



Social semiotics of quarantine checkpoint signages for COVID-19 pandemic in the Philippines: Insights for disaster literacy

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Abstract

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The Philippine government's narrative of war against the "unseen" enemy uses order and control as a disaster risk reduction response to address the current health emergency. Because quarantine checkpoints have become the physical manifestations of this narrative, it is important to study how they negotiate identities and behaviors to reinforce order and control. This investigation was undertaken through a multimodal analysis of 34 sample images of checkpoint signages placed all over the country during the first months of lockdown. An inventory of elements and an analysis of semiotic resources in the linguistic, typographical, and layout modes of the design were conducted to discover both explicit and implicit meanings and attitudes these signages communicate. The analysis revealed that semiotic decisions in the design purposefully foreground authority and power relations and that the attempts to mitigate this power contribute to the kind of face the government intends to portray—strict but understanding. The insights about the reception of its intended audience were drawn from an online survey where 84 participants ranked the elements according to the sequence when they noticed them. The reasons behind their ranking were also solicited. The survey revealed that the audience of checkpoint signages reacts to color, position, relevance, and other typographical emphasis tools such as underline and boldface. This paper posits that in emergency communication when understanding essential information is a matter of life and death, it is important to know what semiotic resources can be optimized to ensure attention and comprehension.

Keywords: Checkpoint signages, disaster literacy, multimodal analysis, semiotic resources, social semiotics, linguistic landscape

1. Introduction

As a response to the COVID-19 pandemic, Republic Act No. 11469 or the *Bayanihan to Heal as One Act* was enacted in the Philippines on March 23, 2020, declaring the pandemic as a national emergency. As part of the measures to control the spread of the virus, the country has been placed in quarantine, with varying levels of restrictions. The Inter-agency Task Force (IATF), the unit formed to oversee the peace and order situation, regulates mobility, enforces curfew, and implements health protocols. Public spaces have been transformed into regulated spaces where mobility and social interactions are limited, controlled, and monitored. Only essential transactions are allowed, and other activities are relegated to private, residential, and virtual sites. To ensure compliance with the new set of social rules, government authority figures set in place implementation strategies including staging checkpoints.

These manned locations where mandatory checks are done have become an important representation of law and authority. Recent checkpoint studies emphasize the complex nature of this space as a regulatory architecture (see Rijke, 2020; Griffiths & Repo, 2020; Rijke & Minca, 2019; Griffiths, & Repo, 2018; Rogers, 2016; Tawil-Souri, 2011). Checkpoints represent different situated social realities while consistently capitalizing on power which undergirds its design as a physical structure. For instance, Griffiths and Repo's (2018) study of the politics of everyday crossing at Gilo Checkpoint or Checkpoint 300 by Palestinian female workers in East Jerusalem and Israel highlighted the said checkpoint as a gendered space where regulatory requirements and attitudes disadvantage women. Focusing on another Palestinian checkpoint, Tawil-Souri (2009, 2011) argued that the Qualandia Checkpoint is a negotiated space. Despite being a site for the Israeli military's performance of power, it is also seen as a place of resistance because it has become an economic hub for peddlers, drivers, and small entrepreneurs.

Beyond these militarized settings, checkpoints have also been explored as a device for migration and border control (see Heckert, 2020; Kuznetsova & Mikheieva, 2020; Sur, 2019; Hastings & Wang, 2018; Yin, 2018; Rogers, 2017; Resnik, 2016; Meierotto, 2014) and sobriety checks (see Morrison, Ferris, Kwizera, Chen, & Peek-Asacarin, 2020; Fel, 2019; Gomez-Garcia & Hidalgo-Solorzano, 2016). Overall, these studies foreground the exercise of power enabled by this regulatory structure. In this article, I explore a new context where checkpoints are situated.

In the context of COVID-19 pandemic in the Philippines, it is important to examine what role(s) checkpoints play and how they achieve these purposes. Ostensibly, these pandemic checkpoints are largely constructed as devices for health risk control justified by the declaration of a national emergency and the need to monitor public compliance with various quarantine protocols. In addition, they are seen as critical sites to communicate information relative to the public health emergency. Both monitoring and communication purposes are achieved with the aid of indexes of authority displayed in this physical gatekeeping structure. They typically bear signs of authority such as government agency logos and uniformed personnel. As a distinctive part of the nation-state's linguistic landscape, checkpoints potentially play a significant part in disaster literacy.

1.1 Checkpoints and Disaster Literacy

A disaster is defined as:

a serious disruption of the functioning of a community or a society at any scale due to hazardous events interacting with conditions of exposure, vulnerability and capacity, leading to one or more of the following: human, material, economic and environmental losses and impacts (United Nations Office for Disaster Risk Reduction, n.d., para. 1).

This definition effectively aligns with the COVID-19 pandemic and its unparalleled impact on modern-day global health, economy, and society. Massive exposure to the virus has taken a significant toll on local and global health care systems (Kelman, 2020). Further exacerbating the situation is the Philippine government's response with its war-like strategy against the dreaded virus. Constructed as a "threat to security," COVID-19 is represented as a national enemy, a view that is used to justify practices to "securitis[e] the pandemic" (Hapal, 2021, p.4). Stringent measures set in place to fight this security threat, however, further compromised the situation of vulnerable members of the Philippine society, particularly those living below the poverty line who need to fend for themselves daily, relying on meager earnings from insecure jobs that were put on hold as part of the lockdown provisions.

While the COVID-19 pandemic may be considered the gravest calamity, the Philippines had already experienced several equally disruptive disasters in the past. Despite the creation of the National Disaster Risk Reduction Management Council (NDRRMC) in 2010 and the design of the National Disaster Risk Reduction Management Plan (NDRRMP) detailing a roadmap to achieve its goal of developing resilience and long-term risk reduction, the management of the current pandemic shows important opportunities to further strengthen the nation-state's plan.

As part of the strategy for prevention and mitigation, the NDRRMP (2011-2018) declares "enhanc[ing] capacities of communities to reduce their own risk and cope with the impacts of all hazards" (p.6) as an important objective. This is done through "[b]ehavioral changes created by the preparedness aspect" which "can be measured by how well people responded to disasters" (p. 7). This kind of changes can only be attained by enhancing disaster literacy defined as "an individual's ability to read, understand, and use information to make informed decisions and follow instructions in the context of mitigating, preparing, responding, and recovering from a disaster" (Brown, Peterson, & Haun, 2014, p.1).

Brown, Peterson, and Haun (2014) identified four levels of disaster literacy based on Nutbeam's (2000) levels of health literacy—*basic*, *functional*, *interactive*, and *critical*. *Basic literacy* refers to the ability to read and comprehend communication artifacts. *Functional literacy* refers to the ability to comply with advisory on how to prepare for, respond to, and recover from disasters. *Interactive literacy* is considered as advanced skills in "seeking and managing disaster-related experiences" (p.3) Finally, *critical literacy* refers to the "capacity to analyze disaster-related information, be empowered to address barriers, and take personal control to remain safe, cope with and recover from disasters" (p.3).

While understanding messages of important emergency communication artifacts such as signages is important in developing basic disaster literacy, it is far more important to develop critical understanding of both explicit and implicit meanings in these materials. For instance, it is important to develop awareness about how such kinds of materials position the audience. This is vital in taking control and having the agency to respond to complex situations when basic structures and order break down during unexpected situations. Since checkpoints are an important element in the government's response to the pandemic, it is important to understand what meanings they communicate other than their surface level messages.

1.2 Checkpoint Signages as Road Signs

Checkpoint signages may be considered as special road signs placed to perform a specific function. According to the Department of Public Works and Highways (DPWH) Highway Safety Design Standards (2012), for a signage to be effective, it must have the following characteristics: "(1) fulfill a need; (2) command attention; (3) convey a clear and simple message; (4) command respect; and (5) give adequate time for proper response" (p. 4).

These guidelines are parallel with the following Philippine National Police-Directorate for Police Community Relations' (PNP-DPCR) guidelines for checkpoints:

- There is a noticeable sign that announces the checkpoint with the name of the Philippine National Police unit in charge.
- The checkpoint should be conducted in a well-lighted place.
- The teams manning the checkpoint should be under the command of police inspectors or officials with higher ranks.
- The officers manning the checkpoint must be in complete uniform with a corresponding nameplate.

In addition, every checkpoint is required to have the following equipment: (1) marked patrol vehicles; (2) firearms with basic load of ammunition; (3) handheld and vehicle-based radios; (4) flashlights, megaphones, video camera; (5) signages showing the warning signs like "Slowdown Checkpoint Ahead," and "Checkpoint 20 meters ahead" (PNP-DPCR Poster: What a PNP Checkpoint Should Look Like, 2014). A template is also provided for the main signage, which is a landscape-oriented, rectangular panel. At the center of the sign and in bold typeface is the word "STOP," followed by the text, "PNP Checkpoint" in the next line. Statements such as "Please bear with us" and "Thank you for your cooperation" are also included. Finally, at the bottom part of the sign, identifiers of the police station and the chief of police are specified.

This basic description of the checkpoint structure serves as a starting point for this semiotic analysis.

1.3 Research Questions

In the context of pandemic communication, this study primarily aims to explore the underlying meanings created by the convergence of semiotic resources in checkpoint signages and the ways these resources are received and understood by the intended audience. This research objective is targeted by answering the following questions:

1. What are the characteristics of pandemic checkpoint signages as multimodal ensembles?
2. How do these checkpoint signages communicate control to mitigate disaster risk during the pandemic?
3. What insights can be gleaned from the way audiences perceive semiotic resources in checkpoint signages for disaster literacy?

1.4 Theoretical Framework: Checkpoint Signages as Social Semiotic Artifacts

As artifacts for disaster risk reduction, checkpoint signages need to be examined beyond their semantic and syntactic elements. This study adopts a view of this production as a “sign complex” where different semiotic resources integrate and interact to create meaning that can communicate not only straightforward messages but also certain values and beliefs (Bezemer & Kress, 2016, p. 23). Hence, this study proposes social semiotic theory as a framework to explore underlying meanings and attitudes.

Social semiotics is founded on Ferdinand de Saussure’s idea of sign as “elements in which the ‘signified’ (a meaning) and the ‘signifier’ (a material form)” converge, and Charles Peirce’s idea of “semiosis” which refers to the processes of generating these signs (Hodge, 2017, p.9). Social semiotics highlights the function of context in shaping the meaning-making process. Bezemer and Kress’s (2016) social semiotic frame assumes the following characteristics of signs: (1) the merging of form and meaning is intentional; (2) “signs are shaped by the environment”; and (3) “each mode offers certain potentials for making meaning” (pp. 9-10).

From the vantage point of social semiotics, a checkpoint signage, like any communicative event, is considered as a multimodal ensemble. This means that it is composed of intersecting modes of communication. Modes refer to the channels or the materiality through which signs are communicated, which could be through speech, texts, images, layouts, among others. They are in themselves assemblies of interacting signs. Each mode has its own rules and organizing principles for expression which sets its limitations and affordances (Stöckl, 2014). These affordances become resources for making meaning. A signage, for instance, integrates the modes of typography, images, and layout. In typography, colors, typefaces, and sizes are its semiotic resources. The integration and interaction of these resources contribute to the interpretive value of the mode. For instance, capitalizing the word “GO” and printing it in bold, green, formal typeface in the center of signage can give it salience and focus. Adding an exclamation point can add a sense of urgency.

Checkpoint signages are instrumental signs of necessity. In linguistic landscape discourse (discourses of signs in places), there are signs of luxury (aesthetic signs) and there are signs of necessity (essential and functional) (Weber & Horner, 2012). They are also considered top-down signs since they are imposed by authorities to the public and placed in sites of control. As such, it is important to interpret these signages in the context of their “sites of display” because they are situated signs. Sites of display according to Jones (2014) are in themselves “social occasions” (p. 139) because the meaning is co-created by the interaction of the sign and its audience.

2. Method

To answer the above questions, the study employed mixed methods done in two phases—multimodal semiotic analysis and audience reception survey.

The first phase aims to answer the first two questions. This phase is the multimodal semiotic analysis of checkpoint signages guided by Ledin and Machin’s (2020) tools for multimodal analysis. In Ledin and Machin’s (2020) *Introduction to Multimodal Analysis*, they methodically unpacked each mode in terms of its different elements. They described each element’s characteristics and potential interpretive value. This unpacking of the multimodal ensembles was used as tools for understanding the checkpoint signages. The purpose of this phase is to draw out from the sample checkpoint signages their meaning-making resources and how these resources are utilized to communicate control and mitigate disaster risk during the pandemic.

The pictures of checkpoint signages were downloaded from online news articles from different media outlets in lieu of the typical linguistic landscape study practice of physically taking photos during walk-throughs in the research site. Downloaded images of checkpoints situated across the Philippines were screened to eliminate duplicates. This process narrowed down the data set from 44 Internet checkpoint images to 34 valid images for analysis and coding using NVivo (version 1.5), a qualitative data analysis software.

From the pictures of checkpoint signages, the type and token frequencies of the following were coded: (1) elements; (2) language used, (3) colors, (4) font type, (5) position, and (6) size. Then, the results were analyzed by cross-referencing the different elements and their characteristics. The interpretations were based on Ledin and Machin’s (2020) tools for multimodal analysis. Through this process, the insights about the semiotic potentials of these resources to mitigate disaster risk were drawn.

The second phase targets the third research question. While the first two questions investigated meaning from the vantage of production and design, this phase aims to gain insights into the reception of its intended audience through an online survey. Two examples of signages (see Figures 1 and 2) bearing common features were used to find out the way people read them in terms of what they notice first, why they notice these features, and how they react to them. The responses were gathered using a Google form designed in two parts. Each part focuses on one sample signage. For each image, the respondents were asked to do

three things: (1) look at the signage for a few seconds, (2) examine the signage again, this time with numbered elements, and (3) rank the elements based on the order in which they are noticed and explain why.

These two samples were selected because they were the most common checkpoint signages used.



Figure 1. Sample checkpoint signage with numbered elements used in the survey (image from Agence France-Presse, 2020)



Figure 2. Sample checkpoint signage with numbered elements used in the survey (image from “Quarantine Check”, 2020)

Eighty-four participants responded to the survey. There were no screening criteria for the participants because they were all potential audiences of checkpoint signages. The questionnaire was sent online to those who are willing to participate in the survey. The intention was to gather as many responses as possible from people from different walks of life. Their rankings were collected and summarized. While the rankings were quantitatively summarized, the qualitative comments (explanation for the rankings) were thematically and openly coded using NVivo software. The responses were summarized by looking for common themes. These themes were used to generate categories.






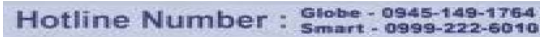

This second phase of the research aims to provide insights about how readers of signs react to the multimodal design of semiotic resources. The results may become an important source of information on how signages may be optimized to communicate important information especially in emergencies.

3. Results

3.1 Modal Inventory of Checkpoint Signages

Table 1 shows the main elements found in the 34 checkpoint signages analyzed. It can be noted from the table that the elements with the highest number of instances are the same elements required by the PNP-DPCR. These are the main texts, messages, and authority markers (i.e. agency logs, issuing agency, and person in-charge).

Table 1
Checkpoint signage elements

Elements	Example	Total
“Checkpoint”		31
Direct Address		25
Issuing Agency		24
Agency Logos		24
“Stop”		23
Person In-charge		17
Contact Details		16
Additional Information		6
Sponsor Logo Ads		5
“Quarantine Area”		4
Reminders/Directives		4
Total		179

While some signages only comply with the basic requirements, there are those that add other details. Along with the PNP-DPCR required details and information, additional information and directives are also included. Quite interestingly, some of them also include sponsor logos.

3.2 Description of Semiotic Resources in the Design

Signages communicate through an assembly of textual, image, and layout as modes. The characteristics (use of color, typography, size, and position) of these elements serve as semiotic resources that foreground certain messages. Table 2 below shows how each element was rendered in the signages. Since not all elements appear in all signages, the heatmap makes comparison of the frequency counts more explicit. Because each signage is a designed semiotic artifact whose meanings are embodied in the integration and interaction of its different modes, the elements are described in comparison with the other elements within each signage. For instance, position is described relative to the line in the signage where an element occurs. Where there are multiple elements, it is possible to have more lines than other signages with less elements. The same is done for size. Size is described relative to the other elements in the signage.

Table 2
Summary of characteristics of each modal element in the checkpoint signages

ELEMENTS	COLOR				FONT TYPE		LANGUAGE USED			POSITION											SIZE											
	Black	Blue	Red	*White	Formal	Ornate	English	Filipino	Other	Center	Center	Center	Center	Center	Center	Center	Center	Center	Center	Left	Right	Top	Top	middle	Biggest	2nd in size	3rd in size	4th in size	5th in size	6th in size	7th in size	
	1st	2nd	3rd	4th	5th	6th	7th	8th	4th line	4th left	4th right	Top left	Top right	both sides																		
Agency	9	3	4	0	11	0	12	0	1	6	4	4	2	3	1	1	1	0	0	0	0	2	2	0	2	2	7	3	2	3	1	
Checkpoint Sign	16	5	22	0	31	0	30	2	0	3	18	24	7	2	0	0	0	0	1	0	0	2	2	0	13	12	17	5	3	1	0	
Contact Details	10	3	2	0	14	0	13	0	0	1	1	2	6	5	2	1	0	2	1	1	0	0	0	0	1	1	2	6	4	5	0	
Logos	5	0	3	0	8	0	9	0	0	11	4	1	0	0	1	0	0	0	0	0	0	0	0	15	13	1	6	14	10	1	1	0
Additional Informa	5	1	1	1	5	0	5	0	0	1	2	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5	2	2	0	0
Direct Address	17	6	13	1	24	0	25	0	1	2	3	13	12	9	4	3	1	2	1	0	1	0	0	0	2	2	12	11	8	4	2	
Person-in-charge	16	2	6	0	17	0	17	0	1	0	1	4	9	10	4	0	1	2	1	1	1	0	0	0	1	1	3	11	7	4	1	
Quarantine	1	1	4	0	4	0	4	0	0	1	2	2	1	1	0	0	0	0	1	0	0	0	0	0	2	2	2	1	0	0	0	
Reminders/Directiv	0	1	4	0	4	0	4	0	0	1	2	1	1	0	0	1	0	0	0	0	1	1	0	0	2	0	2	0	0	1	0	
Sponsor Logo	2	0	0	0	2	0	2	0	0	0	0	0	1	2	0	0	0	0	3	1	3	0	0	0	0	2	1	2	0	1	1	
Stop	2	2	20	1	23	0	23	0	0	13	15	5	0	0	0	0	0	0	0	0	0	1	1	0	23	3	4	1	0	1	0	
Total	83	24	79	3	143	0	144	2	3	37	51	57	38	36	16	7	4	9	5	5	24	19	1	1	52	39	65	43	27	20	5	

The following discusses the characteristics of the above elements.

- (1) **Issuing Agency/Unit:** It can be noted that information about the issuing unit is often printed in black and formal font. This piece of information is placed often in the first three lines. Size varies but texts are often the 3rd to the 6th in size.

- (2) **Agency Logos:** They are often colored images, but the dominant color is black. Fonts used in these images are formal rather than ornate. They occur either on the first line or the last line. They may appear as a series of images on top or at the bottom or on either side of the issuing agency. The logos often include the Philippine National Police logo and the local government unit logo. Often, the logos are either the 2nd or the 3rd in size.
- (3) **“Checkpoint” Text:** This text is often printed in boldface and heavy formal font type. It also often occurs in red color, graded from bright to subdued, from light to dark. There are few instances when it is printed in heavy black. There is one frequently occurring signage where this word is underlined for more emphasis. Sometimes it is modified by the word “PNP” or it stands on its own. It is often the biggest and placed either at the topmost part of the center (2nd to 3rd line). It is often written in English, but there are those with Filipino translations—“Oplan Sita” (“sita” means “to confront” or “to accost”).
- (4) **“STOP” Text:** This is often written in heavy red color also from light to dark and is always in capital letters. The font used is formal with a heavy and thick appearance. It often stands on its own in the center at the top or the second line. It is also often the biggest element on the signage.
- (5) **“Quarantine” Text:** There are only four signages from the samples that bear this text. This text is often black and placed at the first few lines. It is also either the biggest, the second, or the third in size compared to the other elements. It is written in formal heavy black, blue, or red typeface and in English. The word is often used as an adjective that specifies what kind of checkpoint is approaching.
- (6) **Person-in-charge:** The person’s name, rank, and designation are indicated, with the name in bigger size. It is often written in black and from light to medium weight typeface. Sometimes, the designation is placed under the name in smaller size font. This information is often placed at the lower part of the signage and often one of the smallest features.
- (7) **Contact Details:** Contact details often follow the person in charge. The contact details indicate the cellphone and landline numbers of the station where the signage comes from. It is often black and in light to medium typeface designs. It is often the smallest and the last detail on the signage. On some occasions, an image of a cellphone is placed before the numbers to further index the contact details.

- (8) **Additional Information:** Some signages include other important information for the community such as curfew hours and other identifying markers of the signage. These texts are often black and in light to medium typeface design. They are often the smallest element. There are occasions when the texts are placed in the middle of the signage.
- (9) **Direct Address to the Audience:** There are messages begging for understanding, patience, and cooperation. This element is part of the required template, so it occurs in almost all the signages. The texts are often in light to medium typeface design in black with some cases of blue and red. They are all in English and placed in the middle in medium size letters (3rd to 5th size).
- (10) **Other Reminders/Directives:** There are also other imperative statements directed towards the audience. Some are reminders to facilitate the conduct of the checkpoint smoothly such as “Slow down” or “Roll down your windows...”. These reminders are in blue or red in light to medium formal typeface designs. They are in English and normally placed in the middle or at the bottom. If not the smallest, they are medium sized (3rd to 5th size).
- (11) **Sponsor Logos:** In some signages, there are sponsor logos indicated. Frequently occurring in these signages is a popular motel logo and some cellular network logos. All of them are placed at the bottom but appearing in average size (3rd to 4th size) compared to the other elements.

As the data show, the choice of typeface style and language appears consistent across the checkpoint signages. The font type may vary, but the typeface designs are always formal rather than elaborate, with more angular features than curvatures (Ledin & Machin, 2020). In terms of language, English is consistently used as the main medium. There are very few instances of translations in other regional languages.

While elements and features vary, the layout is consistent. Texts are framed by a rectangular signboard with long horizontal orientation. No other decorative border is noted except for the wood or steel frame where they are mounted. Texts are mostly horizontally oriented and center aligned. Margins are minimal. Texts typically begin or end a little before the edge. The background is always white without decorations.

Signages are placed conspicuously facing the incoming motorists or pedestrians either on the side of the road or in the center leaving only a portion of the space enough for either a vehicle or a certain number of pedestrians to pass through. In the pictures, uniformed and armed peace-and-order enforcers can be seen manning the checkpoint and standing near the signage.

3.3 Reception of the Intended Audience

Focusing on the reception of the signs' intended audience, Table 3 presents the top three elements noticed by the participants in the first sample (see Figure 1).

Table 3
Ranking of the modal elements for Signage 1(Figure 1)

Sequence	1: Logos	2: Agency Label	3: Checkpoint Text	4: Contact Details	5: Direct Address	Total
Rank 1	2 (2.41%)	6 (7.22%)	75 (90.36%)	0	0	83
Rank 2	7 (8.43%)	66 (79.52%)	6 (7.22%)	1 (1.20%)	3 (3.61%)	83
Rank 3	40 (48.19%)	8 (9.64%)	0	11 (13.25%)	24 (28.92%)	83

It can be noted from Table 3 that most of the respondents rank the “Checkpoint” text first, followed by the agency label and then the logos. The respondents explain that “Checkpoint” and the agency label are noticed first because of their size and color. Both are red and the biggest elements in the signage. The former is the biggest, while the latter is the second biggest. The respondents cite the following reasons for prominently noticing the elements: (1) The sequence of the elements directs the flow of reading because they are accustomed to reading from top to bottom. (2) There are also typographical characteristics that help foreground the elements. Underlining and putting words in boldface helped highlight the information. (3) Their perception of importance of the modal element also contribute to prominence. They consider these elements they ranked prominently to be the most important. (4). The popularity of the word is also a factor. The word “COVID” attracts their attention instantly. (5.) The similarity of the elements also helps direct the flow of attention. The agency label and the word “Checkpoint” may vary in size, but they are the same in color and typeface design. (6) The logical sequencing of information also helps direct the flow. The agency label provides information about the institutions ordering the checkpoint. (7). Visual load is also another factor. The logos are noticeable because they are too many and too crowded.

Table 4
Ranking of the modal elements for Signage 2 (Figure 2)

Codes	1: Stop	2: Quarantine Area	3: Checkpoint	4: Direct Address	5: Agency Logos	Total
Rank 1	75 (92.59%)	6 (7.41%)	0	0	0	81
Rank 2	5 (6.02%)	77 (92.77%)	1 (1.20%)	0	0	83
Rank 3	1(1.23%)	0	70 (84.34%)	1 (1.23%)	9 (11.11%)	81

Table 4 presents the sequence of top three modal elements ranked by the participants in the second signage sample (see Figure 2). In this signage, the words “STOP”, “Quarantine Area”, and “Checkpoint” are the top three elements. Color and size are cited as the top reasons why these elements are ranked first by the participants. While the word “STOP” and “Quarantine Areas” are printed in the same size and typeface design, the former is in bright red and positioned at the top of the signage. The following reasons are highlighted in the qualitative responses as important characteristics that give prominence to the elements: (1) Capitalization makes them feel that the message is important; (2) They read from top to bottom, so the sequence of the elements directs the flow of attention; (3) The popularity of a word such as the word “Quarantine” also catches their attention since it has become a buzzword during the pandemic; (4) Similarity in the design is also cited as an important characteristic. The words “STOP” and “Quarantine” are similar in size and typeface design; (5) The relevance of the words to the current context also helps draw attention to the elements. They see these words as carriers of important messages in the context of the pandemic; and (6) The amount of space consumed by the element matters. The elements prominently ranked are texts that consume a bigger space in the signage.

4. Discussion

The inventory and descriptions of the modes show purposeful and intentional assembly, integration, and interaction of elements. The intentionality of the design is expressed in giving salience, coherence, and hierarchies to the elements. These are deliberate semiotic decisions done to codify certain ideas, values, and attitudes about the situation. This control of semiotic resources shows “technologization” (Fairclough, 1992) or the intentional shaping of language and resources to achieve certain objectives. The decisions in the signage design and production foreground the messages of urgency, authority, and control.

Urgency is communicated in the overall semiotic decisions which favor formal design typefaces, black, blue, and red fonts against simple white background devoid of decorative elements. Even the use of short and direct words and expressions contributes to this message of urgency. For instance, the word “Checkpoint” is made prominent by color contrast, position (topmost or center) and size (biggest). There are also other typographic resources such as boldface and underscores used to highlight the element. It can also be noted that this keyword is frequently isolated in its line. This shows framing of important words through separation which creates a sense of gravity and importance.

Authority and control, especially by the government, are made evident through the use of legal identifiers. These are the issuing agency and the logos that are often given prominent parts in the signage. Prominence is designed through position (top and center) and size of the elements. The name and rank of the officer-in-charge, while not given as much prominence, also strengthens the mark of authority that the signage bears.

Control is highlighted in the recurring interactive elements that aim to communicate directly to its intended audience such as imperatives and placating messages. Their salience

and value can be interpreted in their hierarchical representation. The imperatives “STOP”, “Slowdown”, “Roll down your windows...”, and the placating messages such as “Thank you for your cooperation” and “Please bear with us” are elements that not only aim to directly acknowledge and communicate with the audience but also reinforce power relations between the sign-maker and the audience. It can be noted from the design that the use of color, position, and size produces a certain hierarchical ordering of importance among these messages. Imperatives that express commands are given more salience through color, position, and size. The word “STOP” is often printed in bright red heavy typeface design which seems to communicate importance and urgency. It is also often the biggest text placed at the top. Placating messages, on the other hand, are often smaller in size and printed in light to medium typeface design. The placement is often at the bottom where it is easy to miss. These features seem to mitigate the atmosphere and reception of the space. Anderson (2009) claims that spaces also exude a certain ambiance from collective and shared emotions that exist. In spaces of power, certain attitudes and emotions are common such as fear, anxiety, or resistance. Authorities who are designers of these checkpoint spaces seem to anticipate such sentiments, hence the attempt at mitigation. This combination of messages of compliance and care is also evident in other public signages during the pandemic such as the ones in the airport analyzed by Tenedero (2021).

This hierarchical representation of interactive elements seems to position the audience at the receiving end of a strong command. While there are attempts to mitigate the strength of this order by begging for understanding and cooperation, it still asserts a position of dominance. While the intention is seemingly to position the sign-maker as a kind and caring authority, the statements such as “Please bear with us. Thank you for your cooperation” may also be taken as a polite version of a command.

The design also reinforces certain social realities such as the dominance of the English language in matters of public communication and commodification of communication. It can be noted that the sample signages are predominantly in English, even if they are placed in different parts of the country. Even in emergency situations where important information should be understood by all citizens, English is still the favored medium. Even the DPWH’s Highway Safety Design Standards Manual (2012) states that “[t]he use of (F)ilipino worded signs are not recommended because they tend to be large due to the length of equivalent words.” They are not recommended “unless absolutely necessary and useful” (p. 5). It seems that even in the context of emergency, sign-makers hardly feel that using Filipino or the local languages is necessary. This situation is lamentable because, in the context of a global pandemic, people who live in multilingual and multicultural societies can benefit greatly from using local languages as a resource in crisis communication (Dreisbach & Mendoza-Dreisbach, 2021). Flores and Asuncion (2020) explore the communication preferences of the constituents of different local government units in the Philippines, and the said study revealed that the constituents deem the use of local languages as highly effective in crisis communication.

Commodification of communication is evident in printing sponsor logos on the signages. The size which is often the same or close to the important key message (“STOP”

and “Checkpoint”) highlights these logos. The position which is at the bottom attempts to downplay the advertisement logos a little, but putting them on both sides still competes for attention. Such positioning indicates the intention to have these sponsors’ identities noticed. It is also interesting to note that the reputation of one company sponsor (a motel) does not seem to match the kind of sincerity and authority the signage is supposed to communicate. In the Philippines, motels have an unpleasant reputation. They are places where Filipinos attribute clandestine and illicit activities.

It is important to note that when the signages are examined more critically, from the vantage point of production, there are meanings, values, and dispositions deliberately foregrounded. It is also necessary to know if these messages are received by the intended audience accordingly. This is where the results of the audience perception survey become informative.

The audience perception survey confirms what semiotic resources are effective in communicating salience and prominence. The respondents notice elements of control and urgency the most because of the way they are given emphasis, primarily through color and size, followed by position and typeface emphasis (boldfacing and underscoring). This suggests that these design strategies are the most useful semiotic resources to apply to communicate salience.

Audience responses to agency logos are quite interesting because they are present in both samples. In one, the logos are positioned on top, while they are at the bottom in the other. Only the ones printed on the first line entered the top three most noticeable mode; the ones at the bottom did not. While its position atop the first signage made it noticeable making it to the ranking, it is not enough to be considered the most perceptible. This may mean that while position can give salience, other factors such as relevance, coherence of the design, and size are considered important. In the qualitative comments, the only reason why the participants notice the logos is the visual overload it creates since there are so many of them at the top. There is no reference to their relevance or the meaning that they contribute to the signage.

The survey also revealed important insights about the reading behaviors of the participants. For instance, it is observed that even in non-linear texts such as signages, most readers still follow the top-to-bottom reading orientation. There are respondents who sequence the elements from top to bottom because they claim that this is how they are accustomed to reading texts.

The qualitative feedback also indicates that the factors that contribute to attention grabbing are visual consistency, logical appeal, and use of relevant key words. In terms of consistency, the participants confirm that similarity in the characteristics of the elements builds coherence. They claim that they notice more the elements designed in the same way—same colors, size, and typeface design. According to Ledin and Machin (2020), the act of making some characteristics of elements occurring in one material similar or parallel builds coherence and relationship.

In terms of connection, the participants demonstrate valuing for the logical connection among elements. The elements that logically relate to one another tend to be

noticed in sequence. For instance, when they notice, “STOP”, their next reaction is “Why?” This question then leads them to notice next the texts “Quarantine Area” and “Checkpoint,” which offers a reason and a response to their ‘why’ question.

Finally, the use of current buzzwords such as “Quarantine” and “COVID-19” are also cited as attention appeal of the signage. According to some respondents, upon seeing these words, they automatically assume that it is important because it has relevance to the current situation.

5. Conclusion

This study analyzed 34 images of COVID-19 checkpoint signages placed in different parts of the country to determine how their semiotic resources are deployed in production to give prominence and salience to certain ideas relevant to mitigate disaster risk during the pandemic. The analysis of the images revealed deliberate foregrounding of urgency and control in the design. This is achieved by certain design decisions in the use of colors (red for urgency and blue/black for formality and authority), sizes (bigger font/image size for prominence), position (words highlighted are placed on top or in the center). Typographic tools for emphasis such as capitalization, underscoring words and expressions are also utilized to highlight directives and authority markers. The use of formal-looking fonts and straightforward design devoid of decorative elements also contributes to this message. Despite the strong message that signages communicate, there are attempts to mitigate this effect by adding direct addresses begging for understanding, cooperation, and solidarity.

This study aimed to examine how effective these semiotic resources are in communicating their intended messages. Elements such as texts and images that communicate urgency (i.e. text labels “Quarantine”, “Stop”, and others) and those that foreground control (i.e. agency logos and agency label) are ranked the three most noticeable. The use of colors, size, position, and typographical emphasis tools help communicate salience and hierarchy. Other factors that communicate prominence are similarity of design, logical ordering, and relevance.

Indeed, checkpoint signages in themselves are social events that enact certain social realities. Their presence communicates authority and urgency of the situation. From the standpoint of crisis and emergency communication, the signages seem efficient in communicating their message. They are successful in foregrounding the elements that perform their main function—to communicate order and control at a time of emergency. However, the signages are strong reminders of restriction that the public must bear. While design and content index the kind of face the government wants to portray to the public, that is, strong but understanding, it seems contrary to the harsh treatment that quarantine and curfew violators have actually endured in the hands of authorities (Talabong, 2020; Gavilan & Talabong, 2020; Hapal, 2021; See, 2021). The message then becomes clearer, control trumps compassion and understanding.

There are important lessons about disaster literacy gleaned from the findings of the study, especially about optimizing semiotic resources for communicating important information during emergencies. For producers of emergency communication, it is important to strongly consider the design. It is not only the meaning potential of the linguistic component that is important. The purposeful assembly and coordination of elements are necessary in giving salience, framing, and coherence to the whole message. According to Crisis and Emergency Risk Communication (CERC), in times of emergency, “communicating information is the first and only resource available for responders to give affected communities” (US Department of Health and Human Service, Center for Disease Control and Prevention, 2018, p. 2). The urgency of relaying important information and reminders is a matter of life and death. It is vital, therefore, that they are communicated in a way that guarantees understanding and attention. Semiotic resources such as color, size, placement, and typeface should be utilized in a more deliberate and logical way.

The choice of language is also an important element in the signage to consider. While the medium used in these signages is predominantly English, current discourse on crisis communication favors the use of local languages (Flores & Asuncion, 2020; Dreisbach & Mendoza-Dreisbach, 2021). The information that matters in life-and-death situations must be communicated in a language that the people understand best.

There is also an important lesson to be learned about developing critical disaster literacy among the people. The study revealed that there is more to understand from a communication material such as signages than just their surface level messages. It is important to understand how the materials position the public as readers. Because checkpoint signages are devices for order and control during crisis, it is important to understand how semiotic resources are optimized in production to communicate their intended message. This is essential in deciding how to act and survive during emergencies. When a disaster instantly strikes, the structure the public relies on to establish order may fail. The people would be left on their own to decide which information is credible and which is not. While the current discourse on disaster literacy focuses on more explicit aspects of communication, it is also important for further studies to examine more implicit semiotic resources of communication. The public should be trained to understand subtle cues in communication so that they will not become lambs being led to the slaughter.

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