secundarios fueron sistematizados a escala nacional y municipal/metropolitana, ofreciendo el contexto para la muestra de equipamientos culturales en los tres municipios donde fueron aplicados formularios y realizadas entrevistas de cuño cualitativo con los/las gestores/as y coordinadores/as. Los testimonios registrados revelan que el contexto de la pandemia obligó a realizar cambios en la estructura técnico-tecnológica en lo que respecta a la comunicación. Inicialmente temporarios, estos cambios fueron incorporados al cotidiano de las instituciones; siendo, en la actualidad, una posibilidad de diálogo entre los equipamientos, el público y los lugares donde se ubican, incluso ampliando su inserción para otras escalas espaciales. Por fin, constata que es difícil definir qué y cuáles son prácticas innovadoras, ya que, en el campo cultural, innovación puede asumir tantos significados como objetos estudiados. Entre las personas entrevistadas por la investigación, la noción de innovación presenta significados diferentes, por veces contradictorios, siendo fácilmente atribuida al uso de la tecnología y la automatización del trabajo humano. Sin embargo, la incorporación de prácticas innovadoras va más allá, como muestran los resultados finales de este texto.

Palabras-clave: Cultura, Lugar, Innovación, Tecnologías de la Información y la Comunicación, Región Metropolitana de Salvador, Instituciones Culturales.

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INTRODUCTION

What is the relationship between culture, place, innovation, and processes of use and appropriation of Information and Communication Technologies (ICT)? To explore this question, a qualitative investigation was conducted in Salvador and two municipalities in its metropolitan region (Lauro de Freitas and Camaçari). The aim was to explain the process of use and appropriation of ICT by cultural institutions present in the spatial area chosen for the field surveys. The results presented in this article explain a specific aspect of a larger investigation into the relationships between technique, technology, and place[1].

The premise is that the places will relate differently to the techniques and technical objects, according to the conditions they offer as an "operational means," to enable production, circulation, communication, leisure, etc. (SANTOS, 2006). The relationships between place, technique, and technology will be conditioned by the density of this operational environment in each specific place, as well as the accessibility to this environment by individuals, groups, and institutions that appropriate these "resources." Thus, different places offer very different levels of density and accessibility for the creative use of the technique and its transmutation into "appropriate" technology, re-signified by use.

Research on the relations between place, technique, and technology requires an evaluation of space as an operational means, but also as a perceived/conceived means, according to the ideas of Milton Santos (2006). The results of an investigation can imply the role and importance of places in the appropriation of the technique and its transformation, through the use and appropriation of technology. Geography emphasizes the spatial dimension of these processes, from the actions of groups and initiatives that elucidate "places" and produce space in specific space-time contexts.

The cultural field holds a potential for innovation on a broader scale with the use of ICT than the individual or the home. The different cultural facilities – libraries, museums, cultural sites, cinemas, theaters, and heritage buildings – can employ ICT in conventional or even creative ways, to reframe techniques in favor of alternative rationalities to those that created them. To identify these innovative experiences, first, an analysis of the general context is necessary to find some basic indicators of ICT use, such as a good internet connection, infrastructure, and presence in virtual environments. A more in-depth discussion is also needed about what innovation would entail for the cultural institutions explored by this study. This theme has rarely been addressed in Geography and related areas. A preliminary state-of-the-art review indicated that the references are scarce or non-existent. In Brazil, the research of Lima (2019) and Lima and Oyadomari (2020) did not focus on the insertion of cultural facilities in the virtual universe through the use and appropriation of ICT, but rather on cultural consumption and online cultural practices on digital platforms and streaming. Our research emphasizes how cultural institutions relate to their audiences via ICT, how this relationship affects the places where they operate, and, dialectically, how those places influence the use of ICT.

In the following sections, we present the methodological procedures of the research carried out between 2022 and 2024, as well as the results achieved from the systematization of secondary and primary data and their analysis focused on the insertion of the institutions analyzed in the virtual universe. We also focused on what their representatives understand as innovation, as well as the use and appropriation they make of ICT.

INTRODUCING THE METHODOLOGY

Identifying the universe for analysis of cultural institutions followed certain criteria. Cinemas, as they are mostly commercial establishments and heritage structures, due to their enormous variation of possibilities – including objects such as statues and fountains (which would explain the low rates of ICT presence in these types of sites) – were not the focus of this research stage. Archives were also not included, as they do not usually have significant contact with the public. Theaters, despite being mostly public – 62% public in 2020 and 28% private non-profit (CETIC.BR, n.d.) – operate similarly to cinemas[2]. This leaves museums, libraries, and culture[3] spots, which are cultural facilities in constant contact with the public and often try new actions or already have in their missions – as in the case of some culture spots – innovative practices.

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To identify these institutions, data were collected from SECULT-BA (n.d.) for culture spots in the municipalities of Salvador, Lauro de Freitas, and Camaçari, as well as from the Ministry of Culture, through the SBNP (National System of Public Libraries, n.d.) and the National Register of Museums (n.d.) for libraries and museums. The choice of these three municipalities in the Metropolitan Region of Salvador (RMS), Bahia, Brazil, was because they were most likely to present innovative proposals in the context of ICT use. Although the SECULT-BA (n.d.) lists 50 culture spots in the three municipalities, this number was reduced to 49, as one is repeated. Of the 17 libraries in Salvador listed by the SBNP, 3 existed, but were located in other municipalities. One library did not exist in the informed location, or nearby, with another in a nearby location, but which was already on the list as a different library, leaving 13 libraries. Adding these to those of Lauro de Freitas and Camaçari, the three municipalities have 18 libraries. The museum data were the most accurate, with 85 reported and verified.

With these data, the presence of these institutions was all verified on social networks. For websites, the operation of the URL – the electronic address – of websites left unmaintained or hosted on old domains that usually "break" and make the website unavailable was checked, which does not mean that old and un-updated websites are always broken, as in some cases seen in this research. Given that not all websites report the dates of the posts, this was a preferred methodology. For social networks, the presence of profiles and the date of the last post were verified. "Active" social networks were those that had at least 1 post in the last 6 months. For libraries, this data was collected between January 18 and 19, 2023, for museums between January 19 and 20, 2023, and for culture spots between January 23 and 24, 2023, and with a possibility of change in the posting history of some of these profiles since the end of this period. For the location data of Facebook and Instagram, some facilities do not have their own profile on these social networks, but are present as location; which do not indicate a direct relationship with the use of ICT, as they refer to the relationship that the community has with the facility and not to projects of the institution itself, but can help identify innovative projects through the information of third parties. A six-month limit was imposed on the posts of people in the locations, i.e., while active profiles are because of the facilities, active locations are because of their users.

After analyzing the activity of the profiles of libraries, museums, and culture spots in Salvador, Lauro de Freitas, and Camaçari, the research sought to understand the uses that these institutions (85 museums, 49 culture spots, and 18 libraries) made of ICT, what they understood by innovation, and what the possible relationships are between these two topics. Primary data were produced by applying a questionnaire and interviews with the directors or coordinators of cultural facilities, which sought to infer what these managers understand by innovation, as well as the presence of facilities and collections/services offered in digital media with the use of ICT, in addition to the actions of cultural institutions in the places where they are located.

For the different cultural institutions (culture spots, libraries, and museums), we analyzed the type of activities carried out and the services offered by these facilities through the World Wide Web, as well as the digitization and availability of their collections on the internet. We also collected data on cultural institutions based on their actions and presence on social networks (Instagram, Facebook, YouTube, etc.), considering the frequency of posts in a period of 6 months for museums and libraries and 3 months for culture spots. We systematized and created a new table with cultural institutions (culture spots, libraries, museums, etc.) based on the quality of posts on social networks, using criteria to evaluate the clarity of information and the organization of the posts, the published content and the relationship with culture and technology, the frequency of posts, and the presence or holding of events (courses, workshops, festivals, etc.) in the space that related them to the location of the cultural facility. Thus, we reduced the research in the later stages from 33 to 12 culture spots, from 33 to 15 museums, and from 4 to 3 libraries, thus enabling a more targeted focus on those cultural institutions that promoted innovative actions in the use of the technique in physical and digital media and that promoted the facility and the place where they are inserted.

We sent a Google Forms form to the institutions included in the new lists prepared through social networks (Instagram and Facebook) (Box 1). The form was resent several times by different means of communication, such as email and, in some cases, by WhatsApp and SMS. After submission, face-to-face visits were made to some cultural institutions in Salvador with a greater possibility of conducting an interview at a later time, including: Pierre Verger Foundation; Cipó - Interactive Communication; Vila Velha Theater; Pracatum; Casa Via Magia; Casa Pia; Brazil Italy Europe Cultural

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Institute (ICBIE), Casa do Benin Museum, Casa de Jorge Amado Foundation, Casa do Rio Vermelho, Aleixo Belov Sea Museum, Paulo Freire Library, Cidade da Música, Caixa Cultural, and Muncab. The visits were divided into two stages: first, to the culture spots and, next, to the museums and libraries.

The engagement criteria of cultural institutions in social networks, as well as the availability of information and content related to the use of ICT, were the main guides for a non-probabilistic and quota sampling process of the interviewees, as the absence of facilities on social networks generally indicates difficulties in accessing ICT, related to the precarious infrastructure. The sample also includes the saturation criterion of responses, when the information provided by the interviewees focuses on repetition, indicating that, in qualitative terms, sampling is sufficient to answer the research questions posed.

On Google Forms	Interviews on Google Meet
1. Does your institution have internet access? 2. What does your institution use the internet access for? 3. What is the internet speed at your institution? 4. Does your institution have social media profiles? Which ones? 5. Of the profiles mentioned above, which ones are active (posted something in the last 6 months)? 6. Which social network is the best to publicize the institution's work? 7. What are the costs associated with the use of Information and Communication Technologies in your institution? 8. Can you imagine how your institution would function without internet access? Explain your response. 9. What do you consider innovative practices in your institution? 10. Are these practices that you consider innovative related to the use of Information Technologies? If the answer is yes, go to item 10.1. 10.1 How are they related? 11. From your personal point of view, how do you define innovation? 12. Personal data: Full name, age, contact number, institution where you work, and function in the institution.	1. From your personal point of view, how do you define innovation? 2. For you, is innovation related to the use of Information and Communication Technologies? How? 3. What have been the main changes in your area of professional activity in recent years? 4. How have innovations helped to improve the activities of your institution/group? 5. Are these activities related to the neighborhood(s) around where your institution is located? Do Information and Communication Technologies facilitate the integration of your institution in these places? If so, how? 6. What has been the impact of Information and Communication Technologies, as well as the emergence and growth of social networks, on the cultural area? 7. Do you think ICTs and social media have transformed public engagement and participation in your institution/group? How? 8. Do current technologies help your institution/group more in the content production and/or dissemination?

Chart 1 – Form and interview questions. Compiled by: Angelo Serpa.

Six interviews were conducted in Salvador in a virtual environment on the Google Meet platform, three with managers of culture spots: Pierre Verger Foundation with director Angela Lühning; ICBIE with coordinator Marcella Sgura; and Bahia Academy of Letters with manager Marcos Vinicius Rodrigues; and three with museum managers: Casa do Benin Museum with director Igor Thiago; Aleixo Belov Sea Museum with coordinator Larissa Nabuco; and Laje Collection with its creator and director José Eduardo Ferreira Santos. A face-to-face interview was also conducted at the Paulo Freire Library with director Ladailza Teles. In Camaçari, Ana Nery, coordinator of the ÚNICA/LABTEC Museum, was interviewed. In Lauro de Freitas, three interviews were conducted: Cícero José, director of Lauro de Freitas Cine-Theater; Eliete Teles, director of Eliete Teles Theater (which is also a culture spot); and Geferson dos Santos Santana, coordinator of Maloka Cultural Space (a culture spot). All interviews followed a previously established script, which included general questions about innovation, technology, and social networks, and specific questions related to the performance of institutions in the cultural field (Chart 1).

The process of selection, categorization, and analysis of the interview extracts generally followed Bardin's content analysis, especially with regard to the phases of exploration of the material and

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treatment of the results. Segments of the transcribed interviews were selected that are pertinent to the questions posed in the interview script. This information was organized thematically in tables (for example: what is innovation, insertion of cultural institutions in places/communities from the use of ICT, etc.), which supported their subsequent categorization, explaining homogeneities, repetitions, contradictions, and convergent/divergent points of view for analysis and exposure/discussion of the results[4]

THE USE OF ICT IN THE CULTURAL FIELD: SOME GENERAL DATA FOR SALVADOR, CAMAÇARI, AND LAURO DE FREITAS

The presence of computers in cultural institutions in the country depends on the type of facility. In 2020, 94% of archives and cinemas had their own computer, culture spots followed with 84%, then theaters with 79%, museums with 72%, libraries with 66%, and heritage buildings with only 51%. Fewer facilities had WiFi than computers, which was 83% of cinemas, 76% of culture spots, 70% of theaters and archives, 61% of museums, 59% of libraries, and 52% of heritage buildings. Of those who had WiFi, except for archives, less than 50% of all cultural facilities made WiFi available to the public: 51% of the archives, 47% of the libraries, 45% of the culture spots, 43% of the theaters, 39% of the cinemas, 37% of the museums, and 14% of the heritage buildings (CETIC.BR, n.d.). The data provide a general picture of the technological infrastructure of cultural facilities on a national scale. More general data are difficult to obtain at more concrete geographical scales (CETIC.BR, n.d.).

LIBRARIES				
	SSA	LAU	CAM	TOTAL
Number of libraries	13	3	2	18
WEBSITE				
Profile	2	0	0	2
Available	2	0	0	2
FACEBOOK				
Profile	3	0	1	4
Current	1	0	0	1
Localization	6	1	1	8
Current	3	0	0	3
INSTAGRAM				
Profile	3	0	0	3
Current	3	0	0	3
Localization	5	0	1	6
Current	1	0	0	1
YOUTUBE				
Profile	0	0	0	0
Current	0	0	0	0
TWITTER				
Profile	0	0	0	0
Current	0	0	0	0

SSA: Salvador; LAU: Lauro de Freitas; CAM: Camaçari

Table 1 – Presence of libraries on social networks. Compiled by: Edson Abreu, 2023.

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The analysis was narrowed to focus only on the Metropolitan Region of Salvador, how many cultural facilities exist, and where they are located. This focus facilitated obtaining data at closer scales, such as the presence of these facilities in virtual environments and possible innovative experiences that we hoped could be identified through these environments.

The libraries did not have any presence on YouTube and Twitter. Instagram is the social network with the largest number of active profiles. Most of the profiles. Of the four existing profiles on Facebook, only one remained active (Table 1). For museums, the situation of Facebook and Instagram use was similar, and both profiles exhibited high rates of continuity (Table 2) with 78.9% for Facebook and 84.2% for Instagram. Most of the websites listed here also have a high permanency of 78.4%. The least common profiles continue to be YouTube and Twitter, with only one of these profiles still functioning at the time of the surveys, i.e., the YouTube channel of the Laje Collection.

MUSEUMS				
	SSA	**LAU**	**CAM**	**TOTAL**
Number of museums	80	2	3	85
WEBSITE				
Profile	62	2	1	65
Available	50	0	1	51
FACEBOOK				
Profile	36	0	2	38
Current	28	0	2	30
Localization	9	0	0	9
Current	5	0	0	5
INSTAGRAM				
Profile	35	0	3	38
Current	29	0	3	32
Localization	7	0	0	7
Current	5	0	0	5
YOUTUBE				
Profile	4	0	0	4
Current	1	0	0	1
TWITTER				
Profile	3	0	0	3
Current	0	0	0	0

Table 2 - Presence of museums on social networks. Compiled by: Edson Abreu, 2023.

For culture spots, Facebook is the platform with the highest number of profiles, but it is less updated than Instagram, whose permanence is almost 100%. The websites are in a similar situation to that of Facebook in terms of permanence. On the other hand, YouTube and Twitter profiles also have little presence and permanence; nevertheless, culture spots were the first institutions in which active Twitter profiles could be found (Table 3).

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CULTURE SPOTS				
	SSA	CAM	LAU	TOTAL
Number of Culture Spots	43	4	2	49
WEBSITE				
Profile	30	4	1	35
Available	18	2	0	20
FACEBOOK				
Profile	36	2	1	39
Current	19	1	1	21
Localization	1	1	0	2
Current	1	1	0	2
INSTAGRAM				
Profile	22	2	1	25
Current	21	2	1	24
Localization	3	0	0	3
Current	1	0	0	1
YOUTUBE				
Profile	8	1	0	9
Current	1	0	0	1
TWITTER				
Profile	5	0	0	5
Current	2	0	0	2

Table 3 - Presence of culture spots on social networks. Compiled by: Edson Abreu, 2023.

INNOVATION, TECHNIQUE, AND TECHNOLOGY: ESSENTIAL INSTRUMENTS FOR THE PROMOTION OF CULTURAL INSTITUTIONS (IN SALVADOR AND CAMAÇARI)

The respondents in Salvador express diverse and varied views on innovation and its benefits. Nevertheless, all generally associate innovation with novelties and changes that enable a significant improvement in public access to cultural facilities or in organizing work in institutions, among other aspects. Innovation can entail using technological/digital devices and instruments in ways that are not necessarily "innovative" new techniques or ways of acting but can also be linked to automation of routine and daily tasks and activities within institutions. However, the debate about innovation goes beyond that, because it is connected with knowledge and action, to the possibility of bringing something new that changes the way of working and using the technique in cultural places and institutions.

Angela Luhnig, from the Pierre Verger Foundation, states that innovation would be "adding to something that already exists, some technique, some thought, a technology, an action, a different and functional practice than what was in use before." For the Foundation, it is reflecting on how one "can maintain practices that are both attractive and functional, as well as innovative, for the public." Marcela Sgura, from the ICBIE, goes the same direction when she points out that to innovate is to develop something "in a different way from what has always been done, that is, to get out of the pattern, the convenient, the usual things, already codified, and try to do something different that is a new for that sector." For Sgura, there is a lot of innovation "in the field of arts, theater, music, culture." In contrast, for Marcus Vinicius Rodrigues, from the Bahia Academy of Letters, "in literature, all innovations are

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very old. Everything that is said to be new is a hundred years old. It's repetition. I don't see much new in this that is proclaimed as new." Rodrigues points out that "the great innovation in the world is technology," "It's the great novelty. We're having this displacement from physical places to virtual places."

The statements from interviewees about our research questions emphasize especially how to innovate in the use of the technique, or attribute another function to a technology already present in the institutions, or how the appropriation of the technique can modify the cultural field, through cultural facilities adopting digital media and social networks by using ICT, to promote the institutions and places where they are adopted.

Larissa Nabuco, from the Aleixo Belov Sea Museum, emphasizes that an innovation "is something that is being or was thought to be developed in a unique way or in a new way." In this context, she associates innovation "with the state of the art of something," which, according to her, "marries technology well, which we see as the state of the art in today's society." Nabuco highlights the amount of information that "has been arriving in increasingly innovative ways" to people through social networks, algorithms created to "simplify or even accelerate this transmission of knowledge, information." Furthermore, Igor Thiago, from Casa do Benin Museum, explained that "the advent of virtual technologies and the internet," and "a very strong virtuality" characterize the current landscape, and believes that, today, "innovation is very much linked to new technologies, which are the technologies from the emergence of the internet and screens."

From the Laje Collection, José Eduardo Ferreira connects innovation to the idea of curatorship, with the cuts that are made in the works of the collection: "innovation is in the typographic form, for example, you see in both houses, you'll see a typographic form that broke the idea of the white cube, which is a norm of Brazilian art and exhibitions. So we break this, and this is innovation." At the Paulo Freire Library, Ladailza Teles emphasized the most pragmatic aspects of managing the institution by highlighting the role of innovation "to improve the services that exist within the space. Innovating is something that comes to bring novelties, to give higher quality to the services that already exist within the institution itself, or even the opening of new services from this innovative perspective."

In Camaçari, the interviewee Ana Nery, coordinator of the ÚNICA/LABTEC Museum, highlights the link between innovation and processes of transformation/recycling of materials with the use of technology. For example, in the assembly of a robot with children: "We assemble it ourselves, we teach children to assemble it. It doesn't even have to be expensive. In one course here, we do it with cardboard." The logic, in this case, is to value the innovative aspects of recycling and reuse in the technological field: "take cardboard, an old computer engine, from a DVD, and we teach the child to make a circuit. They take a little clip and teach how to turn on a battery circuit and start that engine, a little LED, which they took from another piece of equipment that's no longer being used."

In Nery's statements, rework is a way to deal with novelty and technology. Spaces like the ÚNICA/LABTEC become indispensable in these contexts: a public space[5] in which people, especially children, learn to deal with technology, discover how it works, its potential and limits, where, in short, they can manufacture their own technological apparatuses and, as highlighted by the interviewee, "do science."

In general, the meaning of innovation for the directors/coordinators interviewed can be summarized in one word: "novelty." However, what is novel varies greatly between different institutions, depending on the objectives and the relationship of the cultural facility with its audience and location. For a museum, novelty can mean obtaining a larger audience, improving the quality of its collection, or exhibiting through the use of new techniques. A culture spot can benefit from having its activities more publicized and viewed by the public, while a library could focus on dissemination to attract more visitors or readers, in addition to evolving the digital cataloging of its collection.

Thus, while they have a similar overview of innovation, the perceptions and goals vary significantly from one cultural institution to another. This reveals diverse approaches between the different facilities, as well as how these institutions relate to the place, highlighting that even similar facilities may have specific visions linked to innovation, reflecting the relationship with the place where each operates.

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In the contemporary context, the great innovation is related to social networks and how they assist in technical/technological development and in the promotion of individuals/institutions and their spaces of action. Social reality groups and inserts people through the relationships they develop throughout their lives, whether in educational, family, economic, or geographical spheres. On the other hand, in the social media environment, each individual plays a role and has a specific cultural identity (TOMAÉL; ALCARÁ; DI CHIARA, 2005).

According to Marteleto (2001, p. 72), social networks represent "[...] a set of autonomous participants, uniting ideas and resources around shared values and interests." Autonomy makes it more challenging to identify, deepen, and appropriate the information processed in this virtual space (including by the cultural institutions identified in our research) (TOMAÉL; ALCARÁ; DI CHIARA, 2005).

"Social networks are not a recent phenomenon, nor have they emerged with the web; they have always existed in society, motivated by the need for individuals to share knowledge, information, or preferences with each other" (MOREIRA; COSTA; VIEIRA, 2016, p. 104). However, technological advancement was responsible for the emergence of cyberspace, in which networks command and dictate the forms of social organization and the relations between the public and spaces of action. Thus, the way the institution positions itself on social networks will somehow condition the relationship, the approach, and the appropriation of the public with the cultural equipment.

Based on Moreira, Costa, and Vieira (2016), if we accept that virtual environments are innovative tools to create practice and learning communities, it is also necessary to recognize the need for a new perspective for the creation of learning contexts and for the use of the environments that the new model proposes. For José Eduardo Ferreira Santos, from the Lage Collection, ICT has to do with other perspectives for cultural facilities to interact with their audience, "with the dissemination of the works, with the publication of what is being done in the Collection. The materiality makes people come here, but also the virtuality causes more transnational interactions with other territories." Santos considers that this was very important for the cultural facilities because it brought another record of memory, as "before the pandemic, we didn't have the dimension of what we had as work, as pictorial artifact, as documentation material. So technology helped create this virtual space that's a research space as well." In other words, the digitization of the collection brought another type of audience, not in person, who also interacts at a distance with the works exhibited at the institution.

The main and innovative highlight of the networks is the dynamism they offer in the organizational environment, both in face-to-face and virtual spaces, where people with similar objectives exchange experiences and generate relevant information for their sectors of activity (TOMAÉL; ALCARÁ; DI CHIARA, 2005). According to Tomaél, Alcará, and Di Chiara (2005), knowledge "needs to be transformed, developed, and worked within organizations; otherwise, it will just be an unimportant cluster of information. This is the biggest challenge of the Information Age: creating an organization capable of sharing knowledge" (p.94). Hence, networks help improve organizational aspects, enabling institutions to benefit from their dynamic characteristics to more effectively share knowledge.

For Bessant and Tidd (2019), innovation is driven by the ability to develop relationships in society, in the economic, political, educational or cultural fields, detecting the opportunities linked to flaws/gaps or the possibility of improvements to create situations that promote new approaches and a use of the technique or new action to search for innovative solutions, thus appropriating the "problem", to propose something new that benefits a partial or total whole. However, the use of new techniques/technologies and the large-scale diffusion of social networks is still very uneven, and, in some places and institutions, the innovative context still has flaws and gaps in the use of media and digital media.

Cultural institutions in Salvador have, despite some difficulties reported by the directors/coordinators interviewed, a good relationship and presence in the media and digital media, to relate to the place where they are located through these means. In this context, cultural facilities seek to innovate by communicating with the public, using ICT to adapt to the specific needs of the places where they operate.

On the one hand, Angela Luhnig, from the Pierre Verger Foundation, thinks that replacing some tools with others that can be faster, more visible and effective, and can help in this direction. On the

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other hand, while Marcella Sgura, from the ICBIE, highlights the role of social networks, “Instagram, Facebook, Twitter, TikTok, promotional videos, in short, everything that technological innovation has brought,” because, for her, “It’s no use going out pamphleteering on the street or using a banner that would have work in the past, now few people stop to read a banner hanging on a wall.” Communication with pamphlets and banners, according to Sgura, no longer works with the Institute’s public.

In this context, the objectives achieved with ICT would result from using social networks to broadcast messages and help disseminate information of interest to the cultural institutions investigated. Thus, networks and digital media merge, creating a new model of communicating with the main objective being faster and more targeted communication.

In the context of the RMS, Ana Nery, coordinator of the UNIQUE/LABTEC, located in Camaçari, highlights the impact of social networks in the museum’s managerial scope. For her, the internet helps people to become acquainted with cultural institutions better without having to visit them. “Because we had a very high demand for requests for information by email, today we no longer have this demand because today we have everything on social networks.” She noted the increased demand and greater knowledge of the museum when more information about the institution began to be conveyed in the virtual universe, because the public began “to visualize and discover,” from which arose “the interest in visiting us, and this only helped us.”

Social networks have benefited the ÚNICA/LABTEC Museum, not only saving time by disseminating information online, but also by attracting a greater number of visiting schools. The number of visitors more than doubled between 2017 (when the museum’s social networks were created) and 2019, from 1251 to 3102, attracting both public and private schools. The closure of the museum during the pandemic interrupted the growth, since the number of visitors in 2022, when it resumed operations, was only 1848 people, but the numbers were expected to grow again in the following years.

Therefore, the use of ICT has been an important change in the communication strategies of cultural facilities, making outreach more dynamic and enabling a greater reach of the public through the search for an innovative way of communicating, including deconstructing the stigmas of urban places, such as the Subúrbio Ferroviário in Salvador, where the Lage Collection is located (in the neighborhood of São João do Cabrito). For José Eduardo Ferreira Santos, “technologies help to improve information in relation to the territory, the collection, in relation to works and artists, in relation to an entire periphery that has often been treated by the local media as a violent place, as a place with a perverse dynamic.” Santos considers that the Subúrbio Ferroviário in Salvador, like any place, “has both sides, you have the creations that people make and you have the historic social issues.”

The use of ICT to facilitate communication with the public and the places of cultural institutions appeared, in some discussion, as a need due to the pandemic context (in the period of the Covid 19 pandemic) and, from there, not exactly facilitating the communication of cultural facilities with the public, but creating a new way of communicating, already initiated through the use of technologies and digital media.

According to Marcus Vinicius Rodrigues, from the Bahia Academy of Letters, the institution “was thrown into the twenty-first century by force, because of the pandemic,” because, before, “everything was analog, in the physical world, everything was kind of apart from society, because the Academy was also more distant from society.” According to him, the advance related to ICT lies in the possibility of the institution interacting with more people, which would be more difficult in person. “So, I can do an event called Indigenous Art and Thought and Quilombola Thought, and, by doing it online, I can talk to a person who is in the interior of Bahia or in another state,” since, for example, “In Salvador you may not have a person, because there are no indigenous communities so close” to the capital of Bahia. He also highlights that he “reaches people who have never been to the Academy by watching these conversations on YouTube.”

Igor Thiago, from Casa do Benin Museum, pointed out that using ICT during the pandemic period put him “in a place of social network management, content production,” noting that “after the pandemic passes and this virtual programming decreases, I saw, in practice, a movement of people to visit Casa do Benin, because they discovered it virtually, liked the content, and now wanted to meet the House in person.” According to Igor, this audience is not necessarily from Salvador since the institution receives visits “from people outside Brazil, outside Bahia, with this feedback for us.” At the Paulo Freire Library,

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Ladailza Teles observed that during the pandemic the institution sought to innovate through the use of technology, "because we started talking to the user through technological means, making live streams that we hadn't done." She highlights the role played by live streams to bring "the content that we take from informative or even constructive debates on various topics, talking about the library or some other topic.

The statements of the directors/coordinators of the studied institutions reveal that the pandemic context was responsible for forcing changes in the technical/technological structure for communication, from the moment the social environment and spatial interactions were rearranged; thus, it is up to the cultural facilities to adapt to the new needs. The changes, initially temporary, were incorporated into the institutions. Currently proving to be a great possibility in the interactions and communication between the facilities, the public, and the places where they are inserted, including expanding their range of action and their insertion into the space on other scales.

THE USE OF ICT BY CULTURAL INSTITUTIONS IN LAURO DE FREITAS

One of the interviewees, the director of Lauro de Freitas Cine-Theater, emphasized in relation to the use of ICT, that on the one hand, these technologies are efficient for disseminating events through posts on social networks, helping reach diverse audiences and expand the visibility of the cultural space. On the other hand, the same technologies also contribute to the decrease in public attendance because the internet allows one to attend concerts and presentations of any kind without leaving home. Cultural institutions may need to find new ways to innovate and attract more face-to-face audiences to these spaces. In this context, culture in its spatial dimension is fundamental to understanding, strengthening, and seeking solutions to social problems.

Maloka Cultural Space, also located in Lauro de Freitas, defines itself on its Instagram profile as a "cultural, recreational, and educational space," aimed at "children, young people, and adolescents," a "non-profit non-governmental organization." On the one hand, Geferson dos Santos Santana, one of its coordinators, highlighted the importance of ICT and social networks in disseminating the activities carried out in the space and enabling online registration in the courses and workshops offered. On the other hand, he highlighted the importance of direct contact with the public and the effort to imprint "creativity and innovation in the practices carried out" in a direct relationship with those who attend the space. At Maloka, Geferson is responsible for activities aimed at reaching the entire community, such as "workshops and cultural productions involving popular culture in general."

In the daily spatial practices of the population, culture expresses the spontaneous manifestations of the popular levels, because the "country 'from below' is a factory of genuine, representative, authentic manifestations. This is where the richness of improvisation focuses. These spontaneous, or almost, forms are fed by both traditions and innovations" (SANTOS, 2005, p. 36). This "allows them to relish, to enjoy, to expand the territorialized culture, where the fusion between time and place occurs" (SANTOS, 2005, p. 36)

Hence, ICT acts in the cultural sphere in redefining places, understood here as lived spaces (SERPA, 2019), where popular cultures can create and innovate even in adverse conditions, thus generating an authentic and original cultural production. Furthermore, these dynamics play a fundamental role in leisure and social well-being, promoting spaces for interaction, belonging, and exchange of experiences that strengthen spatial and community ties.

In general, managing a cultural space is intrinsically related to the way the space is lived and appropriated by the director/coordinator, as a result of his/her experience with the institution in which he/she operates. The need for innovative responses is a challenge in the daily lives of these institutions, in the sense of "improving a certain segment, a certain situation," according to Cícero André, director of Lauro de Freitas Cine-Theater, who understands "innovation" as "evolution." Eliete Teles, director of the theater that bears her name, thinks that today, when you reflect on technology, you "think a lot about the media stuff, about technological innovations, which seems a little industrial." She relativizes this understanding by remembering that, in the field of arts, artistic creation itself is guided by innovation.

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These questions lead to reflect on another important point: what has been the role of social networks and cultural initiatives, such as culture spots, in promoting belonging and community participation, as well as in coping with the social barriers that fragment the coexistence between institution and neighborhood? This is what we will discuss next.

CULTURE SPOT AND COMMUNICATION: ARTICULATING THE NEIGHBORHOOD AS A PLACE

In the neighborhood, between squares, commerce, and routines, deep bonds of familiarity emerge and are consolidated, expressed in the coexistence between neighbors, in the strengthening of old and new friendships, and in a way of living that is built and shared in daily life. The neighborhood "is still understood as having its own identity, the result of a particular physiognomy, and a specific social coexistence, in which the residents express the uniqueness of the place through a collective consciousness of belonging" (HALLEY, 2014, p. 46).

In this context, culture spots emerge, which play a significant role in the interaction that fosters affection and belonging of the population, transforming the neighborhood into a place. Eliete Teles explains to us in her interview that "the neighborhood of Itinga is a peripheral neighborhood in the metropolitan region, in Lauro de Freitas," with "more than 90 thousand inhabitants." Teles emphasizes that it is "the largest neighborhood in extension and population" in the municipality, also highlighting that she has lived in Itinga for more than 20 years and that the Theater is an integral part of the place. According to her, this provides a lot of interaction between the cultural facility and the neighborhood, due, among other factors, to the proximity to a municipal school, the Municipal School of Ipitanga: "it's interaction all the time. Most of the people who do activities here are from the neighborhood. Today, some young people who were monitors and teachers here were once our students." In addition, some "people who were our students ten years ago and are already going to university in the arts."

The interview with Eliete Teles helps us to understand how important culture is in strengthening and building the identity of individuals based on experience and training, also strengthening the understanding of the neighborhood as a place. The Theater also helps to break down some social barriers, as it is located in a peripheral neighborhood and opened to the community, facilitating and motivating the inclusion of those interested in the world of the arts and increasing cultural and educational equity.

The Eliete Teles is a puppet theater that obtained a Culture Spot seal in 2009. It has a main room with 90 seats, a dance room, a small library, and a foyer. As Eliete explains, "We have all kinds of dolls. We have a puppet show of those who put their hands in the box, but we also have puppets of almost human size (...) basically, our puppets are pressed papier-mâché, foam, some other material that provides something to complement."

Even recognizing the importance of social networks for the dissemination of culture spot activities (presentations, workshops, etc.), Teles points out that the Theater is located "in a peripheral neighborhood, and people do not have as much access to social networks, people a little older sometimes end up not accessing this network that is Instagram that we access so much." On the other hand, she recognizes that "in relation to social networks, we know that today we can take advantage of them positively, because we can expand our means of advertisement, our possibilities, and disseminate our work, to defend it also from an artistic point of view."

The audience of the Theater is basically children and adolescents, which reinforces the educational aspect of its activities, especially because it is located in a popular and peripheral neighborhood of the Metropolitan Region of Salvador. However, ICT has helped expand this audience and disseminate the culture spot on other scales. Although Eliete indicates that, in addition to ICT, the Theater uses other strategies to strive for this expansion, because "we have a practical work with creative methodologies, practices that I even consider innovative and that are recognized." According to Teles, although the facility can now reach a larger audience beyond the Itinga neighborhood through social networks, it is not enough to have this means of communication, as creativity is also necessary in the educational and artistic processes that occur daily in the institution.

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In the cultural field, the culture spots and cultural facilities reveal an immense potential for articulation between place, identity, and belonging. The interviewees, especially those related to the Eliete Teles Theater, highlight the role of these institutions as spaces of resistance, memory, and social transformation. However, even these spaces, which propose to promote access to art and culture, face challenges in maintaining face-to-face audiences, because, paradoxically, the same technologies that expand the reach of cultural actions can also alienate the public, as previously emphasized by Cícero José, director of Lauro de Freitas Cine-Theater.

CONCLUSIONS

Defining which and what are innovative practices is difficult. The profile is fundamental: of the place studied, of what is studied, and who is studied, because one cannot define innovation beforehand without running the risk of losing fundamental aspects of what would be considered innovative in a particular field. In the cultural field, innovation can take on as many meanings as the objects studied. Culture spots classified as belonging to the "training" area are different from those of "Afro-descendant culture," "handicrafts," "audiovisual," "youth," "community radio," etc., which are different from museums – each with its own mission – and libraries and theaters – equally different. The contextualization of the data collected helps, enabling identification of those institutions that do not innovate, but not always the innovative cultural facilities themselves.

Among the interviewees reached by our study, the notion of innovation has different and sometimes contradictory meanings, being easily attributed to the use of technology and the automation of human work. However, the incorporation of innovation goes beyond this, since, in any scope of action, one could talk about innovation when adapting a technique, regardless of its functionality, to promote a better way of working or performing some function.

Based on different contexts and social inequalities, mobile phones, computers, and the internet must be recognized as part of the contemporary popular imagination, even though most people have relatively recently gained access to these resources. This creates not only myths about the possibilities of use and appropriation of ICT but also fears that technology will become another factor of exclusion, which opens the perspective for addressing not only social and cultural differences (and inequalities) to ICT access, but also how social reality shapes access and interest in digital media, as well as the view of what would or would not be innovation.

Based on the issues raised in this article, we can conclude that it is difficult to deal with innovation and innovative practices in an all-encompassing way, and the geographical approach to the problem with a focus on place is fundamental, thus, in a delimited and particular context. In the cultural sphere, defining innovation can be even more complex, since cultural practices and facilities are in different places, with very different actions and audiences, which guide their model of action and lead to the need to analyze innovative practices in the cultural sphere in a unique way, considering all the artistic, managerial, and organizational nuances that a cultural facility can present.

Considering the debate on the concepts of innovation and technological change, the role of social networks stands out as a significant innovation in the current context. Thus, social networks represent the main agents of the new technical arrangement established in the information society. Acting as centralizing poles of information, they exert significant weight for decision making, the possible organizational advances, and promotion in the cultural institutions analyzed.

The crucial point is that, in the current context, for cultural facilities (library, culture spot, museum, or theater) to establish and maintain public dynamism and visibility, adapting to the new dynamics and technologies associated with social networks is fundamental to ensure their operation and the opportunities to promote the facilities and places where they are inserted.

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DATA AVAILABILITY

Not applicable.

NOTES

1 - The study also included public schools, microentrepreneurs, and collaborative mapping initiatives in Salvador, Camaçari, and Lauro de Freitas. This article presents only the results related to the research conducted at cultural institutions (see SERPA, 2022; 2024).

2 - In Lauro de Freitas, two theaters were considered, one of which also serves as a culture spot, given the low density of cultural institutions in the municipality.

3 - In Brazil, culture spots (pontos de cultura in Portuguese) "are groups, collectives, and entities of a cultural nature or purpose that develop and coordinate cultural activities in their communities and networks, recognized and certified by the Department of Citizenship and Cultural Diversity of the Brazilian Ministry of Culture as instruments of the National Policy on Living Culture." https://www.gov.br/culturaviva/pt-br/cadastro-nacional-cultura-viva/manual-de-agente-certificador-atualizado_jun25.pdf

4 - For more details on content analysis in Bardin, see Valle and Ferreira (2025).

5 - "It's an open, public laboratory, which is what I think is most important" (Ana Nery, coordinator of the ÚNICA/LABTEC Museum).

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Serpa, A. - The author contributed to the elaboration, realization and manipulation of the data and writing.

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