





# **Graphic Design for Emergency Situations**

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## Keywords

Graphic Design · Design for Social Causes Information Design · Science Communication Design for Health · Data Visualization

## **ABSTRACT + IMAGES**

"Graphic design is unlikely to save lives in any direct way – it is more likely to enable actions that do. (...)" *Eric Kindel* <sup>1</sup>

The "First Things First" manifesto, originally published in 1964<sup>2</sup> (Garland, 1964) and updated in 2000<sup>3</sup> and 2020<sup>4</sup>, calls upon social responsibility from communication designers. Socially responsible design can positively engage and transform the lives of communities; it changes social behaviour, increases empathy and a sense of belonging to a community. These virtues grow in importance when it is necessary to take measures with high impact on social life on a global scale.

There is a history of excellence in communication design campaigns aimed at health education and awareness, such as Abram Games' posters during World War II, Marie Neurath's leprosy campaign in 1955, AIDS campaigns since the 1980s, campaigns to combat the Ebola virus in Africa in 2014 and anti-smoking campaigns, more recently. Humanity has faced several pandemic crises, some geographically confined, such as Malaria, but many others with broad global resonance, such as the HIV and SARS-CoV-2 The high number of deaths and the geographical and social transversality of the Covid-19 disease justified measures akin to war scenarios. In the first months – Europe only became aware of the severity of the disease in March 2020 – it was relatively easy to impose restrictive confinement measures. With the second wave, in the winter of 2020, it was more difficult to maintain them. The pandemic also exposed the most vulnerable social sectors: precarious workers, people with serious chronic diseases, the elderly, the poor. The complexity of the situation on a global scale, with several national governments in denial (or contributing to misinformation) and the proliferation of fake news, have made science communication essential, for the sake of the physical, mental and economic health of societies. Posters, posts, advertisements, signage and wayfinding systems or infographics educated, informed, disciplined or tried to persuade a huge majority. These materials circulated in print and digital media, given their ubiquity. WHO (World Health Organisation) early recognised the role of communication design: in April 2020 it launched a global call for designers to help halt the spread of Covid-19<sup>5</sup>. Unfortunately, experts predict new pandemic situations with global impact. Pollution (air, soil,

### Partner Institutions CIAUD / FAUL

### Expected Future Partner Institutions

Ministério da Saúde, Direção-Geral de Saúde (Portugal) Santa Casa da Misericórdia de Lisboa

## **OBJECTIVES**

Compile and catalogue graphic design objects produced within Covid-19 in Portugal and abroad.

Separate the collected documentation according to the function, support and nature of the graphic object.

Critically analyse the material using an analysis model designed for the purpose.

To produce framework texts about communication design at the service of social causes, especially focused on health and emergency situations. To produce a set of recommendations and good practices in communication design for emergency or catastrophic situations, local or global.

To strengthen the relationship between science and communication design, highlighting the need to use scientifically robust information, on the one hand, and to communicate it in a way that is accurate and accessible to the recipients, on the other.

Strengthen the relationship between politics and design, highlighting communication as a key element in the effectiveness of power decisions and alerting to the need for communication design to take a more active part in decision-making.

To actively contribute to the effectiveness of preventive actions and not only of containment or combat, considering the Sustainable Development Goals.

epidemics. The dissemination of information with scientific support, communicated in a clear, simple and understandable way, and which is socially and culturally transversal – obsoleting ideological drifts of control and instrumentalization of the discourse – is crucial to contain the disease, alongside, of course, scientific research (which has made it possible to develop medicines and vaccines), measures to strengthen the training of professionals and the upgrading of health buildings and equipment.

At the beginning of the current Covid-19 pandemic crisis, the lack of knowledge of the disease and, consequently, some delay in recommending the measures to be adopted, the inconsistencies in the discourse of experts, and the high economic impact of confinement measures, made it difficult for states to make decisions. The communication of protective measures – such as the use of masks, frequent handwashing, physical distance – and combating measures – such as the identification of symptoms and what to do in case of positive testing – made communication, not only written and verbal, an urgent necessity. And because to lead and get populations to react it is necessary not only to give orders, but also instructions, it was necessary to explain scientific knowledge about the virus and the disease and about the evolution of the pandemic in the world. Flattening the curve became a world slogan, and more recently vaccination an imperative need.

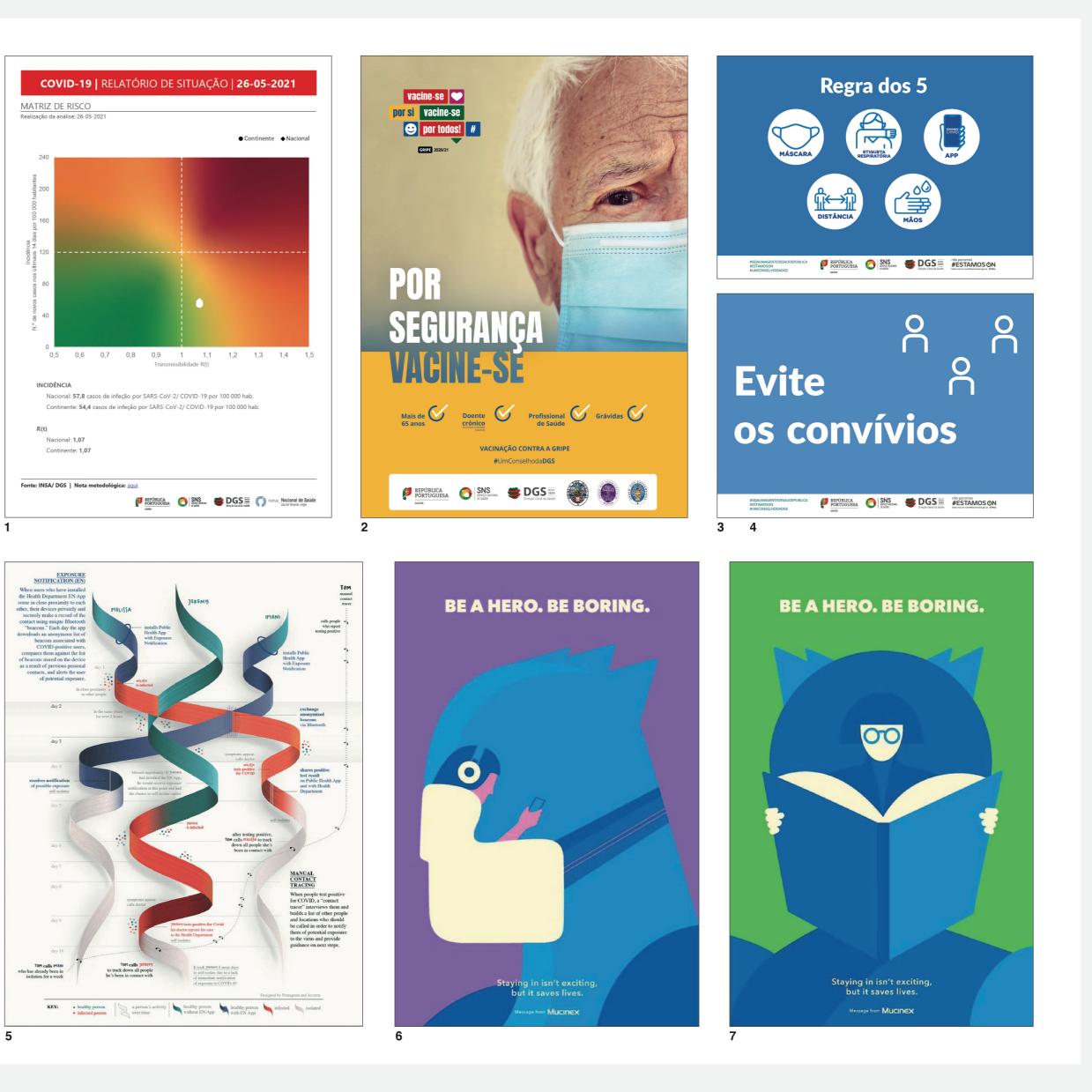
rivers and oceans), global warming and climate change will lead to droughts, floods, forest fires and other natural disasters. Such calamities may trigger or aggravate armed conflicts, trigger mass migrations, in short, situations of social emergency, with impacts on the most diverse aspects of life on a planetary scale.

Our project is rooted in this scientifically based diagnosis and takes into account the Sustainable Development Goals that are applicable. We intend to collect the materials produced under Covid-19 in Portugal and in the EU, in the various media, catalogue them, build a repository that invites reflection and the development of recommendations and good practices to be applied in situations of global emergency. This knowledge will be disseminated in a streaming communication, two scientific articles with Scopus indexation and an e-book.

<sup>1</sup> ROBERTS, Lucienne, *What Role Does Design Play in a Public Health Crisis?* [online]. 2020. Consult. in 20/05/2021. Available on www: <https://eyeondesign.aiga.org/what-role-does-design-play-in-a-public-health-crisis/>.
<sup>2</sup> *First Things First*. [online]. Ed. Ken Garland, 1964. Consult. in 15/05/2021. Available on www: <https://web.archive.org/web/20070701150225/http://www.kengarland.co.uk/KG%20published%20writing/first %20things%20first/index.html>.
<sup>3</sup> *First Things First Manifesto 2000*. [online]. 1999. Consult. in 20/05/2021. Available on

www: <http://www.eyemagazine.com/feature/article/first-things-first-manifesto-2000>.

<sup>4</sup> First Things First A Manifesto – 2020 Edition. [online]. Consult. in 15/05/2021. Available on www: <https://www.firstthingsfirst2020.org/>.
<sup>5</sup> United Nations Global Call Out to Creatives – help stop the spread of COVID-19. [online]. 2020. Consult. in 15/05/2021. Available on www: <https://www.talenthouse.com/i/united-nations-global-call-out-to-creatives-help-stop-the-spread-of-covid-19>.



## BIBLIOGRAPHIC REFERENCES

- CALORI, Chris, VANDEN-EYNDEN, David, Signage and Wayfinding Design: A Complete Guide to Creating Environmental Graphic Design. Hoboken, New Jersey: Wiley, 2015.
- ROBERTS, Lucienne, What Role Does Design Play in a Public Health Crisis? [online]. 2020. Consult. in 20/05/2021. Available on www:
  <a href="https://eyeondesign.aiga.org/what-role-does-design-play-in-a-public-health-crisis/">https://eyeondesign.aiga.org/what-role-does-design-play-in-a-public-health-crisis/</a>>.
- TUFTE, Edward R., *The Visual Display of Quantitative Information*. Cheshire, Connecticut: Graphis Press, 2007 [original publication 2001].
- TZEKLEVES, Emmanuel; COOPER, Rachel (eds.), *Design for Health.* London: Routledge, 2017.
- WRIGHT, Rebecca, ROBERTS, Lucienne, SCHRAUWEN, Sarah (eds.), *Can Graphic Design Save Your Life?* London: GraphicDesign, 2017.

 Covid-19 risk matrix, Portugal. Source: https://covid19.min-saude.pt/wp-content/uploads/2021/05/450\_DGS\_boletim\_20210526.pdf
Poster calling for Covid-19 vaccination, Portugal. Source: https://www.dgs.pt/ficheiros-de-upload-2013/gripe-2020-cartaz-lares-pdf.aspx
Infographics with rules against Covid-19 propagation.
Infographics with rules against Covid-19 propagation.

Source: https://www.sns.gov.pt/wp-content/uploads/2020/11/AF\_CARTAZ\_A3\_420-x-297\_CONVIVIOS.pdf https://www.sns.gov.pt/wp-content/uploads/2020/11/AF\_CARTAZ\_A3\_420-x-297\_REGRADOS5.pdf **5.** Infographics about contact tracing in combating Covid-19. Source: https://www.pentagram.com/work/covid-19-technology-task-force

6 | 7. Poster for Mucinex campaign "Be a Hero. Be Boring". Illustrator: Noma Bar for McCann New York + McCann Health. Source: https://campaignbrief.com/best-ad-of-the-day-mucinex-be-a-hero-be-boring-by-mccannhealth-new-york/

# embryo-project | Design **Poster 2/2**







## SCIENTIFIC RELEVANCE FOR THE DISCIPLINE

The compilation and cataloguing of dispersed documentation are likely to be the basis for several master's and doctoral research projects with effective social impact.

The good practices guide, with the conclusions of the analysis, will allow knowledge to be made available to students, designers and others interested in the subject.

The promotion of the relationship between science and communication design highlights the need for collaboration between disciplines that are generally distant and contributes to the reinforcement of this fruitful dialogue.

The promotion of proximity between science and politics is demonstrated because the quality of communication, in its visual and written aspects, has a socially regulating and pacifying role.

The need to act quickly in education and awareness campaigns to avoid or minimize crisis situations with high social impact, constitutes a challenge for communication design and, consequently, raises reflection and discussion in the disciplinary field.

## EXPECTED ECONOMIC AND SOCIAL IMPACT

With this project we intend to gather information and produce knowledge about design in emergency situations. We intend to empower designers and other agents of society for the imperative need to produce rigorous, clear and accessible communication, regardless of location, ethnicity, social group, religion, political regime..., i.e. effective from the first moment of a crisis with potential to reach planetary proportions. We also intend the manual of good practices to provide a set of instructions capable of pointing out directions to achieve that same effectiveness. By achieving these goals, the economic impact will not be easily quantifiable, but if it contributes to minimize the effects of a crisis, it will certainly exist and be relevant. The same will happen with the social impact of the project. On the other hand, the publication of a book that disseminates the knowledge produced, may also have an economic impact – through sales – and will have the social impact of the wide dissemination of knowledge. By proposing to investigate, reflect on and develop knowledge about design in crisis situations (and for its prevention), we touch on important aspects of the UN's Sustainable Development Goals, a commitment with which whole society should be involved.

## **RESEARCH PLAN AND TASKS**

This project focuses on the role of communication design in crisis situations and their prevention. In a world where sustainability is one of the main challenges and climate change is expected to trigger new episodes of crisis, communication, supported by science and design, is crucial to face and overcome them.

We intend to develop a broad reflection on this theme, collecting and exploring bibliographical references and, above all, compiling and critically analysing communication design objects n order to extract knowledge applicable in future situations.

#### STAGES OF THE PROJECT

The project is divided into five distinct phases, some of which may take place simultaneously:

#### 1. Research

Bibliographic research on topics related to: design in crisis situations, design for social causes, design and health, information design, infographics, wayfinding, posters. Literature review of the selected material.

Review of the problematic and formulation of hypothesis(es).

Semi-structured interviews with design professionals (national and foreign) involved in projects related to the Covid-19 crisis and treatment of the information gathered by this way.

#### 2. Observation

Definition of criteria to guide the collection of graphic material and delimiting the quantity of gathered objects.

Collection and cataloguing of graphic material related to the Covid-19 pandemic crisis, from Portugal and abroad.

Elaboration of an analysis model to be used in the different collected materials. Critical analysis of the collected material.

#### 3. E-book project

Organization of the information to be included in the book and definition of the editorial structure.

Writing of the texts.

Resolution of the aspects related to image copyright.

Image digital enhancement.

Development of the book editorial design project.

#### 4. Dissemination

Participation in two conferences in the area of communication design with oral communication.Publication of two indexed articles.Dissemination of the edited book.Lecture on the investigated theme and the obtained results.

#### SCHEDULE

8. Research schedule. Source: the authors.

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Research	Bibliographic research																		
	Literature review																		
	Review of the problem and formulation of hypotheses																		
	Semi-structured interviews with design professionals																		
2. Observation	Definition of criteria to guide the collection of graphic material																		
	Collection and cataloguing of graphic material																		
	Elaboration of an analysis model																		
	Critical analysis of the collected material																		
3. E-book project	Organization of the information and definition of editorial structure																		
	Writing of the texts																		
	image copyright																		
	Image digital enhancement																		
	book editorial design project																		
4. Dissemination	Participation in two conferences																		
	Publication of two indexed articles																		
	Dissemination of the edited book																		
	Lecture on the investigated theme																		
5. Conclusion	Final reflection on the project																		
	Writing of a report																		

#### **CRITICAL SUCCESS FACTORS**

We consider that the research has several critical success factors that will benefit the results. Firstly, we consider the topic to be highly pertinent and up to date, as it responds to important societal challenges. Secondly, the seven team members reveal great enthusiasm for the topic and have research interests that complement each other, which allows a plural vision of the investigative topic. According to the interests of each of the researchers involved, we may call upon different areas, such as design for social causes, history and theory of communication design, typography, editorial design and multimedia, and make them revert into the research.

The possibility of hiring a graduate researcher will allow us to speed up the process of gathering information – a task that does not require as high a critical sense but is very time consuming.

We consider that the adequate duration for the realization of the project is 18 months. In the first semester we should develop phase 1 (research) and part of phase 2 (observation – definition of criteria that guide the collection of graphic material, collection and cataloguing of graphic material, creation of the analysis model to be used).

In the second semester, phase 2 (observation) should be concluded, with the analysis of all the collected material, and phase 3 (book project) should be carried out. The third semester will be dedicated to phase 4 (dissemination) with the participation in two conferences oral communication and publication of two indexed papers, with the realization of a lecture on the theme and the results of the project and also with the dissemination of the edited book. And, to conclude, to phase 5 (conclusions) in which a balance of all the work will be done and a report will be written.

#### 5. Conclusion

## EXPECTED SCIENTIFIC RESULTS

## BUDGET: € 7.500,00

With this project, we expect, in general, to contribute to scientific knowledge in the area of communication design, materialized in four types of specific indicators:

The participation in two conferences with oral communication, in which we can make known the project

and exchange experiences with other researchers.

The publication of two articles (in indexed publication) that will allow the wide dissemination of the research.

The publication of an e-book that, through the digital media, can be shared in a much easier and wider way,

which will be an important contribution to the scientific community.

The realization of a lecture at a more local level that allows communicating the research results to a closer audience,

such as the academic community in which we are inserted.

The new knowledge produced enriches and reverts directly to teaching practice.

The project budget is intended for the acquisition of bibliography on the theme, the employment of a graduate research fellow for six months, and the dissemination of the research results – through participation in conferences and the publication of an e-book.