

This transdisciplinary book was organized by professors Mitsuru Yanaze and Felipe Chibás Ortiz, bringing together renowned authors of chapters from Brazil, China, Cuba, Jamaica, Spain, United States, France, India, Italy, Nigeria, Kenya, South Africa, Morocco, Russia, Mexico, among others, being published by the University of São Paulo with the support of GAPMIL of UNESCO.

This innovative text that shows chapters with a quali-quantitative approach written by scientists, researchers, activists, artists, consultants and market professionals, 13 indicators and some metrics that should be considered to build new urban spaces or rebuild There are still, following the principles of MIL Cities (Media and Information Literacy Cities), novo framework defended by UNESCO.

MIL Cities or urban spaces with media literacy in 360 degrees, only those that can use as new technologies, more like co-participation of new stakeholders, such as startups, companies, academia, artists, governments and policy makers, international institutions and influencers, using Artificial Intelligence, or Blockchain, or Big data, robotics and new technologies in general, but respecting diversities and empowering ethics, sustainability, critical thinking and co-creation and responsibility for the socio-environmental impacts. This framework is an evolution of Smart Cities, which often underestimate human factor and the role of each citizen in the process.

This text serves as the foundation of the application to guarantee the interests, which at the request of UNESCO are being developed by the Thot-CRIARCOM team, led by Prof. Felipe Chibás Ortiz. <https://en.unesco.org/milcities>

The book is addressed to all who want to see how it will be or future of the cities.

ISBN 978-65-990224-0-1



Mitsuru Yanaze
Felipe Chibás
editors

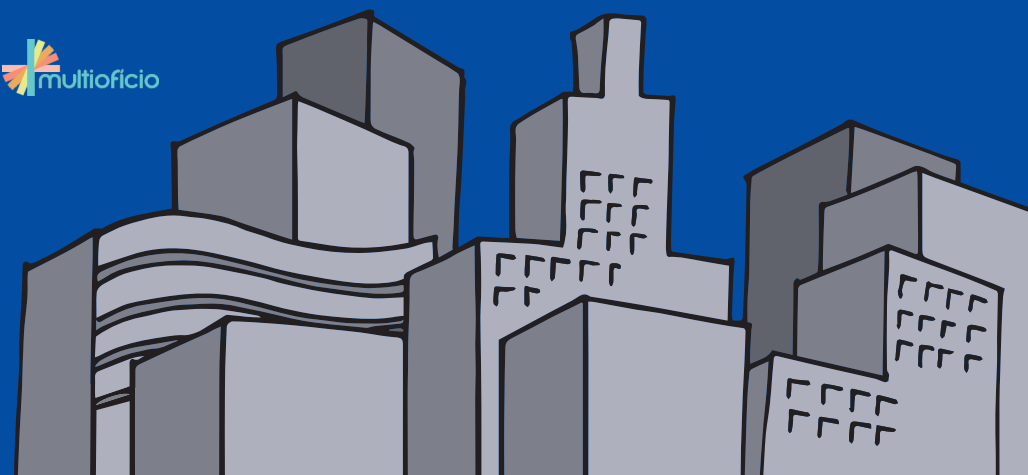
From smart cities to MIL cities
Metrics inspired by UNESCO's vision

From smart cities to MIL CITIES

Metrics inspired by UNESCO's vision

EDITORS:

Mitsuru Yanaze
Felipe Chibás



Mitsuru Higuchi Yanaze

Professor and Full Professor at the School of Communications and Arts at the University of São Paulo, Coordinator of CEACOM. Author of numerous books of great national and international success and the annual international event CULTURE, COMMUNICATION, MARKETING AND COMMUNITY.

Among his books, MARKETING, COMMUNICATION, INNOVATION AND TECHNOLOGY in the MIL CITIES (2019) stands out, organized with Felipe Chibás Ortiz and authors from many countries, edited by USP with the support of UNESCO GAPMIL. Also the MARKETING AND COMMUNICATION MANAGEMENT: ADVANCES AND APPLICATIONS.

Trainer of many generations of scholars and marketing professionals and is the coordinator of the Communication and Marketing Management course at ECA / USP, which is offered in person and EAD.



Felipe Chibás Ortiz

Regional Representative for Latin America and the Caribbean, International Steering Committee of UNESCO-led GAPMIL. He is a PhD professor and a free professor by ECA/USP and a master by PROLAM / USP. Consultant, professor and researcher at CEACOM at ECA-USP.

Specialist in Direct Marketing, University of Alcalá de Henares, Spain and graduated in Psychology, University of Havana, Cuba.

He is the author of 23 books, published in several countries and languages. Among them stands out MARKETING, COMMUNICATION, INNOVATION AND TECHNOLOGY in MIL CITIES (2019), organized with Mitsuru Yanaze. Also the title CREATIVITY, INNOVATION AND ENTREPRENEURSHIP in the digital age and M@RKETING PESSOAL DIGITAL, the latter published by Atlas.

He coordinates the annual international event CULTURE, COMMUNICATION, MARKETING AND COMMUNITY and the research group Toth-CRIARCOM, a transdisciplinary team of studies on Creativity, Innovation, Communication and Digital and Personal Marketing, as well as in MIL Cities, from CEACOM - ECA / USP.

**From smart
cities to
MIL
CITIES**

Metrics inspired by **UNESCO's** vision

Publication File:

Cover Art: Dorinho Bastos

Executive Publisher: Elaine Gardinali

Bookmaker: Multiofício

MITSURU HIGUCHI YANAZE

FELIPE CHIBÁS ORTIZ

(Editors)

From smart cities to **Mil** CITIES

Metrics inspired by **UNESCO's** vision

Authors

Alice Y. Lee | Aline M Borges | Alton Grizzle | Andreia Neves Asami | Avelino V Couceiro Rodríguez |
Barbara Mazzetti | Coetzee Bester | Davi Mayer | Divina Frau-Meigs | Dorinho Bastos |
Edna de Mello Silva | Elaine Cristina Gardinali | Estrella Luna Muñoz | Felipe Chibás Ortiz
| Flávia Rudge Ramos | Giovanna Gianturco | Howard Blumenthal | Irina Zhilavskaya | Jagtar
Signh | Jeffery Deans | Jude Chukwunonso Abugu | Kiran Pandey | Leandro Key Higuchi
Yanaze | Maja Zaric | Mariella Nascenzi | Milouda Boichou | Mitsuru Yanaze | Orlando da Silva
Junior | Paul Guzzardo | Rachel Fischer | Rachel Schnalzer | Regiane Relva Romano | Rúbia Steiner
| Simone Denise Gardinali Navacinsk | Wallace Gichunge | Wania Torres | Yohhan Santos Ribeiro

1st Edition

São Paulo

Escola de Comunicações e Artes – Universidade de São Paulo

2020

**Cataloging in Publication
Library and Documentation Service
School of Communications and Arts of the University of São Paulo**

F931 From smart cities to MIL cities : metrics inspired by UNESCO's vision /
Mitsuru Yanaze, Felipe Chibás Ortiz (ed.) -- São Paulo: ECA-USP, 2020.
446 p.

ISBN 978-65-990224-0-1

1. Tecnologia da informação – Aspectos sociais 2. Tecnologia da comunicação -
Aspectos sociais 3. Cidades MIL I. Yanaze, Mitsuru II. Chibás Ortiz, Felipe

CDD 21.ed. – 303.4833

Produced by: Lilian Viana CRB-8/8308

FOREWORD

The title of this book is an important and enthusiastic piece of work. The editors and authors are not only transmitting a shared vision but also planting seeds that could germinate and regenerate over and again to create a forest of change in societies.

That Smart Cities are upon us is unquestionable, inevitable and irreversible. The average citizen may or may not have heard of the concept of Smart Cities. Most citizens¹ do not understand the implication of Smart Cities in their lives. Anyone who depends on any form of information, uses technology, or engages with media in their daily lives should learn more about, and get involved in MIL Cities.

The usefulness of this book is that it does not drag the reader into the debates of the positive or the negatives of Smart Cities. Rather, it offers pragmatic ways for citizens to prepare themselves to reap the benefits of Smart Cities and self-protecting from the attendant downsides by becoming media and information literate. It also suggests various ways in which city actors can proactively contribute to transforming people's lives in cities with media and information literacy (MIL).

Rebuilding cities and communities based on technology is more than 30 years in the making. Regenerating cities and communities grounded on information and communication goes much farther back. The reader of this book must ask the question, how and where do we start? Do we start with infrastructure, citizens (people), or both? The editors of this book have skilfully illuminated the necessities to fuse people with infrastructure, hence the title.

In 2013/2014, UNESCO put forward the idea of *MIL Citizens* in two of its trendsetting resources, the model *Global Media and Information Literacy Assessment Framework: Country Readiness and Competencies* and the *Media and Information Literacy Policy and Strategy Guidelines*. The latter resource proposes MIL Citizens as the desired outcome of national MIL policies and strategies frameworks.

Circa 2016, the UNESCO-led Global Alliance for Partnership on MIL (GAPMIL) broached the idea of MIL Cities in a networking dialogue. UNESCO used this as a title of a session at the 2016 Global MIL Week Feature Conference in Sao Paulo, Brazil. In 2018, UNESCO spearheaded Global MIL Week 2018 with its feature events in Kaunas, Lithuania and Riga, Latvia, under the theme *Media and Information Literate Cities: Voices, Powers, and Change Makers*. By 2019, UNESCO and partners promoted the Global MIL Week theme, *MIL Citizens: Informed, Engaged, Empowered* with its feature events in Gothenburg, Sweden.

This book demonstrates a successful development process. Some people plant, others water, and yet others collect, store, and distribute the harvest. The editors of this book embody that spirit. Seeds of MIL Cities have been planted. The UNESCO Global Framework for MIL Cities invites pioneering cities to pilot the concept, <https://en.unesco.org/milcities>. Every reader,

¹ By citizens, I mean metaphors of citizenship rather than a strictly legal category – thus including all peoples.

writer, and all city actors can help to realize a full harvest of MIL Cities. Whether you are a regular citizen with interests in these topics, someone who knows nothing about these topics, or an information, media, technology, education, culture expert, etc. there is something for you in this book.

The *UNESCO Cities Platform* and *World Cities Day*² offer an even broader perspective of integrated knowledge for change. "A city's ability to adapt to an uncertain future is vital for its resilience and creating lifelong learning opportunities for all, including safely making the most of digital technologies... The *UNESCO Cities Platform* is a way of bringing several issues together to be able to examine them from a holistic perspective, and propose fresh ways of tackling emerging issues. Science, technology and innovation policies in cities may provide enhanced capacities to engage, to connect, to act and to be resilient³."

I have emphasised elsewhere that the move from MIL Cities to MIL Citizens is a natural transition highlighting that change always starts with people. The UNESCO MIL Cities initiative enables non-traditional stakeholders, including city mayors, election networks, policymakers and planners in transportation, health, entertainment, housing, hotel industries, public and commercial spaces, as well as other players in city-life, to promote MIL learning creatively. A key point here is how international cooperation can lead to the expansion of MIL not only to individuals but also to different social groups (refugees, children, migrants, those affected by disasters, those who are susceptible to crime, drugs, and violence) as well as institutions. This is one of the reasons that UNESCO started GAPMIL and *Global Media and Information Literacy Week* as two international platforms to stimulate initiatives like MIL Cities.

I think that the editors of this book open a valuable window to stimulate more discussion towards innovating MIL Cities.

The hope is that many other authors will popularise the obvious impact that MIL Cities could have.

Alton Grizzle

Programme Specialist in Communication and Information⁴

Section for Media and Information Literacy and Media Development

Communication and Information Sector

UNESCO, Paris

² <https://en.unesco.org/news/unesco-celebrates-world-cities-day-31-october-2019>. Accessed on 23 February, 2020

³ https://en.unesco.org/system/files/en_world-cities-day_concept-note.pdf. Accessed on 23 February, 2020

⁴ This Foreword is written as part of the author's work as Programme Specialist in the Section for Media and Information Literacy and Media Development, UNESCO. However, the ideas and opinions expressed are not necessarily those of UNESCO and do not commit the Organization.

PREFACE

MIL Cities - The future of urban spaces

It is an honor to present this book with research reports, debates and free texts on the concept of MIL Cities that make up this monograph. Contributions are essential to help multiply more real urban MIL cases in a connected and highly technological world, but must use these advances with a human sense. In this area, the MIL empowerment of citizens is essential. This concept has been created by GAPMIL, which is the Global Partnership Alliance for Media and Information Literacy, led by UNESCO, with representatives from more than 80 countries on all continents. This alliance encourages, with the support of academics, private entities, government agencies and representatives of the whole society, the promotion of democratic projects where every citizen has the right to use information and mass media, with conscience, free expression and responsibility.

The concept of MIL cities is ideally applied to territories that focus their local initiatives to encourage the use of information and consequently the so-called Creative Cities, Educating Cities and Smart Cities can educate for the critical and creative reading of reality, the Communication and information.

The aforementioned concept of MIL Cities is based on the integration of various public policies, which was discussed during the event, Global MIL Week 2018, in Lithuania and Latvia, organized by UNESCO, in addition to other international organizations. The contributions of this book are important for those interested in the good use of information for the construction of citizenship. I hope you enjoy reading chapters by authors from several countries, who intended to think about a truly human future for urban spaces.

Dr. Jesús Lau

Co-Chair, International Steering Committee of UNESCO-led GAPMIL
Universidad Veracruzana, México

E-mail: jlau@uv.mx - jesuslau@gmail.com

Website: www.jesuslau.com.mx

Social and academic networks FB, Twitter, Instagram, LinkedIn, Flickr, ResearchGater, SlideShare, ELIS: [jesuslau](#)

INTRODUCTION

This new book has its natural precedent in the book **MARKETING, COMMUNICATION, TECHNOLOGY AND INNOVATION**, in the MIL Cities, which brought together renowned authors from Brazil, China, Cuba, Spain, United States, France, England, India, Italy, among others, published in 2019 by the University of São Paulo with support from GAPMIL and also organized by professors Mitsuru Yanaze and Felipe Chibás Ortiz. This text was presented during the Gothenburg Book Fair, in Sweden in 2019, as well as at the V 5th International Meeting of **CULTURE, COMMUNICATION, MARKETING AND COMMUNITY** in Cuba and at Bradesco's Inovabra and at the University of São Paulo (USP), in Brazil.

The book's organizers believe in the so-called MIL cities. This is the construction of cities that use the new technologies, but with the participation of new stakeholders, such as government officials and policy makers, influencers and young people, using Artificial Intelligence, Big data, robotics and new technologies in general, but in an ethical, sustainable, critical and creative way and taking responsibility for the social impacts it causes. Smart city initiatives often underestimate the role of citizens in this process.

The MIL Cities framework implies teaching citizens, as well as public and private organizations, to take a critical look that will make it easier for them to read and overcome and / or get around in a creative way, the Cultural Barriers to Communication that they have or face, as was seen during the 2018 Global MIL Week, held in Kaunas Lithuania (UNESCO), where this topic was widely discussed. Cultural Barriers to Communication, such as sexism, ethnocentrism, religiocentrism, among others, tend to be present in the formal education offered today and in books and communication and marketing pieces broadcast in traditional and digital media (CHIBÁS ORTIZ, YANAZE, FLORES, 2018; UNESCO , 2019). Also in the programming of Artificial Intelligence and chatbots that sometimes reproduce prejudices such as sexism among others. Thus we see, for example, that many of the digital attendants are female, reproducing once again the prejudice referring that women can only perform subordinate jobs, subordinate to men.

Fake news, deep fakes, misinformation, creation of factoids and alternative facts, negative propaganda against a candidate or political project, purposeful creation of narratives and selective stories with manipulative intentions, encouragement of post-truths (believe only what reinforces "my truth" or beliefs), intolerance, radicalization, etc. obscures the benefits of having more access to information, technology and new digital media. By promoting MIL cities, societies can be helped to think and act in a more critical and reflective way, and in this way put us on the path to positive and sustainable creative change.

The concept of MIL City includes action in physical and digital spaces and includes both traditional actors in formal education (schools, universities, teachers, students, families), but also marketers, startups and journalists, public and private institutions, creative networks,

researchers, activists, ecologists, entrepreneurs, government officials, policymakers, electoral commissions, transportation systems, public health, artistic and cultural groups, NGOs, trade associations, libraries, museums, community projects, etc.

The specific themes present in the chapters are among the group of 13 indicators and metrics that have been researched to evaluate MIL Cities, by the Toth-CRIACOM team (Creativity, Innovation, Communication and Marketing), led by Prof. Felipe Chibás Ortiz with the direction of UNESCO. These 13 indicators and their respective metrics were presented in the last edition of Global MIL Week in Gothenburg (2019), by Professor Felipe Chibás Ortiz.

The chapters of the authors of the current book were written with a qualitative and quantitative approach. Each author wrote a chapter aimed at one of the 13 indicators described above, but showing the development of this indicator, without addressing all its metrics or quantitative ways of evaluating or measuring that indicator. In this way, practical experiences, cases and theoretical speculations are told about how MIL Cities can be

The book brings together renowned authors from several countries, such as the United States, France, Italy, Russia, China, India, Mexico, Kenya, Nigeria, South Africa, Jordan, Brazil, Jamaica and Cuba, among others. We hope you enjoy this text that tries to look at the present with a look to the future.

Prof. Dr. Mitsuru Yanaze of CEACOM- Coordinator of the Center for Evaluation and Measurement Studies in Communication and Marketing at the University of São Paulo

Prof. Dr. Felipe Chibás Ortiz from CEACOM- Center for Evaluation and Measurement Studies in Communication and Marketing at the University of São Paulo

References

CHIBÁS ORTIZ, Felipe, MIL Cities and Artificial Intelligence under UNESCO: Challenges of Sao Paulo, In: UNESCO Global MIL Week, Gothenburg, 2019.

CHIBÁS ORTIZ, Felipe, YANAZE, Mitsuru, FLORES, Valeria. Building MIL Cities with the methodology of Cultural Barriers to Communication and Creativity: A Study in Education with Young People from Brazil and Cuba, In: YANAZE, Mitsuru, CHIBÁS ORTIZ, Felipe (Org.). Marketing, Communication, Technology and Innovation, In MIL Cities, ECA-USP, São Paulo, 2019. p. 430, ISBN 978-85-7205-22290

UNESCO, MIL Cities, Global Media and Information Literacy Week 2018, Kaunas, 2018.

Disponível em: <https://en.unesco.org/globalmilweek2018/milcity>, Acesso : 01 dez. 2018.

PRELIMINARY NOTE

How to measure the immeasurable?

This was the challenge before us, not only to think about the architecture of this book, but also when we set out to metrify cities, that is, to explain how the concept of MIL Cities could be something more visible, palpable and achievable by any small city, medium or large, with large or little technological investment.

For this reason, the chapter authors of this book, most of them considered experts at GAPMIL (Global Alliance for Media and Information Literacy Partnerships), an organization led by UNESCO, took a qualitative and quantitative approach. That is, each of them wrote from a theoretical-practical perspective their experiences, cases or future theoretical constructions on any of the 13 indicators and their respective 160 metrics that are being elaborated and researched by the Toth-CRIARCOM team (Creativity, Innovation, Communication and Marketing) UNESCO Sub-Guidance (2019-b). In this regard, the MIL Cities Metrics application is also being developed in order to be able to evaluate as objectively as possible cities wishing to have this perspective (2019-c). The demo of this app can be accessed from the UNESCO website at <https://en.unesco.org/milcities> The concept of MIL Cities (UNESCO, 2018) is an evolution of Smart City and City of Knowledge, as to be truly sustainable, smart cities must also be MIL cities. This implies educating, empowering and empowering city dwellers of all age groups and social classes, as well as various stakeholders from the most traditional to the least traditional, such as startups, subways and other public modals in the city, travel agencies. communication and marketing, banks, among others, to establish networks of cooperation and make a critical, ethical, truly creative and responsible use of the new infrastructures and technologies that contemporary cities offer.

When discussing smart cities, the prevailing tendency is to understand that the massive amount of data generated at all times about cities (big data) must be extracted, filtered, structured and systematized to compose key performance indicators (metrics) relevant and strategic. In the case of MIL Cities, that is, media and information literacy in the context of cities, the essence lies in the empowerment of these indicators in order to promote the transformative action by the various agents of the context of social structures, focusing on improvement of the common good, fostering citizenship and respecting diversity in a sustainable way, with the co-creation and co-participation of people and new social actors in city government. That's why people and organizations that are empowered in this way develop critical skills that allow them to better handle fake news and deep fakes.

Thus, it is possible to consider that the MIL Cities framework is directly linked to citizenship education, since it presupposes reading, understanding, argumentation and opposition, and the creation of new content: that only a conscious citizen with critical thinking and Developed

creative programs will overlap the quantitative metric, for example, the rate of schools per city dweller to the meaningful discussion of what is quality integral education for the city.

The topic of MIL cities was raised in the Global Framework for MIL Cities (UNESCO, 2018) and is also one of the topics that were discussed as new MIL trends in the Media and Information Literacy Curriculum for Teachers International Consultative Meeting (UNESCO, 2019-a), associated with the theme of Cultural Barriers to Communication, as it is difficult to build an unethical MIL city, neighborhood or community with many cultural barriers, stereotypes and prejudices about each other (CHIBÁS ORTIZ, 2019-b).

The MIL Cities framework implies teaching citizens, as well as startups, public and private organizations to have a critical eye that makes it easy for them to read and overcome and / or creatively circumvent the Cultural Barriers to Communication they have or face, as it has been seen during the 2018 Global MIL Week, held in Kaunas (UNESCO), where this topic was widely discussed. Cultural Barriers to Communication, such as sexism, ethnocentrism, religiocentrism, ethical distortions, limited opportunities for young and old, language barriers with immigrants or people from disadvantaged regions, financial constraints, mistreatment of the disabled, bullying, among others, are often present in the formal education offered today and in books and pieces of communication and marketing in traditional and digital media (YANAZE, CHIBÁS ORTIZ, 2019). Also in the programming of Artificial Intelligences and chatbots that sometimes reproduce prejudices such as sexism among others (CHIBÁS ORTIZ, 2019-a). Thus we see, according to the UN in a report cited by UNESCO, that many of the digital attendants are female, reproducing once again the prejudice that women have to perform subordinate functions to men (UNESCO, 2019-d).

According to Prof. Dr. Alton Grizzle, principal researcher and expert of the MIL program at UNESCO Headquarters in Paris, media and information literacy or MIL, using English acronyms, is already regarded as a tool for development worldwide and is now recognized by 193 countries around the world. For nine years, UNESCO and many partners have been promoting media and information literacy awareness through the Global MIL Week event. On November 25, 2019, one hundred and ninety-three countries unanimously proclaimed the Global Week of MIL as an official event at the 40th Session of the UNESCO General Conference (GRIZZLE, 2019).

According to Moez Chakchouk, Assistant Director-General for Communication and Information at UNESCO, "In marking the official proclamation of the Global Media and Information Literacy Week, UNESCO's message to the world is that media and information literacy is the key to empower all peoples. This UNESCO decision now firmly places media and information literacy on the international development agenda and calendar (GRIZZLE, 2019). This proclamation comes shortly after the 2019 Global MIL Week held in Gothenberg which had over 200 commemorative events in over 100 countries partnership with the Swedish National Commission of UNESCO (GRIZZLE, 2019).

UNESCO has a vision for media and information literacy. You can call this dream vision. The dream is to bring media and information literacy to the world. This dream that began 37 years ago with the Grunwald Declaration on Media Education in 1982 (GRIZZLE, 2019).

The MIL Cities framework is a bit newer yet. It was launched in 2018 by UNESCO itself and is the junction of the MIL concept and that of cities (UNESCO, 2018).

This group of 13 indicators with their respective metrics is shown below, with at least one specific example of metric. As you will appreciate, these are parameters already known, but observed from a new perspective, the MIL view.

1. Libraries

The number of actions and workshops with authors, focused on adolescents and young people, teaching how to search and find safe sources for research, carry out the Libraries per year;

2. Roads, buildings, means of transport and mobility

The city has a planned communication proposal on the use of space creatively for the various transportation vehicles today;

3. City Hall, public institutions and citizenship

a. The Government (City Hall) has an Ethics Commission and provides important information at election times to prevent fakenews from confusing voters about candidates' proposals;

b. The city has the diagnosis and mapping of its Cultural Barriers to Communication by neighborhoods and municipalities;

4. Health

Number and percentage of hospitals, clinics, networks and pharmaceutical industries, as well as other health institutions with preventive health information campaigns that offer safe information on medicines and health, including vaccination campaigns;

5. Culture, heritage, art, sport, tourism and leisure

a. Number and percentage of parks carry out communication campaigns focusing on accurate information on well-being and quality of life;

b. Number and percentage of cinemas and theaters that articulate with the schools for the exhibition of films produced by students;

6. Education

a. Number and percentage of public and private schools that have in their curriculum subjects related to the MIL approach and anti fake news?

b. Number and percentage of teachers who received some type of MIL or anti-fake news training;

7. Associations, trade unions, NGOs, socio-cultural projects and other non-traditional actors

Number and percentage of trade associations and unions articulate curriculum outside their spaces, using public and private spaces to discuss media and access to information;

8. Media

Number and percentage of communication, city marketing agencies that run MIL campaigns and anti fake news;

9. Artificial intelligence, startups and digital channels

a. Number and percentage of technologies (Artificial Intelligence or AI systems, Virtual and Extended Reality) take advantage of the health, culture and education of citizens;

b. How many and percentage of anti fake news companies, software, and applications own the city;

10. Security

a. Number of apps and cameras available throughout the city to ensure safety, avoiding problems such as floods and other accidents and natural disasters,

b. The city's police and other security agencies had some kind of MIL training or training;

11. Environment and sustainability

a. Number and percentage of web platforms owned by the city to discuss environmental issues;

b. Number of city-created applications designed to solve ecological problems;

12. Youth, the Elderly, Women, LGBTi, Blacks, Indigenous, Migrants, Disabled and Other Vulnerable Groups

Number and percentage of young leaders occupy leadership positions in government (percentage);

13. Integration Metrics

Number and percentage of sustainable innovative solutions implemented by the city.

We hope you enjoy this book and try to realize such an important framework for current and future cities.

Prof. Dr. Felipe Chibás Ortiz

Regional Representative for Latin America and the Caribbean, International Steering Committee of UNESCO-led GAPMIL

Thot-CRIARCOM Coordinator

Researcher and Associate Professor at CEACOM - Center for Evaluation and Measurement Studies in Communication and Marketing at the University of São Paulo (USP)

References

- CHIBÁS ORTIZ, Felipe, MIL Cities and Artificial Intelligence under UNESCO: Challenges of Sao Paulo, In: UNESCO Global MIL Week, Gothemberg, 2019-a.
- CHIBÁS ORTIZ, Felipe, MIL Cities Metrics for Cultural Changes and Creative Jump: Metrics and Challenges of Sao Paulo, In: UNESCO, World Cities Day, Paris, 2019-b.
- GRIZZLE, Alton, 193 Countries Proclaimed Global Media and Information Literacy Week: It is now official!, Paris, UNESCO, 2019.
- UNESCO, MIL Cities, Global Media and Information Literacy Week 2018, Kaunas, 2018. Access: <https://en.unesco.org/globalmilweek2018/milcity>, in 01/12/2018.
- UNESCO, Media and Information Literacy Curriculum for Teachers International Consultative Meeting, Access: <https://en.unesco.org/news/international-experts-deliberate-draft-global-standards-curriculum-media-and-information>, Belgrado, 2019-a, in 01/12/2019.
- UNESCO, MIL Cities: An Initiative on Creative Learning of Media and Information Literacy in Cities, Access <https://en.unesco.org/milcities>, Paris, 2019-b, in 01/12/2019
- UNESCO, MIL Cities metrics App are being developed, Paris, 2019-c. Access: <https://en.unesco.org/milcities>, in 01/12/2019
- UNESCO, I'd blush if i could: closing gender divides in digital skills through education. Disponível em: <https://unesdoc.unesco.org/ark:/48223/pf0000367416>, Paris, 2019-d, in 14.jun.2019.
- YANAZE, Mitsuru, CHIBÁS ORTIZ, Felipe (Eds.). Marketing, Communication, Technology and Innovation, In MIL Cities, ECA-USP, São Paulo, 2019. P. 430, ISBN 978-85-7205-22290

ÍNDEX

Foreword

Anton Grizzle , p. 5

Preface

Jesus Lau, p. 7

Introduction

Mitsuru Yanaze and Felipe Chibás Ortiz, p. 8

Preliminary Note

Felipe Chibás Ortiz, p. 10

CHAPTERS BY INDICATORS AND METRICS

0. To understand

Chapter 0 - MIL Cities Metrics and Artificial Intelligence under UNESCO perspective: São Paulo case. Felipe Chibás Ortiz, Alton Grizzle, Aline M. Borges, Flávia Rudge Ramos, Barbara Mazzetti e Orlando da Silva Junior (Cuba, Jamaica, Brasil), p. 21

1. Libraries

Chapter 1.1 - Libraries as learning and empowering bridges for MIL Cities. Estrella Luna Muñoz (Mexico), p. 49

Chapter 1.2 - Harnessing the power of libraries in Nairobi to become Media and Information Literacy Learning Centres

Wallace Gichunge (Kenya), p. 59

2. Roads, Buildings, Means of Transport and Mobility

Chapter 2.1 - The Best Place in the World: Modeling the Neighborhood

Howard Blumenthal (United States), p. 71

Chapter 2.2 - Transit Digital Art Lab: A Case Study

Paul Guzzardo (United States), p. 81

3. City Hall, Public Institutions and Citizenship

Chapter 3.1 - Roll of City hall, Public Institutions and Citizens to build MIL cities

Maja Zaric (Serbia), p. 101

Chapter 3.2 - Launching MIL Projects in Hong Kong under the Smart City Blueprint

Alice Y. L. Lee (China), p. 109

Chapter 3.3 - Public Communication as an intersection for the construction of a MIL City concept: the São Paulo City Hall

Simone Denise Gardinali Navacinsk and Elaine Cristina Gardinali (Brazil), p. 125

4. Health

Chapter 4.1 - Health Institutions have preventive health information like MIL Cities metrics and actions

Milouda Boichou (Morocco), p. 151

5. Culture, Heritage, Art, Sport, Tourism and Leisure

Chapter 5.1 - Informational Media Literacy in the city of São Paulo: a new look at Culture, Art, Leisure, Sport and Tourism

Davi Mayer (Brazil), p. 183

6. Education

Chapter 6.1 - MIL Cities and the role of African universities: Observing the relevance of Information Ethics programmes in six African countries

Rachel Fischer and Coetzee Bester (South Africa), p. 195

Chapter 6.2 - Media and Information Literacy in the higher education system on the post-soviet space: potential and development prospects

Irina Zhilavskaya (Russia), p. 215

Chapter 6.3 - University cities as MIL cities: Case Study of FACENS University Center

Regiane Relva Romano (Brazil), p. 227

Chapter 6.4 - Pedagogical trails for citizenship in the development of MIL Cities

Leandro Key Higuchi Yanaze, Edna de Mello Silva, Yohhan dos Santos Ribeiro, Andreia Neves Asami (Brazil), p. 249

7. Associations, Trade unions, NGOs, Socio-cultural projects and other non-traditional actors

Chapter 7.1 - Technological and Cultural dimensions of a safe MIL city

Giovanna Gianturco and Mariella Nascenzi (Italy), p. 263

8. Media

Chapter 8.1 - Fake News and Media Literacy in Jamaica: The Influence of the Broadcasting Commission as a Component of a Global MIL City

Jeffery Deans (Jamaica), p. 277

9. Artificial Intelligence, Startups and Digital Channels

Chapter 9.1 - Artificial Intelligence, Startups and Digital Channels: Inclusion, Efficiency and Quality in Service to Organizations in MIL Cities

Rúbia Steiner (Brazil), p. 293

10. Security

Chapter 10.1 - Security within MIL cities: how the citizen-reporter relationship plays an essential role in journalism

Rachel Schnalzer (United States), p. 309

11. Environment and Sustainability

Chapter 11.1 - Creating a SMILE centre in Tunis: MIL, Governance and Sustainability

Divina Frau-Meigs (France), p. 323

Chapter 11.2 - Strengthening Data and Information Literacy for inclusive, safe, resilient and sustainable cities in the Global South (focus on India and Africa)

Jagtar Singh and Kiran Pandey (India), p. 345

12. Youth, Women, LGTBi, Blacks, Indigenous and other Vulnerable Groups

Chapter 12.1 - More Women in Politics: a challenge for the MIL Cities

Wania Torres (Brasil), p. 357

13. Integration Metrics

Chapter 13.1 - Integrated Communication Objectives and Goals for Wise Cities / MIL (Wise and Media and Information Literacy Cities)

Mitsuru Yanaze (Brazil) and Felipe Chibás (Cuba/Brazil), p. 373

Chapter 13.2 - From Smart cities to MIL cities: Integrating Media, Information and Digital Literacy in City Plans for Sustainable Smart Cities

Jude Chukwunonso Abugu (Nigeria), p. 397

Chapter 13.3 - La Habana from 500 to MIL: contributions from urban anthropology

Avelino Víctor Couceiro Rodríguez (Cuba), p. 407

Chapter 13.4 - The MIL Cities: a Look at Cartoons

Dorinho Bastos (Brazil), p. 427

0

To understand

Chapter 0

Metrics of MIL Cities, Cultural Barriers and Artificial Intelligence under UNESCO perspective: São Paulo case

Felipe Chibás Ortiz

Alton Grizzle

Aline M. Borges

Flávia Rudge Ramos

Barbara Mazzetti

Orlando da Silva Junior

Felipe Chibás Ortiz

Regional Representative for Latin America and the Caribbean, International Steering Committee of UNESCO-led GAPMIL. He was elected to this role among experts from around the world. He is a PhD professor and a free professor at the School of Communications and Arts (ECA) of the University of São Paulo (USP) and a master by the Latin American Integration Program (PROLAM) also by USP, in Brazil. Consultant, professor and researcher at the Center for Studies on Evaluation and Measurement in Communication and Marketing (CEACOM) at ECA-USP. He specialized in Direct Marketing at the University of Alcalá de Henares, in Spain and has a degree in Psychology - University of Havana, Cuba.

Alton Grizzle¹

Is a happily married husband, father, Christian, and a person who loves and respect all peoples. He works at the UNESCO HQ in Paris as Programme Specialist in Communication and Information. He manages of UNESCO's global actions on media and information literacy (MIL) and is a focal point on gender and media. He has written on the topic of media and information literacy and presented at various conferences and meetings around the world. Alton has diverse education and experience in the fields of education, management, information systems and media and communication. He has conceptualized and spearheaded many initiatives and projects, authored articles, and co-authored and edited books relating to MIL, gender and media, media development, communication for development. Prior to UNESCO, he was an educator/principal at secondary school and adult vocational training levels of the education systems in Jamaica for ten years. He holds a Diploma in secondary education from the Mico University College, a Bsc. in management and economics at the University of the West Indies (UWI), an Msc in Computer-based Management Information Systems from the UWI, MA in Media and Communication from the University of Leicester, UK; and a Ph.D. in Communication and Journalism from the Autonomous University of Barcelona, Spain.

Aline Mascarenhas Borges

Graduated in Social Communication with emphasis on Public Relations (2004). Post-graduation in Service Marketing Management (2007). Specializing in Digital Communication Management at ECA / USP (2020). Member of the research group TOTH-CRIARCOM / CEACOM of ECA / USP. Conducts research on Cultural Barriers to Communication in technological organizations with the model of open innovation, Ethics and Artificial Intelligence and MIL Concepts (UNESCO).

Flávia Rudge Ramos

Graduated in Industrial Design from Mackenzie University (1986), graduated in Architecture and Urbanism from Paulista University (1998), master's degree (2007) and doctorate (2012), both from the School of Communications and Arts of the University of São Paulo (ECA/USP). Professor of the Higher Education Improvement Program at ECA USP (2005), Professor at the Fundação Instituto de Ensino para Osasco (2006-2008), at the Brazilian Museum of Sculpture (2010) and Professor at the Faculty of

¹ **NOTE:** Contribution to this chapter is written as part of the author's work as Programme Specialist in the Section for Media Development and Society, UNESCO. However, the ideas and opinions expressed are not necessarily those of UNESCO and do not commit the Organisation.

Architecture and Urbanism of Mackenzie University (2010-2014). He has been an architecture, interior design and landscaping office owner since 1998. He has experience in architecture with an emphasis on building projects, interior and furniture design, museology, museography and curatorship of art exhibitions, theory and criticism of modern art and contemporary.

Barbara Mazzetti

Master in Philosophy, with a concentration in Cultural Studies, from the School of Arts, Sciences and Humanities of the University of São Paulo. He defended his dissertation in September 2018, with the title "Stay (being) in the City: values, actors and Permaculture actions in the Municipality of São Paulo". In 2017, she attended a semester of the Master's at the Universidad Autonoma de Madrid, through the Master's program in Arts studies, Literature and Culture, as a fellow of the Santander Universities program. He obtained the title of Bachelor of Leisure and Tourism from the School of Arts, Sciences and Humanities of the University of São Paulo. She is currently organizer and creator of the Permaculture Collaborative Group of the School of Arts, Sciences and Humanities, a project made official by the unit's Secretary of Culture and Extension.

Orlando da Silva Junior

Bachelor of Computer Science from Centro Universitário FEI (2011), Master in Information Engineering from Federal do ABC University (2014) and PhD student in Electrical Engineering from University of São Paulo (USP). He is the current CEO and founder of Mineradores. He acts as an undergraduate professor in Information Technology courses and a graduate professor in several specializations and MBAs of Big Data, Data Science and Artificial Intelligence. He has experience with the development of data structures and intelligent algorithms, recommendation systems, computer vision and complex networks.

Abstract

The objective of this paper is to present the new framework of "MIL Cities" (Media and Information Literacy) proposed by UNESCO and the Global Alliance for Media and Information Literacy Partnerships (GAPMIL), a group led by UNESCO, using Artificial Intelligence and other new technologies, as well as showing some of the parameters and metrics that must follow the city of São Paulo to achieve the objectives established in this proposal. We also intend to show how the effective implementation of this model could contribute to the overcoming of Cultural Barriers to Communication and other serious structural and social problems of this metropolis. The concept of MIL Cities includes earlier concepts such as Smart City, City of Knowledge, Creative City, Innovative City and Educating City. The proposal is to develop cities that not only use new technologies but also bring in new *stakeholders*, especially young people; in an ethical, sustainable, critical and creative way, under the prism of responsibility and sustainability considering the social impacts that actions cause. UNESCO puts forward MIL Cities as one of a multifaceted approach to advance the concept of *MIL Expansion*² (MIL^x). MIL Expansion, a theory of change to reach more people with MIL is needed in an era of the transformation of cities and public spaces to be more information driven through the embedding of technologies. It is about teaching all these social actors to have a critical reading of reality (whether physical or digital) to make creative reading proposals for people, organizations, the press, communication agencies, TV, city halls and other public institutions. This kind of education prepares people and institutions to better deal with the manipulation embedded in the phenomena known as fake news and post-truths (believing that "my truth" is the truth since this information or truth is shared by the people of my bubble or relationship group) that affect our daily lives so much. Based on the idea of Media and Information Literacy, we can understand MIL Cities as the smart cities that integrate social responsibility and the goal of sustainable human development of cities with new technologies, such as blockchain and Artificial Intelligence. They integrate the main agents of society as expertise of universities, companies, representatives of governments and artists in pursuit of these goals. Some cultural barriers such as sexism (gender), religion centrism, lack of ethics, among others that limit the use of artificial intelligence, such as during the categorization, regression, data interpretation and future projection of a MIL City.

Keywords: MIL City, Smart City, cultural barriers to communication, UNESCO, artificial intelligence, media literacy

²Strategic publics.

²²Grizzle, A. and Hamada, M (2019). See also Grizzle, A. (2018).

³False news.

INTRODUCTION

The adoption of the MIL Cities framework, which stands for Media and Information Literacy and Portuguese for Media and Information Literacy, a concept that encompasses Intelligent, Creative and Innovative Cities, among others, involves not only cities characterized by the intense use of new technologies, but also traditional technologies; in function of human development. That is, the use of technology in an ethical and sustainable way, so that organizations and inhabitants of the city have decision-making power, developing ethical values, respecting ecology, diversity and their independent and creativity thinking capacity. A MIL city can also be a city that does not have a high technological investment.

The framework of "MIL Cities" suggested by UNESCO in 2018, has as one of its main propositions, to develop critical and creative thinking throughout the city, to promote the ethical use of communication with and without new technologies. Due to these characteristics, the so-called "social networks" become the preferred medium of political campaigns, many of them devoid of ethics, but of great influence on political electoral results. In this scenario, the great challenge of cities is to train their citizens to act to influence the direction of their municipalities, providing the necessary tools for citizens to face the challenges and opportunities of daily life. Thus, one of the goals of Media and Information Literacy is to educate individuals to question the information disclosed, in order to identify prejudice, prepare for discernment and establish their own sound judgments and then modify reality creatively, ethically and sustainably (GRIZZLE, 2014).

MIL Cities⁵ promotes the innovative dissemination of knowledge, through the structuring of educational and cultural networks of people and organizations such as universities, municipalities and schools; for teacher training so that media education is included in school curricula. The dissemination of this education also includes informal education, involving libraries, transportation and health system, communication and marketing services and agencies, the press, companies, socio-cultural projects, NGOs, among others.

The proposal aims to increase efficiency and quality of life in relation to safety, health, recreation, community services and government to citizens in cities. It is a creative and transparent integration of information, technology and media into the city and community life to enable organizations and people to understand and engage in the practical realization of diversity, respect and human solidarity in a sustainable way.

According to UNESCO (2018), the definition of "city" involves the residents, local authorities and other public and private organizations that make up community life, including the rural areas of a given geopolitical territory. In this context, the educational and cultural factor involving formation is becoming increasingly important. It is therefore increasingly visible in this period of transition and exponential change that characterizes the beginning of the 21st century; the need to know and understand this peculiar and new techno-human social universe that is being built in cities.

⁵ A Global Framework for Media and Information Literacy Cities (MIL Cities). UNESCO (2018), 4 January, 2019. Accessed on https://en.unesco.org/sites/default/files/gmw2018_draft_mil_cities_framework.pdf. MIDIA literacy in policy: an expanding area, Conexões, junho 2019, p. 2. Accessed on: <https://www.medialit.org/sites/default/files/conexoes/Media%20Literacy%20June%202019.pdf>.

In this context, the Media and Information Literacy focuses on the various forms of communication and information. New technologies and media interconnect the world, developing new communication skills, enabling opportunities to work, research and study in collaborative networks (UNESCO, 2017). This coexists with the concern to develop the critical capacity in the population to verify, filter and analyze the innumerable information received by various media in a volumetric and immediate way. It also contributes to the construction of a repertoire linked to this education, the knowledge of the "Cultural Barriers to Communication", with the construction of criteria for the selection of available information, so that it is possible to distinguish between true news and fake news, in a process of productive learning and citizenship exercise (CHIBÁS ORTIZ, 2019a).

The major challenge for cities and town halls today is to transcend or circumvent the "Cultural Barriers to Communication" and integrate the online and offline universe into a new blended multiverse, which blends physical and virtual reality. As well as institutional, marketing, administrative and internal communication of an organization, project, team, public or private institution. We also intend to show how the effective implementation of the MIL Cities proposals could contribute to overcoming Cultural Barriers to Communication and other serious structural and social problems in São Paulo.

CULTURAL BARRIERS TO COMMUNICATION AND CREATIVITY IN CONTEMPORARY SOCIETY

"Cultural Barriers to Communication" (BCC) means a set of factors, whether symbolic or concrete, that go beyond idiomatic differences and may make it difficult for people or organizations of different ethnicities, values, countries, peoples, regions or cultures. (CHIBÁS ORTIZ, 2019a).

Alton Grizzle (2014b, p.18), suggests that intercultural dialogue, premise on global citizenship in the digital age, calls for MIL for all. "Achieving MIL for all then requires both individual and collective actions; enabling individuals and communities to capitalize on cultural and other opportunities and challenges provided by media and technology to transform their lives". In a research carried out by Grizzle (2018) among 1,735 youths between the ages 14 and 30 from over 100 countries, most of the youth surveyed (94%) said that cultural dialogue and respect for others who are different were important to them and the development of their countries and 93% of them thought the media in their countries should promote intercultural dialogue. The youth also recognised MIL as a useful tool in helping them to engage more effectively in dialogue.

Divina Frau-Meigs (2012), defends Media Literacy as a way to address virtual issues with an analytical and critical stance on consumer economics and participation conscious of individuals. In his understanding, the media transformed the social structure through a cognitive view associated with actions, reasons, emotions and values, making the subject have a new sensibility and attitude as virtual access dominates the school, work, leisure and another social spheres, but sometimes without a critical eye. The postmodernist and post-human tendency of today's society, integrating human beings, technology and nature; It allows an interesting inversion when at times leisure becomes work and vice versa, providing the effective participation of creativity. The Internet drives individual experience in various ways, whether constructive or destructive, the individual in this virtual relationship distances himself physically and psychically without reflexive and expressive obligations, always having an immediate and simultaneous return, even without knowing the reality of the facts.

For Setton (2010) this new social model of interaction between individuals, offers instruments that distance and bring people closer. The virtual world allows the formation of closed groups of people with

the same opinion, ideology, political party, belief or religion; pushing the different ones away and eliminating any possibility of opposition, discussion and debate. Therefore, the question of understanding these new practices of virtual cultural relationship that extends to face-to-face and vice versa, demands a formal and non-formal education system that takes into account the new and old Cultural Barriers to Communication created in this real and virtual new context.

According to Isabel Alarcão (2011), the information society is open and global, but with technological barriers. The author understands that school is a place to develop skills, and computer literacy is the one that stands out as one of the newest skills to be developed. The lack of opportunity, especially in countries with wide social inequality, ends up generating a concept of social exclusion through the difficulty of accessing digital media, making people exposed to infoexclusion.

In the complex society in which we live, new and old questions arise that are potentiated by the overflow of information, which travels in countless directions that intersect with problems, opportunities, ideas, threats and challenges. Therefore, we can analyze messages with huge value connotations, which can be positive or negative for various reasons. The world, marked by so much information wealth, urgently needs the clarifying power of critical thinking.

In a study of digital media and family relationships, British researchers Sonia Livingstone and Ranjana Das (2010) found that while there are cultural differences in Europe, Internet use is embedded in family routine, with parents strongly influencing their children. The more parents use virtual tools, the children do too. Therefore, the time spent online has increased considerably.

According to Tornero and Varis (2010), there is a new social structure that presents itself in the face of structural, communicational and technological changes in the world. This provides for new values, globalized political, economic and social processes. The new humanism and the idea of transformation of society bring the perspective, according to UNESCO, of creating a more inclusive society, in which individuals, through the search for knowledge, become more educated people and achieve better quality in their studies (2017). This makes it more likely that universal dialogue will happen. In this perspective, the "Cultural Barriers to Communication" and the indicators of Creativity can be catalyst elements of this new humanism or post-humanism, with the construction of a new society, in which education includes human, social, technological and ecological factors.

Today's communicational, educational, and technological problems should not be analyzed in isolation from ethics. Bauman (2016) states that in postmodernity, ethics is replaced by aesthetics, because social distancing does not interfere with aesthetic contexts. That is, the dilemma of ethics is the moral one. In our times, the idea of sacrifice has become delegitimized; people are not stimulated or want to set out to pursue ideals or moral values; politicians have deposed utopias; and yesterday's idealists became pragmatic. We are in the age of individualism, which is another Cultural Barrier to Communication, because for the author, the individualistic pursuit of quality of life, limited by tolerance, is expressed in indifference; that is, in modern life the social is not concerned enough with moral concepts.

MODELS OF CONTEMPORARY CITIES: PATHS, CHARACTERISTICS AND TRENDS

The descriptive Table No 1. Contemporary City Models gathers specific information from each of the eight proposed city types, as trends in how urban and human centers can or should be in the coming

years and generations. The types of cities are listed in the table in chronological order of appearance and by concept development sequence.

The analysis presented is organized into some data that guarantee a systemic and objective view on the characteristics of each city conceptualization, as follows:

Emergence - when the concept was first established, discussed or disseminated.

Function - which defines the action or essence of a given City type.

Mission / Objectives - what are the guidelines and goals that the City seeks to achieve, accomplish or set.

Methods - how and what are the strategies, constituent elements or action plan used.

Vision - how the City seeks to be recognized, which seeks to establish or change for the future.

Authors - Who are the authors or media outlets that created or propagated the concept about a given City.

Examples - Examples of cities that according to the general criterion assume the commented paradigm.

Table No 1. Contemporary City Models

Cities	Mission / Objectives	Methods	Emergence	Examples
Knowledge Cities	Knowledge-based development is the response of the economic and management sciences to the emergence of knowledge cities.	Knowledge, culture and creativity have become new keywords and tools in understanding urban transformations.	1960	1 Monterrey, Mexico 2 Silicon Valley, USA 3 Linköping, Sweden
Educative Cities	Promote education, diversity, understanding, cooperation and international peace and avoid exclusion on the grounds of race, gender, culture, age, disability, economic status or other forms of discrimination.	Training, promotion and development of all its inhabitants, starting with children and young people; intersectoriality as the guiding premise of the actions and strategic instrument of articulation between institutions, weight and knowledge.	1990	1 Barcelona, Spain 2 Bologna, Italy 3 Belo Horizonte, Brazil
Creative Cities	Continuous processes of innovation, through cultural, social, economic and urban connections, which aim to promote creative differential in the actors and places involved.	Cultural resources subsidized by network technologies, highlighting the importance of innovation and creativity in collaboratively developing goods and services.	1990 2004 - UNESCO Creative Cities Network	1 New York, USA 2 Tokyo, Japan 3 Curitiba, Brazil
Resilient Cities	The intention is to circumvent the problem of conflicting civic and cultural philosophies by focusing on solving specific problems.	Solution problem solving methodologies. Ability of a city to persevere despite challenges; Central purpose is your responsibility to your citizens.	2010 - UN	1 Accra, Ghana 2 Venice, Italy 3 Lagos, Nigeria

Innovative Cities	The focus is development banks, development agencies and other financial institutions interested in developing innovation projects that benefit their local / regional areas of influence.	Agile innovation methodologies. Key factors for ranking: cultural assets, human infrastructure, networked markets, and innovative outcome. The synergy and cooperation between people, institutions and companies are indispensable to generate the social capital that supports the structuring projects of innovative cities.	2010	1Tokyo, Japan 2 New York, USA 3London, England 4 San Francisco, USA 5Berlin, Germany
Smart Cities	Offer a highly functional, fast and quality of life city. Focus on improved use of technology.	Governance, public administration, urban planning, high investment in technology, with international connections and high economic investment.	2010	1 Songdo, South Korea 2 Copenhagen, Denmark 3 Santa Ana, USA
Blockchain Cities	Allows smart contracts, self-managing payment and decision making, removing the middleman and democratizing wealth creation.	High investment in technology, especially in Blockchain technology. Indelible registration: Verify transactions, within digital currencies, scan, encode and insert documents. Uses the blockchain.	2007	1 Dubai, United Arab Emirates 2 Estonia - 2007 3 China 4 Innovation Park, USA (Future City project)
MIL Cities (Media and Information Literacy)	Focus on ethical use of technologies in cities. It aims to empower citizens by providing them with the skills (knowledge, skills and attitudes) needed to engage traditional media with new technologies.	The main tool is education for the formation of critical and critical thinking in the city. It engages in different and interconnected skills to transform people's interaction with information and online and offline learning environments.	2018 UNESCO	1 Belford, England 2 Helsinki, Finland 3 Glasgow, Scotland 4 Saint Louis, USA

Source: Authors archive, 2019.

The idea of Cities of Knowledge, according to Carrilo (2016) and the Ibero-American Agency for the Dissemination of Science and Technology (2011), was the first concept to emerge in 1960, raising the understanding of the City that could create conditions that encourage the creation, sharing, assessment and updating of knowledge through interactions between its citizens and with other cities. As with the City of Monterrey, Mexico (RIZZON; FACHINELLI; ZANOTTO; MONTAÑA & SILVA 2019), the mission is to ensure knowledge-based development, as a response of the economic and management sciences, valuing knowledge, culture and creativity as factors that lead to sustainable urban and economic development, as well as the well-being of the population. Knowledge Cities understand that greater citizen participation in public affairs contributes to more effective governance. Examples of Cities of Knowledge are Monterrey, in Mexico, and Linköping, in Sweden.

The concept of Educating Cities, in turn, emerged in the 1990s, bringing the central idea of cultural investment and the permanent formation of its population as its essence, aiming to promote education, diversity, understanding, cooperation and international peace and avoid exclusion on the grounds of race, gender, culture, age, disability, economic status or other types of discrimination. According to the Ministry of Education (2011), its methods are based on promoting the formation, promotion and development of all its inhabitants, starting with children and young people, and ensuring

intersectoriality as a guiding premise of actions and strategic instrument of articulation between institutions, people and knowledge. According to the Charter of the Educating Cities created and made available by the International Association of Educating Cities (2018), the vision of the Educating Cities is to establish bilateral or multilateral collaboration between cities to exchange their experiences; childhood education policies. Cities like Barcelona, Spain, Bologna, Italy and Belo Horizonte, Brazil, are examples of Educating Cities.

The concept of Creative Cities began to be drafted in 1990, but only in 2004, with the creation of the UNESCO Creative Cities Network, by establishing the potent link between culture and economy, based on creativity, in goods and services. They range from traditional handicrafts to the complex productive chains of cultural industries, according to Ferreira (2017). Its objectives are based on continuous processes of innovation, through cultural, social, economic and urban connections, which aim to promote creative differential in the actors and places involved.

According to Agatha Depiné, in an article published by the Federal University of Santa Catarina (2018), Creative Cities methods are based on cultural resources subsidized by network technologies, highlighting the importance of innovation and creativity in the development of goods and services, with the purpose of developing policies for achieving a more homogeneous and sustainable global economy, as discussed by Reis (2011). Examples of Creative Cities are: New York, USA, Tokyo, Japan, and Curitiba, Brazil.

Already the concept of Blockchain Cities, emerges in 2007, and grows timidly and unnoticed with the growth of digital currencies, bitcoins, configuring this type of city based on cryptographic mechanisms and shared databases, being filled with entries that must be confirmed and encrypted, enabling smart contracts, self-managing payment and decision making, removing the middleman and democratizing wealth creation, according to Rosa (2018). Its main foundation is the indelible record that to verify transactions with digital currencies, digitizes, encodes and inserts documents. According to Tiago Magnus (2017), Blockchain Cities have as tools the Internet of Things⁸, Artificial Intelligence and big data, to establish an integrated management system for urban services and public infrastructure. Is this a possibility of open access urbanism? A city structure for a hyperconnected society? In the article Blockchain City. Connectivity of Smart City - The Smart Bridge and Blockchain City (made by Korea Planning, 2017) believes yes and examples of this type of city are: Dubai, United Arab Emirates, and Innovation Park, USA (future city project).

The Resilient Cities proposition is established in 2010 through the UN, highlighting new models of public governance aimed at mitigating risks and responding to the challenges of each location. According to The Guardian (2014) in the report 'What Makes a City Resilient?', the intention is to get around the problem of conflicting civic and cultural philosophies by focusing on solving specific problems and focusing on a city's ability to persevere despite challenges in establishing a problem-solving methodology that has the central purpose of government accountability to its citizens. According to the organization 100 Resilient Cities (2019), the vision of these cities is to establish an organizational structure and identify the processes necessary to understand and act on reducing exposure, impact and vulnerability to disasters. Examples of Resilient Cities are: Accra in Ghana; Venice in Italy and Lagos in Nigeria.

⁸ Internet of Things, IoT

That same year, the concept of an Innovative City was elaborated, having as its essence the decentralization of financing of innovation activities for sustainable development in the Cities, according to the Ibero-American Agency for the diffusion of science and technology (2011). The focus is on development banks, development agencies and other financial institutions interested in developing innovation projects that benefit their local and regional areas of influence. In establishing an agile innovation methodology, it lists three main factors: cultural assets, human resources and networked markets; where synergy and cooperation between people, institutions and companies are indispensable to generate the social capital that supports the structural projects of innovative cities.

The proposal values retention of "talents", teaching career, continuing quality education and multidimensional approach, urban planning, sustainability, mobility, management and public policies, among others; that transform cities into environments conducive to economic, social and environmental development. According to the organization Innovation Cities (2018), Cities like London, England, San Francisco, the USA and Berlin, Germany are examples of Innovative Cities.

Also in 2010, the concept of Smart Cities was formulated, proposing a highly functional city, based on the use of technology in urban planning and civil participation, in a sustainable manner, as the goal of achieving a better quality of life for its inhabitants. According to the Getulio Vargas Foundation (2019), its methods are based on governance, public administration, urban planning, high investment in technology, environment, international connections, social cohesion, human and economic capital. In the article "Smart and Sustainable Cities: A Bibliometric and Patent Information Study", published by the International Journal of Innovation: IJI Journal (2017), the main objective is to use smart systems to catalyze economic development, such as cities such as Songdo in South Korea; Copenhagen in Denmark and Santa Ana in the United States.

MIL Cities recently emerged during the UNESCO-sponsored Global MIL conference held in Lithuania in 2018. It focuses on the ethical use of technologies in cities, empowering citizens and providing them with skills (knowledge, skills and attitudes) needed to engage traditional media with new technologies. The main tool is education for the formation of critical thinking in relation to content published on the Internet and especially on social networks (UNESCO, 2018). According to UNESCO (2019), it focuses on different and interconnected competencies to transform people's interaction with information and online and offline learning environments to promote equal access to information and knowledge, as well as media and information systems that is free, independent and plural. Thus, MIL Cities considers all forms of media and other information providers such as libraries, archives, museums and the internet, regardless of the technology used. Cities like Belford, England, Helsinki, Finland, and Glasgow, Scotland are examples of MIL Cities.

Performing a general analysis of the eight types of cities described above, it is remarkable the similarity that some types of cities have to each other, whether in the context of creation, objectives, methods of action and application or even vision. Thus, it becomes possible to identify four main factors of cities and their respective values and focuses of action: the economic present in Cities such as Innovators and Blockchain, the technology present in Creative, Intelligent and MIL Cities; the socioenvironmental in Resilient, Intelligent and Innovative Cities and, finally, the cultural and educational, pointed in Cities of Knowledge, Educating, Creative and MIL. Therefore, all concepts of cities come together in certain characteristics, as they differ in other points, but it is precisely the constant interdisciplinarity of these

concepts and dialogue between theory and practice that ensures the updating of discussions about urbanism, environment, technology, economy, education and culture in the cities of the future.

Briefly we can say that the MIL Cities are those that may or may not use Artificial Intelligence, Robots, Machine Learning, Big data, Blockchain, among other technologies, in the most diverse areas of technological environments, digital interactive and physical and face-to-face contexts. Encouraging the ethical, ecological, sustainable and respectful use of the diversity involved in them, through the empowerment and engagement of each citizen and the various public and private institutions that make up the city (UNESCO, 2018). These cities can be large or small.

MIL CITY INDICATORS & METRICS

Grizzle (2018) noted that UNESCO and partners have proposed the “MIL Cities” initiative to enable non-traditional stakeholders, including city mayors, election networks, policy makers and planners in transportation, health, entertainment, housing, hotel industries, public and commercial spaces, as well as other players in city-life, to creatively promote MIL learning based on determined indicators and strategies. In order to assess whether a particular city meets the conditions to be classified as MIL City, UNESCO developed the Global Framework for Media and Information Literacy Cities (MIL Cities). Drawing on this UNESCO Framework for MIL Cities, a proposal was drawn up by Chibás Ortiz to establish the parameters and metrics, whose main parameters are presented below. They include 13 indicators and some examples of metrics, presented at UNESCO. With these 13 indicators, an application is also being developed by Chibás Ortiz, Grizzle and Rodrigo Spillere (UNESCO, 2019-b). This is a fragment of the Research Report prepared by Chibás Ortiz with 13 indicators and some examples of metrics, presented at UNESCO (CHIBÁS ORTIZ, 2019 a; 2019 b):

Libraries

1. Number of actions and workshops with authors, focused on adolescents and young people, teaching how to research and find safe sources for research, conducted annually in libraries;
2. How many actions do they promote to encourage their use and reading in physical and digital media;
3. Availability of internet collections and ease of searching;

Streets, urbanism and means of transport

4. The city has a planned proposal to use space creatively for the various transport vehicles today;
5. The city's planned proposal organically integrates leisure spaces with industries, hotels, shopping centers, housing, other workspaces with transportation routes to access them;
6. Public transport vehicles do not use fossil fuels.
7. The city has a Traffic Department that uses an Artificial Intelligence system, which, as developed by the Chinese startup Didi (VILICIC; LOPES & CARNEIRO, 2019, p. 60), collects data to identify and correct bottlenecks in the city, transport system;

City Hall, public institutions and citizenship

8. The Government monitors communication on social networks by prohibiting the illegal use of personal data and the propagation of false information, to avoid undue influence on elections;

9. Government regulates, enforces and penalizes the use of illegal digital tools such as cyber attack, the use of robots, hacking⁹ and deepfake¹⁰;

10. The city has the diagnosis and mapping of its "Cultural Barriers to Communication" by neighborhoods and municipalities;

11. The City Government promotes teacher training for media and informational education in schools and in adult courses;

Health

12. Number and percentage of hospitals, clinics, networks and pharmaceutical industries, as well as other health institutions have preventive health information campaigns and offer safe information on medicines and health, including vaccination campaigns;

13. Number of health-focused startups in the city;

Culture, art, sport, tourism and leisure

14. Number and percentage of parks carry out communication campaigns focusing on accurate information on well-being and quality of life;

15. Number and percentage of cinemas and theaters associated with schools for student-produced films;

Education

16. Quantity and percentage of public and private schools have in their curriculum subjects related to the MIL approach;

17. Number and percentage of teachers who have received some kind of training or training in media and informational education in schools and in courses dedicated to adults;

Associations, unions, NGOs, socio-cultural projects and other non-traditional actors

18. Number and percentage of trade associations and trade unions articulate curriculum out of their spaces, using public and private spaces to discuss media and access to information;

19. Number and percentage of projects and people who have received some kind of MIL training or fake news coping;

Media

20. Number and percentage of communication, marketing agencies in the city run MIL campaigns and counter fake news;

21. Number and percentage of free and pay TV channels participate in MIL and anti *fake news* campaigns;

Artificial Intelligence, Startups and Digital Channels

⁹ Hacking activities that aim to compromise digital devices such as computers, smartphones and tablets and even entire networks.

¹⁰ Deepfake: technique that uses Artificial Intelligence to replace people's faces in fake videos

- 22. Number and percentage of technologies (Artificial Intelligence or AI systems, Virtual and Extended Reality) offered according to citizens' health, culture and education;
- 23. Number of organizations, software and applications dedicated to combating fake news in the city;
- 24. Automated availability of access to public information¹¹;

Safety

- 25. Monitoring of urban space linked to an alert and information system to prevent and warn the population, the occurrence of violence, floods, interdiction of public roads and other accidents and natural disasters;
- 26. Training of police officers and security area staff in MIL;

Environment and sustainability

- 27. Number and percentage of internet platforms owned by the city to discuss environmental issues;
- 28. Number of city-created applications designed to solve ecological problems;
- 29. Monitoring noise / air / water pollution, with dissemination of data, to combat problems;

Children, Youth, Elderly, Women, LGBTi, Black, Indigenous, Immigrant, Obese, and other vulnerable groups

- 30. Number of informal youth-created projects, groups and networks in the city;
- 31. Number and percentage of young leaders in leadership positions in government and city council;

Integration Metrics

- 32. Quantity and percentage of sustainable innovative solutions implemented by the city;
- 33. Quantity and percentage of sustainable innovative solutions born in the city, such as the use of Artificial Intelligence;

Artificial Intelligence (A.I.) is a multidisciplinary field of study involving philosophy, mathematics, economics, neuroscience, psychology, engineering, cybernetics and linguistics. A.I. is dedicated to developing computer systems that can make decisions and solve problems. At most, it can also help to understand how a human being thinks, but never multiply rational ability. It is also defined as "the branch of computer science that deals with the automation of intelligent behavior" (LUGER, 2004) or "the study of how to make computers do things that humans do better today" (RICH & Knight, 1991). The main purpose of these systems is to perform functions that, if a human being performed them, would be considered intelligent. It is a broad concept that receives as many definitions as it gives different meanings to intelligence (RUSSELL; NORVIG, 2013; COPPIN, 2010).

Applications for the use of artificial intelligence by algorithms are usually introduced in cities and everyday life in an intangible manner, and almost always in the function of providing facilities and

¹¹ Access Public Information, API: is a publicly available application programming interface that provides developers with programmatic access to a proprietary software application or Web service. APIs are sets of requirements that govern how an application can communicate and interact with another.

amenities for routine tasks such as those performed by digital assistants. However, global cultural and social problems are already projected in these technologies.

The UN-issued research report, *I blush if I could: closing gender divides in digital skills through education*, published in 2019, and published by the German Federal Ministry for Economic Cooperation and Development (BMZ), related to "Cultural Barriers to Communication", such as gender stereotypes, skills development, female participation, equal opportunities, among other topics; showed that the use of female voices in virtual assistants, standard in Artificial Intelligence - such as Microsoft with Cortana, Amazon with Alexa, Google with Google Assistant, and Apple with Siri - is increasing the belief that women exist only to help men to continue their tasks. That is, the Cultural Barrier of sexism is helping to consolidate women's subservience, and the gender gap in contemporary societies. This is just one example of the negative biases projected to scale in Artificial Intelligence systems and which need awareness through media literacy to be corrected.

This issue is contextualized by Saniye Gülser Corat, Director of gender equality at UNESCO: "The world needs to pay more attention to how, when and if AI technologies are gendered and, crucially, who differentiates them from gender" (2019). A positive example of this redirect is Google, which has changed its algorithm so that the word lesbian stops targeting pornographic sites. "We are aware that there are problems like this in many languages and we have developed algorithms to improve this search one after another", Reported Google's vice president of search engine quality, Pandu Nayak (S. MODA, 2019).

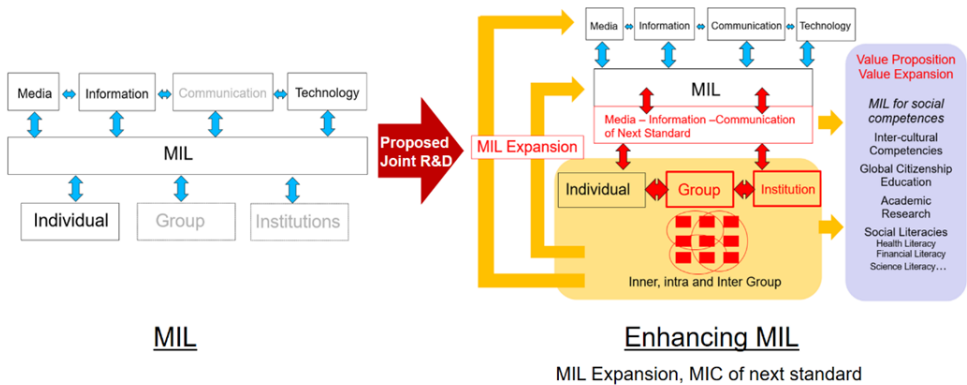
Discussing the dynamics of approaches and indicators of "Cultural Barriers to Communication" as catalysts for change in the algorithmic relationship on the web seems to be a prime factor for changes in the reality of everyday life. Equity and impartiality can be considered an initial progress to minimize those issues in decision making (CHIBÁS ORTIZ, 2019-a).

Therefore, it is important to consider that human interference should be evaluated to ensure that AI decision making is fair, ethical and impartial. Therefore, operational strategies should include details of data collection, processing and storage, as well as documents that report on the design and interpretation of algorithmic models. The use of regulatory processes for model analysis and validation would allow for validation between technique and content, projecting in collaboration significant changes for a better future.

From the systemic perspective of the algorithmic era and the search for regulation of these systems, the 20 modalities and indicators of the "Cultural Barriers to Communication" suggested by Felipe Chibás Ortiz (2019-a) can become a catalyst in the construction of more ethical, just societies that is inclusive and humane. One of the essential goals of MIL education is to help people gain the ability to identify biases and purposes behind Artificial Intelligence technologies and algorithms, and this knowledge is a facilitator for social conflict prevention actions.

The technological advances and other perspectives described above strengthen the argument for new theories of change to accelerate MIL development. Grizzle and Hamada (2019) prepared for UNESCO a proposed MIL social change theory called *MIL Expansion (MIL^x)*. MIL^x aims to improve the diffusion of MIL at the community, group, institutional, and individual levels to include most social groups by creating a framework. The table below summarizes the proposed MIL^x framework and how it connects to information, technologies, media, individuals, social groups, institutions and social competencies.

Figure 1: Media and Information Literacy Expansion



Source: Grizzle, A. (2018) and Masatoshi Hamada, Invited Researcher, University Paris 8, Saint-Denis, France

According to Grizzle and Hamada, MIL^x could: 1) Expanding citizens', audiences' and users' chances to self-actualize and participate in sustainable development through MIL Expansion, pursuing equality between minority groups and the majority or more dominant groups; 2) Informing and engaging at the local or community level and global simultaneously; 3) Sensitizing to and engagement of groups based on ethics, culture, community as well as age and gender; 4) Growing institutional take-up and diffusion on MIL within and without, leading to develop the MIL cities (cf. GRIZZLE, HAMADA, 2018).

INTERNATIONAL EXPERIENCES APPLYING ARTIFICIAL INTELLIGENCE AND OTHER TECHNOLOGIES WITH A MIL PROFILE

Finland's capital, Helsinki, is ranked as the 5th Intelligent City in the world by the Eden Institute positioned as potentially good example to apply the MIL Cities framework. The city found its way between technology and the participation of residents. An example is the internet platform where citizens can come up with ideas, react to projects, and tell their experiences with a technology put into practice. New information, research, and training centers in digital technology were also created (BASTLEN, 2018).

Aiming to embody abstract concepts, the city is conducting a major urban project on a 176-hectare area in the Finnish district of Kalasatama ("fishing port"), which is already considered one of the most advanced in Europe. According to city planner and environmentalist Anni Sinnemäki, the neighborhood was chosen as a territory of experimentation, a platform for innovation and cooperation for the city, economic agents and citizens. To meet expected population growth, residential apartments for 25,000 residents and offices for 10,000 workers are being built in the neighborhood.

The Finnish capital is facing a delicate equation, as the urban sprawl project must meet the goal set in 2017 of achieving carbon neutrality by 2035. Also according to Sinnemäki, in order to achieve climate goals, social and economic aspects will be considered, not just the technological ones (ALLIX, 2018).

Energy efficiency requirements are drastic, as new buildings must produce 30% of the energy they consume, and they must install photovoltaic plates on their roofs (BASTLEN, 2018).

All properties will be connected to a smart grid that will manage power generation and consumption. In addition, the new buildings will be connected to a heating and air conditioning system, which, using huge heat pumps, draws energy from the city's wastewater (ALLIX, 2018).

Kalasatama seeks to achieve in every way the ideal of a sustainable city. The neighborhood is served by subway lines and new lines are in the project. The city has an innovation department, called the Virium Forum, with 35 employees, where Veera Mustomem works. She explains that the goal is not just to save energy, but to focus on the human being, their needs, quality of life and to create a community spirit. The Forum is a public-private-population partnership, designed to support large groups, startups, facilitate experimentation, put them in touch with city services; but always including the citizens, who are the co-creators and testers of all innovations. There are about twenty pilot projects involving residents to test start-up proposals under real conditions, such as a platform for sharing electric cars and even food to avoid waste (ALLIX, 2018).

Future residents, organized in cooperatives, participate in the design of new building projects. Each block will have different types of apartments around gardens within the blocks that will be open to everyone without any kind of fence or wall. Located far from the historic center, the urban plan for Kalasatama will be of high population density, with a large shopping center and eight 27- to 30-story towers, as well as other lower buildings of various uses, such as homes, schools and libraries. The neighborhood already has 3,000 residents and an ultramodern medical center was opened last year. Thus, the city puts into practice its proposal to use technology to offer services that are integrated into everyday life, in a non-invasive way that does not require much learning from its users to enjoy them. Helsinki imposes itself as a model of intelligent solutions aimed at its inhabitants (BASTLEN, 2018).

Another example is in France, where four Artificial Intelligence institutes were inaugurated as part of the French government's national strategy to make the country a world leader in AI developments. This policy addresses the country's potential in the implementation of MIL Cities, in a context not only of technology, but of preserving democracy, equality and media education.

In the international scenario of education, the case of Estonia, a country that belonged to the former Soviet Union and now occupies the fifth position in the international education ranking, draws attention. The Estonian government has used media literacy as a priority development strategy, and despite the different circumstances, the successful methods used can be applied globally. The country established a plan that, from the Ministries of Education and Culture, involved universities for teacher training so that such training could be included in school curricula. The work also involved libraries and NGOs, active in content production and dissemination of media information knowledge. In December last year, the country adopted the European Union Action Plan on Disinformation, which outlines 10 concrete measures to combat disinformation, with the main objective of ensuring a free and fair environment for the European Parliament elections (CML, 2019).

RETHINKING THE CITY OF SÃO PAULO FROM THE MIL APPROACH

To understand the importance of media education, it should be remembered that according to a study by the Getúlio Vargas Foundation, São Paulo is the second most connected state to the Internet, with 48% of households with access to the world wide web, behind only the Federal District. The paulistano

also has the habit of accessing the internet by smart phone in public transport. There is also the "Free Wifi" project of the City of São Paulo that offers free internet access in 621 locations, such as schools, libraries, cultural centers and leisure spaces. In this context, it is worth asking what do São Paulo people do and what are they looking for on the internet? According to a study by Hello agency, seven out of ten Brazilians access social networks for information, although they consider them unreliable.

Although this is a worldwide phenomenon, there are some particularities in São Paulo that deserve to be analyzed. The first is that the main reason for choosing reading on social networks, among so many news and information sites available; This is mainly due to the free content offered, unlike the main Brazilian newspapers and magazines, whose news is accessible only to readers who pay for a subscription. The user of the networks also has the possibility of free publication, independent of editing and any journalistic or editorial criteria. Another major problem is the weakness or total lack of criticism and questioning of most of these individuals who receive this "information" and pass it on without any verification or confirmation of veracity. We are dealing with the so-called "post-truth": a term defined by the Oxford dictionary as "circumstances in which objective facts influence the formation of public opinion less than references to personal emotions and beliefs" (2018). Another worrying fact, according to a study by Midia Insight, is that for the reader, the person who shares a news story is more important than the one who produces it, or even if the article was written by the professional press (GARCIA, 2018). Possible solutions to these problems are to educate the citizen to decode what he reads and to counteract the truth with lies through the same tools.

We see then that with the advent of the internet, this enormous availability of information and knowledge did not positively reflect on the educational level of Brazilians; because the country is bitter to 63rd place in the international PISA ranking that compares education in 70 countries. Brazil has lost five positions since 2012 and is behind most Latin American countries such as Argentina (40th), Chile (44th) and Uruguay (49th).

In Brazil, the state of São Paulo in terms of education does not live up to its economic status, because despite being the richest state in the federation, it is in fourth position in the Basic Education Development Index (ESTADÃO, 2018). The big challenge is to put new technologies at the service of formation and human evolution.

SOME OF SÃO PAULO'S ADVANCES FROM THE PERSPECTIVE OF THE MIL CITIES METRICS

In the area of education, according to the UNESCO Conference that discussed the potentialities of Artificial Intelligence applied, knowledge-sharing platforms, driven by Artificial Intelligence, can deepen the understanding of learning, the improvement of teaching methods and in various areas related to a city.

In February of this year, the Advanced Institute of Artificial Intelligence (AI²) was inaugurated in São Paulo, which brings together professors from the Federal University of São Paulo (UNIFESP) and the Universidade Estadual Paulista (UNESP). The goal is to foster the confluence of interests and joint research between universities and the private sector. The Institute aims to provide a simple and efficient organizational structure to support researchers in their relationship with private enterprise, providing access to highly qualified talents in the areas of Artificial Intelligence, machine learning, robotics, among others (UNIFESP, /2019).

CHALLENGES FOR SAO PAULO

Thinking of the city of São Paulo in this new perspective arise some questions, questions, problems and challenges that must face the city to be able to enter this select group of cities MIL. Here are some of the challenges we consider most important in light of this approach. Are they:

- 1- Despite having applications and websites that allow tracking and monitoring the actions of candidates and elected politicians, there is no public body designed to supervise, curb and penalize the practice of fake News, in order to avoid its influence in the elections.
- 2- Media literacy is not part of school curricula. Public schools and cultural spaces have few inexpressive initiatives that link digital and educational actions outside their walls in order to use public and private spaces to discuss media and access to information;
- 3- The city does not have monitoring of the urban space linked to an alert and information system to prevent and warn the population, the occurrence of violence, floods, interdiction of public roads and other accidents and natural disasters;
- 4- The city does not have a chart that shows, by neighborhood and region, the Cultural Barriers to Communication.
5. Artificial Intelligence and new technologies are still a product offering and not a platform or system that benefits all layers of the population as a whole.
- 6- The construction, planning, implementation and use of plans, programs, open digital platforms and Artificial Intelligence is still far from being a participatory process in which citizens truly participate in a co-creative way.

PROPOSALS FOR SÃO PAULO USING AI AND OTHER NEW TECHNOLOGIES FROM THE PERSPECTIVE OF MIL CITIES

The report, presented on 27 November 2019 during an Open Forum entitled "Formulation of policy options for the development of Big Data and AI", recognizes artificial intelligence (AI) as an opportunity to achieve the Nations Sustainable Development Goals Nations (SDGs), through its contribution to the construction of inclusive knowledge societies. Published in the Internet Governance Forum (IGF), held in Berlin, it is the 12th edition of the UNESCO collection on freedom on the Internet, this document warns of the dangers and negative impacts that may be used with prejudice (that is, with cultural barriers by companies, startups, scientists and programmers who develop algorithms) of new technologies and their negative social impacts, as well as providing the basis for using Artificial Intelligence in an inclusive and sustainable way, describing the opportunities that these new tools offer when used with a focus on humans (UNESCO, 2019-a).

How to bring this type of strategy to Sao Paulo from the group of indicators and metrics outlined above and the challenges facing the city of São Paulo described above? Because of the limited space, we dare to suggest just a few proposals, which of course are not exhaustive.

1. Induce social networks to adopt monitoring mechanisms

We have found answers to the problem of fake news and deep fakes in successful practices, protocols, and experiences undertaken by other countries, which often match the proposals of the *MIL* City. It is clear that these problems must be addressed not only by governments, but by society and its citizens as a whole.

Regarding new media, in response to criticism received, Google and Facebook announced that they would take steps to prevent their platforms from being used to spread false news. Google has promised to introduce a new tool to its Google News service to distinguish rigorously checked articles and is funding data verification projects through the Google Digital News Initiative.

Facebook has teamed up with international news agencies to launch a feature that allows users to report potentially fake posts so that the network posts a comment questioning the veracity of the content with those posts. Last January, the platform launched the Facebook Journalism Project. Its main objective is to promote media literacy so that its users have the information they need to discern the truth of the information they read and share, increase their credibility and trust in journalism and better inform them. the population (GARCIA, 2018).

2. Counteract the lie with the truth

Another positive response has been the growth of so-called fact-checking with the emergence of websites and platforms dedicated to verifying the veracity of news, often linked to the press. In Brazil, the most relevant site is the "Fact or Fake" published by Portal G1 of Globo Emprise.

3. *MIL* Education

The main answer to the problem of misinformation advocated by *MIL* Cities is Informational Media Literacy. Schools and universities need to train public and private teachers, develop curricula, provide materials and support for integrating this content into school curricula. It is necessary to give instruments and repertoire to the new generations so that they can question what they read. Schools should also have libraries and workshops open to the community to disseminate media literacy. In this way, it will be possible to expand the capacity of understanding, analysis and evaluation of messages and information published in the media, from an ethical and civic perspective. Also the employees of public entities should receive this training via classroom and distance education. For example, police, subway and bus staff, among others, should receive this training.

4- Propose a co-creative communication between the city hall and the citizens

It is necessary for the city to have a co-creative communication strategy, the creation of citizens' committees, as well as a multidisciplinary team to answer and make available and organize data regarding the city's public services, processes and problems with open digital platforms, that allow innovation. In addition, it is necessary to invest in analytical tools, so that through Artificial Intelligence, it is possible to organize, aggregate and make available data that respond to the dynamics and complexity of the metropolis and place them at the service of the population.

5. Libraries as centers of media experimentation

To encourage media learning, state and local libraries could become centers for media experimentation, education, and literacy, from a perspective of bringing together and transforming education and learning, with learning about identifying fake news, and using different digital technologies such as virtual and augmented reality, programming, robotics, among others.

6. MIL-smart applications to monitor most vulnerable locations

Punctuating the most vulnerable locations and providing real-time public applications that enable local police action could reduce crime. Installing cameras with AI algorithms with facial recognition in more places on the outskirts would also be an alternative to crime inhibition.

7. Diagnose the 20 modalities of "Cultural Barriers to Communication" by region

The development of an application that diagnoses the 20 modalities of "Cultural Barriers to Communication" by region, indicating actions of respect for diversity, equity, preventive or mediating conflicts in a sustainable way with vulnerable groups, such as women, LGBTQ, blacks, indigenous people, obese people and short stature, children, young people, the elderly, immigrants, among others. This will allow applying specific MIL actions in each city, neighborhood, community.

Initiatives such as those exemplified above may encourage the scope of actions for the city of São Paulo to reach a level within the concepts of MIL Cities.

FINAL THOUGHTS: IMPORTANCE OF THE MIL CITIES PERSPECTIVE

Given the challenges facing today's cities, it is interesting to apply the MIL Cities framework which could be of great relevance to the protection of the democratic system by combating misinformation and promoting transparency, as well as ethics as an essential purpose for the purpose. to have a more humane conviction in today's societies and not just prioritize the technological look. The technology applied to municipal administration and the 13 indicators mentioned above could promote greater efficiency of public and private services provided, such as education, communication, culture, health, sanitation and public safety, among others. All this is to promote diversity, equity, ecology and citizenship in a sustainable manner and without losing sight of technological and economic growth. For this, it is very important to empower citizens and startups, and especially young people through the co-participation and co-creation of projects that apply in the city.

It must be said that the MIL framework can and should be used not only by large cities, but by all cities with this perspective.

Through Artificial Intelligence and other technologies such as blockchain, IoT, Big Data etc, It would be possible to monitor urban space and gather data that would be used for the elaboration of a long-term Master Plan to manage urban sprawl in a manner associated with the expansion of urban infrastructure. This could prevent and solve future problems.

The adoption of the concept of the MIL Cities could also promote joint action by the public and private sectors, academia and artists, as well as greater citizen participation in projects and public administration, with the aim of overcoming the human and technological challenges of the current cities.

References

- ADRION, Roseli, **Pesquisa aponta: sete em cada dez brasileiros se informam pelas redes sociais**, Olhar Digital, 01/02/2019. Available at: <https://olhardigital.com.br/noticia/pesquisa-aponta-sete-em-cada-dez-brasileiros-se-informam-pelas-redes-sociais/82274>. Access: 04 set. 2019.
- AGRELA, Lucas, **Inteligência Artificial começa a chegar a segurança pública**, Exame, São Paulo, 10/07/2019.
- ALARCÃO, Isabel, **Professores Reflexivos em uma Escola Reflexiva**, São Paulo: Cortez, 2011.
- ALLIX, Gregoire, **A Helsinki, la smart city à hauteur de citoyen**, Le Monde, Paris, 06/07/2018. Available at: https://www.lemonde.fr/smart-cities/article/2018/07/06/a-helsinki-la-smart-city-a-hauteur-de-citoyen_5327169_4811534.html. Access: em 15 set. 2019.
- ASSOCIAÇÃO, Cidade Escola Aprendiz, **Conceito: o que é uma Cidade Educadora?** Disponível em: <https://cidadeseducadoras.org.br/conceito/>. Acesso em: 30 de jul de 2019.
- BASTLEN, Olivennes, **Une smart city à l'écoute des citoyens**, Les smart grids, 26/07/2018. Available at: <https://les-smartgrids.fr/helsinki-smart-city-1-2-realisations/>. Access 15 jul. 2019.
- BAUMAN, Zygmunt. **/Ética Pós-Moderna**. São Paulo: Paulus, 2016.
- BISWAS, Kamashi/VALLIPURAM, M., Securing Smart Cities Using Blockchain Technology, XIV IEE International Conference on Smart City, dez. 2016. Available at: https://www.researchgate.net/publication/311716550_Securing_Smart_Cities_Using_Blockchain_Technology. Access: 30 jul.2019
- CACCIARI, Massimo, **A Cidade**, Barcelona: Gustavo Gili, 2009
- CARRILLO, F. J. CARRILLO, F. J. (Ed.). **Knowledge cities: Approaches, experiences and perspectives**. Oxford: Elsevier, 2006. Available at: <https://www.globalspec.com/reference/29520/203279/introduction-the-century-of-knowledge-cities>. Access: 30. Jul. 2019.
- CHIBÁS ORTIZ, Felipe. **Relatório de pesquisa: Indicadores e Métricas para construir as Cidades MIL**, CEACOM – Universidade de São Paulo, São Paulo, 2019-a.
- CHIBÁS ORTIZ, Felipe. **MIL Cities for Cultural Changes and Creative Jump: Challenges of Sao Paulo**, In: *World Cities Day*, UNESCO, Paris, 2019-b.
- CHIBAS, Felipe Ortiz, YANAZE, Mitsuru. **Marketing, Comunicação, Tecnologia & Inovação nas Cidades MIL**. São Paulo: ECA USP, 2019.
- CML, Center of Media Literacy, **Media Literacy in Policy: An Expanding Arena**, Conexions, nº 112, junho 2019. Available at: <https://www.medialit.org/sites/default/files/connections/Media%20Literacy%20June%202019.pdf>. Access: 15 jul. 2019.
- I CONGRESSO Internacional das Cidades Educadoras, **Carta das Cidades Educadoras**, Barcelona, novembro 1990. Available at: <http://www.edcities.org/rede-portuguesa/wp-content/uploads/sites/12/2018/09/Carta-das-cidades-educadoras.pdf>. Access: 30 jul. 2019.
- COPPIN, Ben, **Artificial Intelligence Illuminated**. New England: Jones & Bartlett Learning, 2004.
- DEPINÉ, Agatha, **O que são cidades criativas?**, Revista Via, Universidade Federal de Santa Catarina, 21/02/2018. Available at: <http://via.ufsc.br/sao-cidades-criativas/>. Santa Catarina, 2018. Access: 30. Jul. 2019.

- FACHINELLI, Ana Cristina/ MONTAÑA, Paulo/RIZZON, Fernanda/SILVA, Edson Fontana/ZANOTTO, Mayara Pires, **O desenvolvimento baseado em conhecimento no contexto das cidades: uma análise do caso de Monterrey**, Researchgate, fevereiro 2019. Available at: https://www.researchgate.net/publication/331419439_O_Desenvolvimento_Baseado_em_Conhecimento_no_Contexto_das_Cidades_Uma_Analise_do_Caso_de_Monterrey. Access: 30 jul.2019.
- FERREIRA, Fábio, **Cidades globais, do conhecimento, criativas ou technopolis: um olhar sobre Austin e Salvador**, *Agencia Iberoamericana para la Difusión de la Ciencia y la Tecnología*, Campinas, 25/02/2011. Available at: www.dicyt.com/noticia/cidades-globais-do-conhecimento-criativas-ou-technopolis-um-olhar-sobre-austin-e-salvador. Access 30 jul. 2019.
- FERREIRA, Victor Moura Soares, **A Rede de Cidades Criativas da Unesco: uma perspectiva das cidades brasileiras**, Goiânia: Faculdade de Artes Visuais (FAV)Universidade Federal de Goiás (Dissertação Mestrado), 2017.
- FRANÇA anuncia lançamento de quatro Institutos Interdisciplinares de Inteligência Artificial, Campus France. Available at: : <https://www.brasil.campusfrance.org/franca-anuncia-lancamento-de-quatro-institutos-interdisciplinares-de-inteligencia-artificial>. Access: 19 ago.2019.
- GARCIA, Nuria Ferandes, **Fake News: uma oportunidade para a educação midiática**, Nueva Sociedad – Democracia y política en América Latina, julho de 2018. Available at: <https://nuso.org/articulo/fake-news-uma-oportunidade-para-alfabetizacao-midiatica/>.
- GRIZZLE, Alton, En listing media and information literacy for gender e quality and women's empowerment. In Montiel, VA., *Media and Gender: A Scholarly Agenda for the Global Alliance on Media and Gender*. UNESCO, Paris, 2014a.
- Grizzle, Alton, MIL, Intercultural Dialogue and Global Citizenship (Academic Introduction). In Culver, S. & Kerr, P. *Global citizenship in a digital world*. International Clearinghouse on Children, Youth and Media, NORDICOM, University of Gothenburg, Sweden, 2014b.
- Grizzle, Alton, Assessing Citizens' Responses to Media and Information Literacy Competencies through an online course: An Empirical Study and Critical Comparative Analysis of Experts' Views. Doctoral Dissertation. ISBN: 9788449084775: Available at: <http://hdl.handle.net/10803/666860>. Tesis Doctorals en Xarxa, 2018 (TDX). Autonomous University of Barcelona, Spain.
- Grizzle, Alton and Hamada, Masatoshi, Media and Information Literacy Expansion (MILx): Reaching Citizens with MIL and other Social Competencies. In Carlsson, U. (2019). Understanding Media and Information Literacy (MIL) in the Digital Age. Department of Journalism, Media and Communication (JMG). University of Gothenburg, Sweden, 2019.
- KOBAYASHI, Andrea Regina Kaneko/ KNISS, Cláudia Terezinha/ SERRA, Fernando Antonio Ribeiro/ FERRAZ, Renato Ribeiro Nogueira/ RUIZ, Mauro Silva, **Cidades inteligentes e sustentáveis: estudo bibliométrico e de informações patentárias**. International Journal of Innovation: IJI Journal, 2017, Vol.5(1), pp.77-96 [Periódico revisado por pares].
- KOSKENLAAKSO, Leena, **Finlandia aproveita ao máximo a Inteligência Artificial**, Thisisfinland. Available at: <https://finland.fi/pt/negocios-amp-inovacao/finlandia-aproveita-ao-maximo-a-inteligencia-artificial/>. Access: 17 ago.2019
- INNOVATION CITIES. Innovation cities™ index 2018: global. 2018. Available at: <https://www.innovation-cities.com/innovation-cities-index-2018-global/13935/>. Access 30. Jul. 2019.

INSTITUTO de Inteligência Artificial reúne especialistas de grandes universidades, Portal do Governo, Governo do Estado de São Paulo, São Paulo, 10/01/2019. Available at:

<http://www.saopaulo.sp.gov.br/spnoticias/instituto-de-inteligencia-artificial-reune-especialistas-de-grandes-universidades/>. Access: 13 ago. 2019.

KOREA, Plannig a blockchain city, **Connectivity of smart city – the smart bridge and blockchain city**. Marcus Evans smart cities conference. October 26, 2017, Seoul. Available at:

<<http://planningkorea.com/portfolio/blockchain-city/>>. Access: 30.jul. 2019.

LIVINGSTONE, Sonia; DAS. Ranjana. **Media, Communicaion and Information Technologies inthe European Family**. (2010) Available at:

http://eprints.lse.ac.uk/29788/1/EF8_LSE_MediaFamily_Education.pdf . Access: 08 dez.2019.

MAGNUS, Tiago, **Tudo que você precisa saber sobre o que é blockchain e como funciona**, Transformação digital, dezembro, 2017. Available at: <https://transformacaodigital.com/o-que-e-blockchain/>. Access: 30. Jul.2019.

O que é uma Cidade Inteligente?, FGV Projetos, Fundação Getúlio Vargas. Disponível em:

<https://fgvprojetos.fgv.br/noticias/o-que-e-uma-cidade-inteligente>. Acesso em: 30 jul.2019.

ONU-BR NAÇÕES UNIDAS BRASIL, **Conheça os novos 17 objetivos de desenvolvimento sustentável da ONU**. Available at: <https://nacoesunidas.org/conheca-os-novos-17-objetivos-de-desenvolvimento-sustentavel-da-onu/>. Access: 06 jun.2018

ORTIZ, Fabíola, **Distrito Federal, São Paulo e Rio de Janeiro são os estados mais conectados a internet diz FGV**, Uol, 16/05/2012. Available at:

<https://noticias.uol.com.br/tecnologia/noticias/redacao/2012/05/16/distrito-federal-sao-paulo-e-rio-de-janeiro-sao-os-estados-mais-conectados-a-internet-diz-fgv.htm>. Access: 06 jun.2018

SETTON, Maria da Graça Jacinto, **Processos de Socialização, Práticas de Cultura e Legitimidade Cultural**, Unesp, 2010. Available at:

<https://periodicos.fclar.unesp.br/estudos/article/download/2549/2169>. Access: 20 maio.2018

REIS, Ana Carla Fonseca, **Cidades Criativas: Análise de um conceito em formação e da pertinência de sua aplicação à Cidade de São Paulo**. Tese de Doutorado, Faculdade de Arquitetura e Urbanismo da Universidade de São Paulo. São Paulo, 2011.

REPRESENTAÇÃO da UNESCO no Brasil, **Conferência discute as potencialidades da Inteligência Artificial na educação**, 22/03/2019. Available at: http://www.unesco.org/new/pt/brasil/ia/about-this-office/single-%20view/news/conference_discusses_potentialities_of_artificial_inteligenc/. ACESS: 07 ago.2019.

100 RESILIENT cities, **What is Urban Resilience**, 2019. Available at:

<<http://100resilientcities.org/resources/#section-1>. Access: 30/jul de 2019."c

ROSA, Natalie, **Smart City: o uso do blockchain no desenvolvimento de cidades inteligentes**.

Canal Tech, 02 de março de 2018. Available at: <https://canaltech.com.br/eventos/smart-city-o-uso-do-blockchain-no-desenvolvimento-de-cidades-inteligentes-109218/>. Access: 30. Jul.2019.

RUSSELL, S.; NORVIG, P., **Artificial Intelligence: A Modern Approach**, New Jersey: Prentice Hall, 2013.

S. MODA, **Google conserta seu algoritmo para que a palavra 'lésbica' não seja mais sinônimo de pornô**, El País, Madrid, 08/07/2019. Available at:

https://brasil.elpais.com/brasil/2019/08/08/tecnologia/1565280236_871191.html. Access: 19 ago.2019.

TELLUS, Grupo, **Inovation Park: uma Cidade Inteligente com blockchain e no deserto**, Grupo Tellus Inovação e Design em Serviços Públicos, São Paulo. Disponível em:

<https://tellus.org.br/instituto/cidade-inteligente-blockchain-deserto>. Acesso em: 30 jul.2019.

TORNERO, J.M Pérez. VARIS, Tapio. **Media Literacy and new HuManism** (2010). Available at:

https://www.researchgate.net/profile/Jose_Manuel_Perez_Tornero/publication/228509049_Media_Literacy_and_New_Humanism/links/56d8326f08aebabdb40772b8.pdf

Access: 04 dez.2019

UNESCO, **Global Media and Information Literacy (MIL) Week 2017: UNESCO calls for papers and presentation**. Available at: <https://en.unesco.org/news/global-media-and-information-literacy-mil-week-2017-unesco-calls-papers-and-presentations?language=fr>. Access: 29. ago.2017

_____. **Alfabetização midiática e informacional**. Available at:

<https://en.unesco.org/themes/media-and-information-literacy> Access: 20. mai.2018.

_____. **Mil Cities**. Paris. Available at: <https://en.unesco.org/globalmilweek2018/milcity>. Access: 20. mai.2018

_____. **Alfabetização midiática e informacional (AMI)**. Available at:

<http://www.unesco.org/new/pt/brasil/communication-and-information/digital-transformation-and-innovation/media-and-information-literacy/>. Access: 30. Jul.2019."

_____. **I'd blush if I could: closing gender divides in digital skills through education**.

Available at: <https://unesdoc.unesco.org/ark:/48223/pf0000367416>, Access: 14.jun.2019.

UNESCO **disponibiliza sobre media e information literacy**, São Paulo: CCA ECA USP, Departamento

de Comunicações e Artes. Available at: <http://www.cca.eca.usp.br/content/unesco-disponibiliza-livro-sobre-media-and-information-literacy?page=4>. Access 30 jul.2019.

UNIFESP, **Docentes da Unifesp integram Instituto Avançado de Inteligência Artificial**, Unifesp,

Comunicação, São Paulo, 25/02/2019. **Available at:** <https://www.unifesp.br/reitoria/dci/noticias-antiores-dci/item/3748-docentes-da-unifesp-integram-instituto-avancado-de-inteligencia-artificia>.

Access: 25 out. 2019.

VERDÉLIO, Andréia, **Unesco: Brasil não vê educação como instrumento de qualificação de vida**,

Agência Brasil, EBC, Brasília, 05/09/2016. **Available at:**

<http://agenciabrasil.ebc.com.br/educacao/noticia/2016-09/unesco-brasil-nao-ve-educacao-como-instrumento-de-qualificacao-de-vida>. Access 28 mai. 2018.

VILIC, Filipe; LOPES, André; CARNEIRO; Felipe, **A China Rumo ao Topo**, Veja, São Paulo, 06/10/2019.

VINCENT, James, **The UK says it can't lead on AI spending, so will have to lead on AI ethics instead**, The Verge, Vox Media, 16/04/2018. Access: 17 ago.2019.

WATSON, Bruce, **What makes a city resilient?**, The Guardian, Londres, 27/01/2014.

Available at: <https://www.theguardian.com/cities/2014/jan/27/what-makes-a-city-resilient>. Access: 30 jul.2019.

Chapter 13.4

MIL Cities: a look at Cartoons

Dorinho Bastos

Dorinho Bastos

Heliodoro Bastos has a degree in Architecture from Universidade Braz Cubas (1974), Master's (1984) and Doctorate (1992) and Livre Teaching (2015) in Communication Sciences from the School of Communications and Arts of the University of São Paulo. Since 1976 he has been a professor in the Advertising Course at the School of Communications and Arts / ECA-USP. He is a professor in the post-graduate courses GESTCORP / ECA-USP, Communication and Marketing Management / ECA-USP, at FIA / Fundação Instituto de Administração, INPG / Instituto Nacional de Pós Graduação and SUSTENTARE / Escola de Negócios. In addition to the academic area, he is a managing partner of the studio Dorinho Bastos Comunicação & Design and cartoonist, with works published in various communication vehicles, mainly those related to the Advertising and Marketing market.

***"In the face of humor, we can always have the reaction of saying:
Hey! ... Isn't that right?"***

Ziraldo

The experience of proposing a chapter in a non-verbal language, with a set of cartoons for the previous work *Marketing Communication and Technology in the MIL Cities*, published in 2019, also organized by friends Mitsuru Yanaze and Felipe Chibás, was very interesting.

From a graphic point of view, the illustration / image breaks the rigidity of the text's layout, generating movement and lightness to the academic work.

Thus, as I defended the language of the cartoon in the previous work, and raised the possibility of proposing the rupture of something recurring in the literary work, which is the verbal expression, generating a chapter that is supposedly "disruptive", I present here another set of cartoons inspired by this model innovative city, the MIL Cities, proposed by UNESCO.

In her Master's Dissertation, at the Pontifical Catholic University of São Paulo, in 2011, with the title *The Production of the Senses of Humor in the Cartoons of Maitena: A Linguistic-Discursive Study*, Marisa da Costa defines the cartoon with great quality:

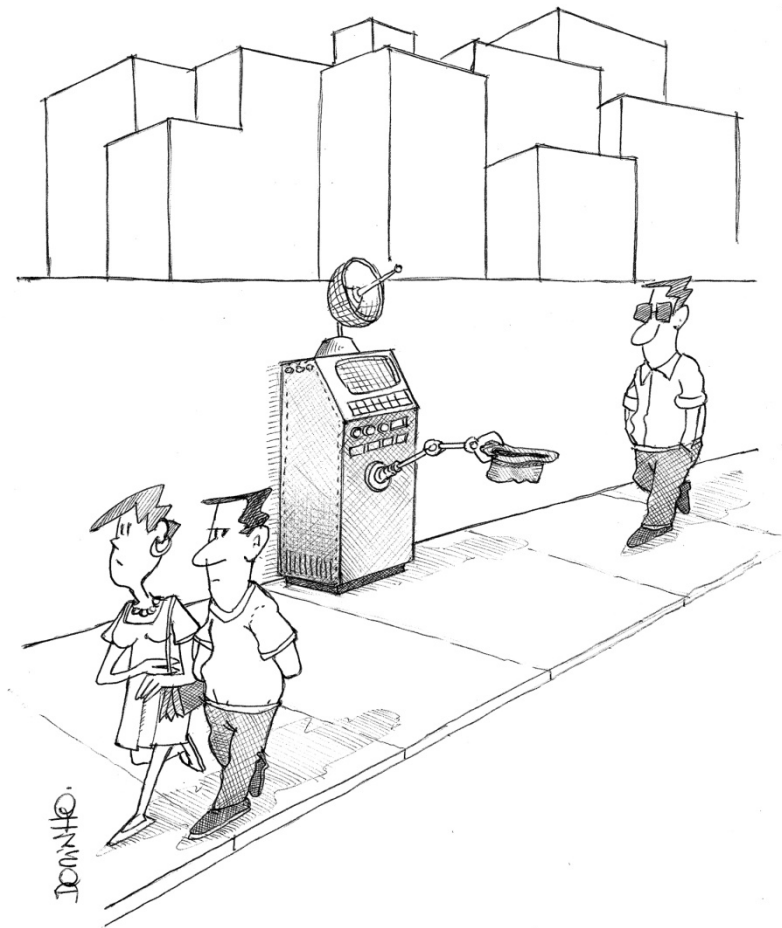
"Cartoons are a discursive genre made up of verbal and non-verbal text, whose main characteristic is timelessness and thematic universality. And whose communicative purpose is to provoke a social reflection with a certain degree of humor".

And reflection is exactly what I propose here. For, just as I am excited about the concepts and future possibilities of our living spaces, which we call "cities", I am concerned about a possible loss of human sensitivity in these new spaces.

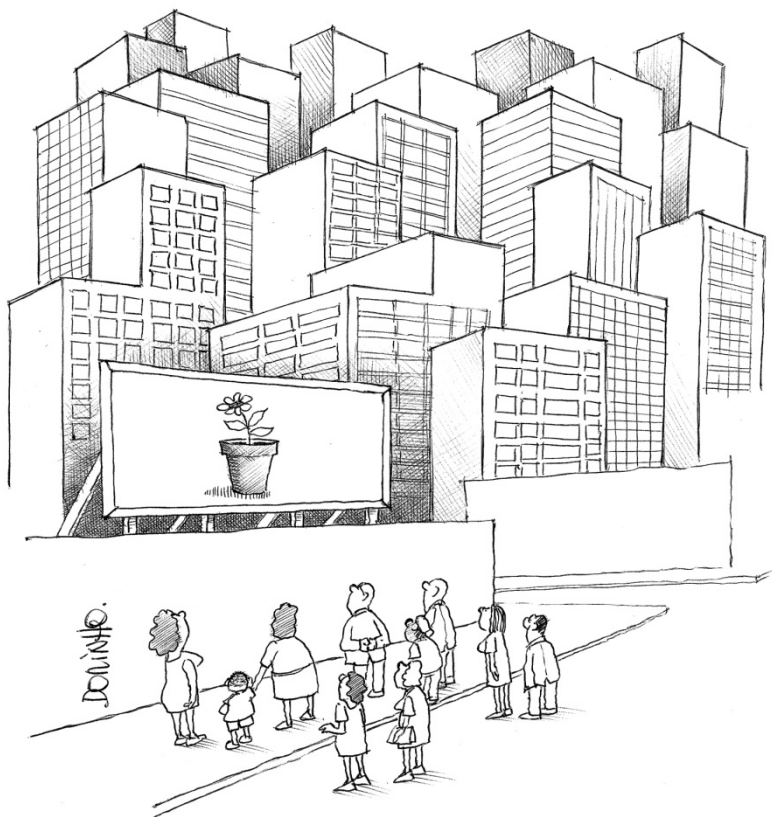
So, who knows some of the following cartoons may lead the reader to reflect:

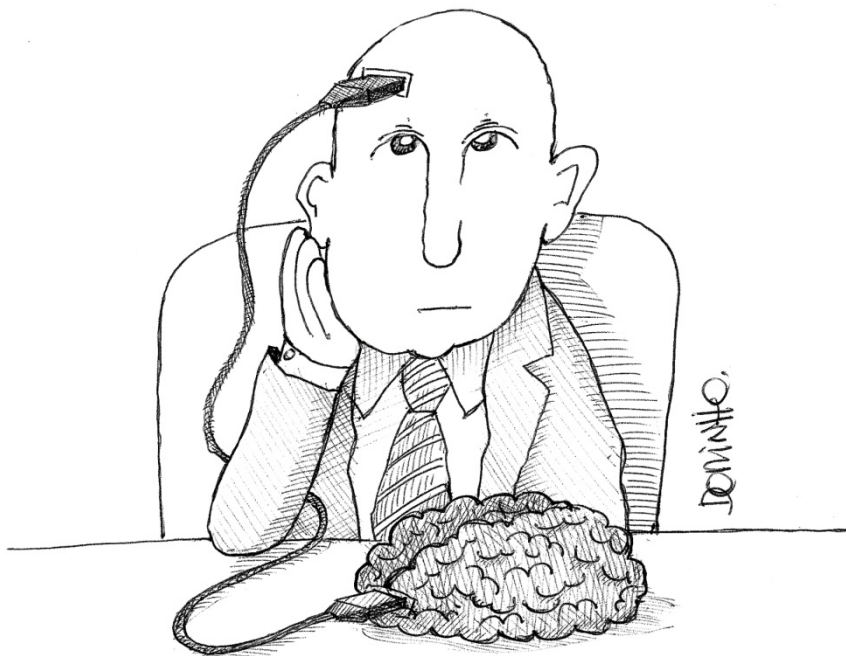
Hey! ... Isn't that right?



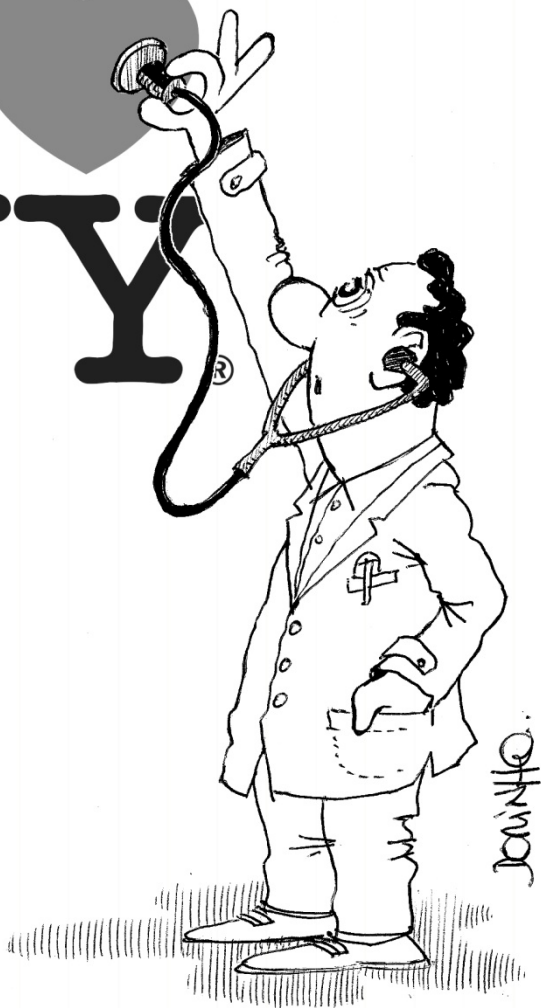


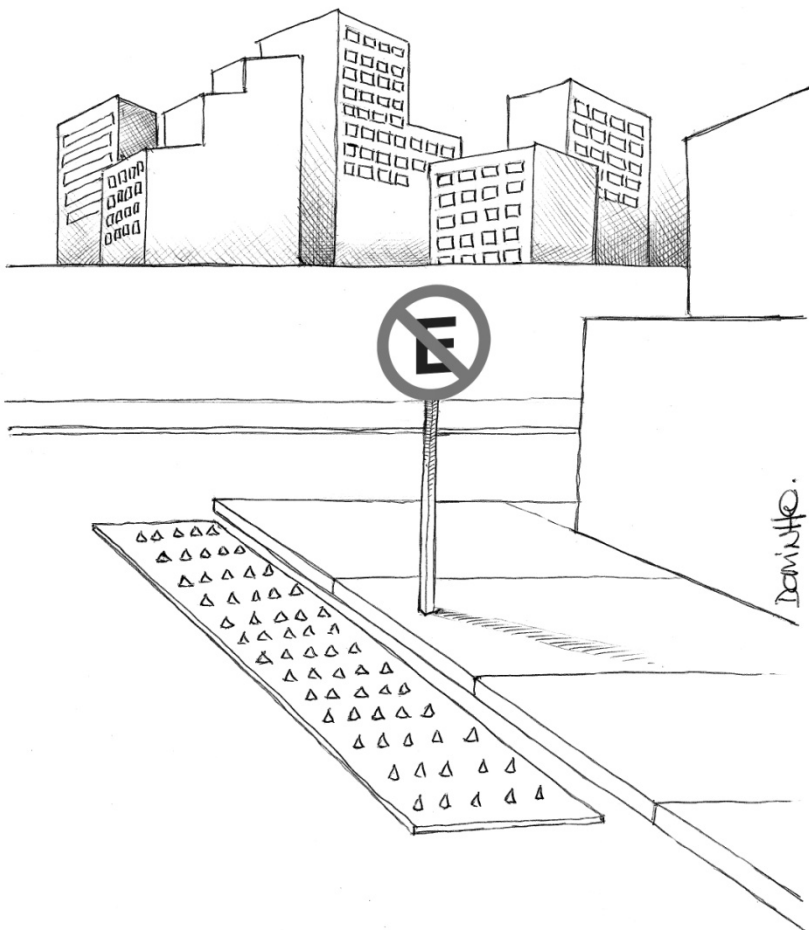


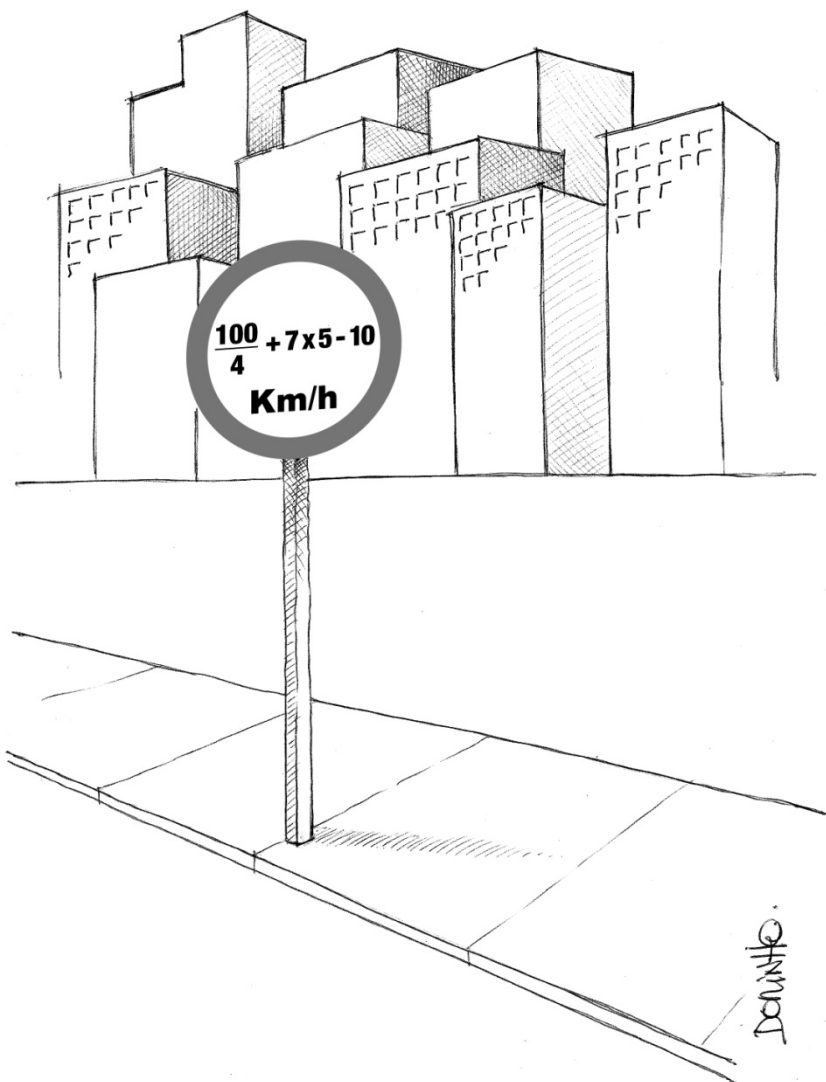


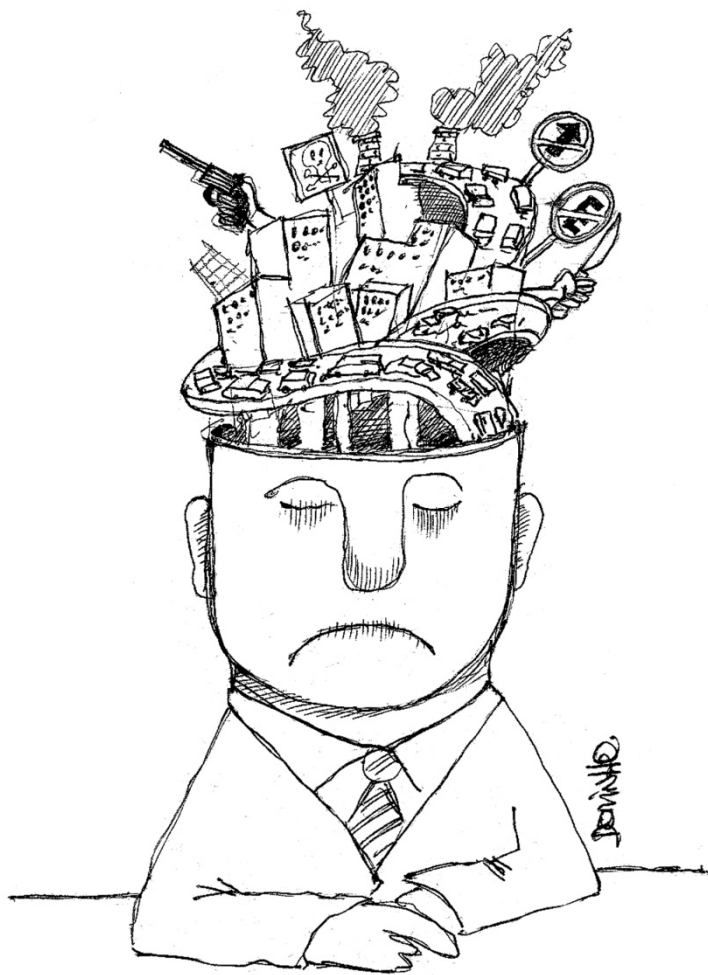


I  NY



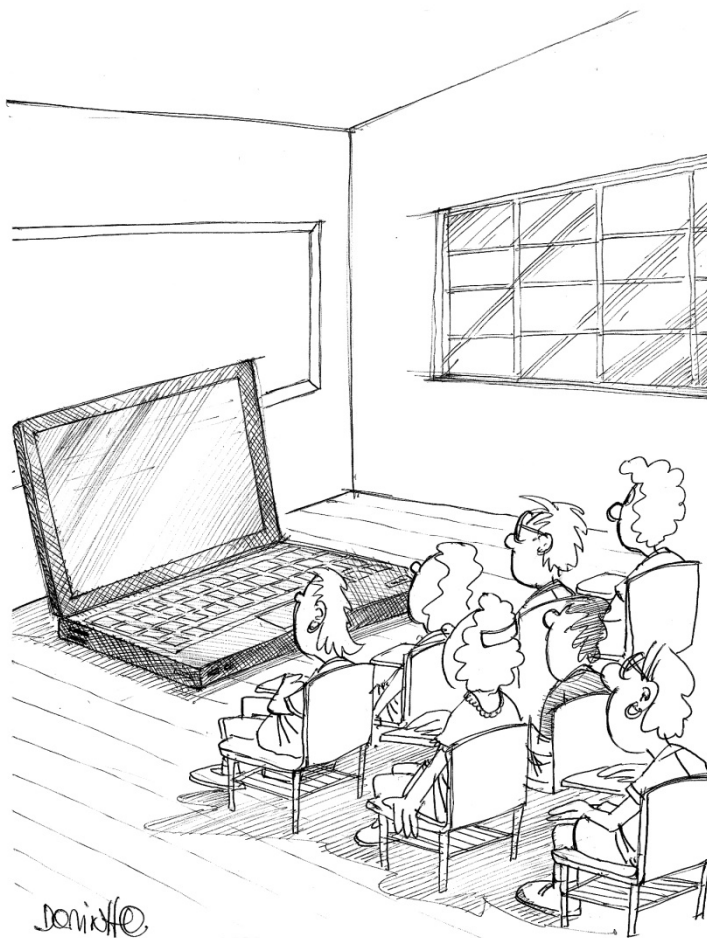


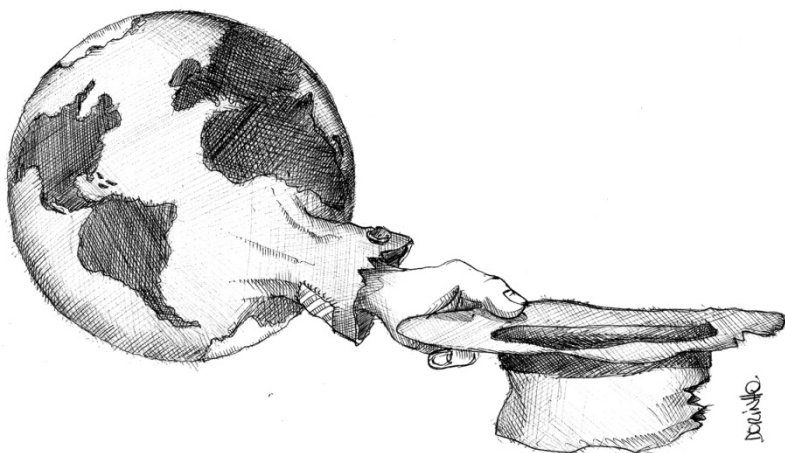




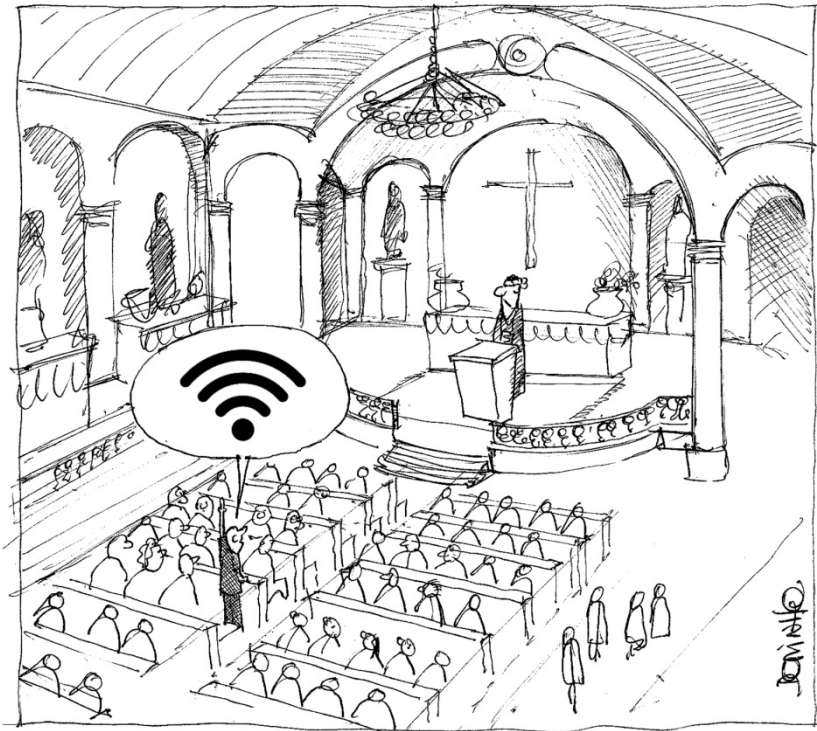
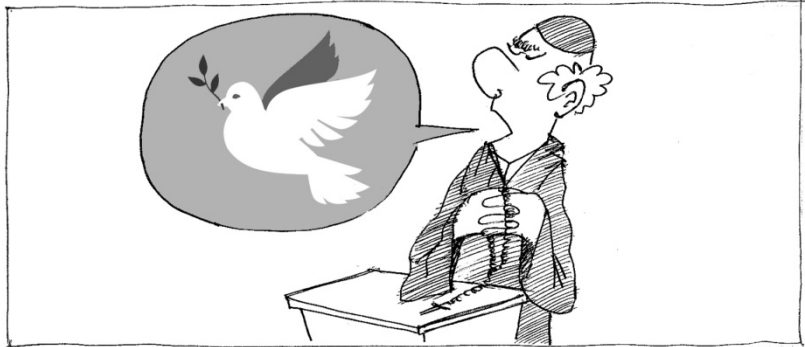






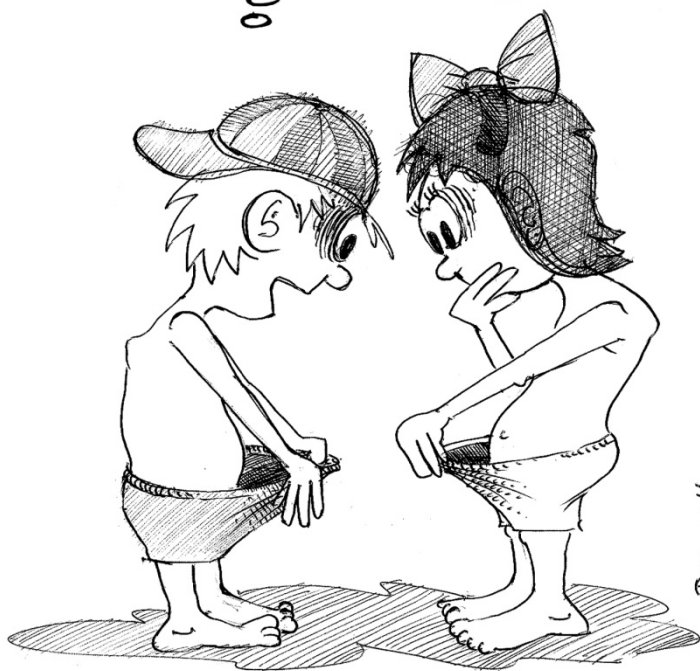






© 2010





Denitto.