

Some reflections on the influence of signage on the perception of public space during COVID-19 pandemic

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Abstract: The outbreak of COVID-19 pandemic significantly changed how people communicated. From day to day the public space started to be filled with signage unknown to people before. The character of the signage (visual-textual), aimed at enforcing a specific kind of behaviour, which to a large extent affected the most basic forms and ways of communication. It was assumed that the visual messages which were placed in the public space, could create a severe contradiction of intuitive innate human behaviour, mainly forcing people to implement unnatural behaviour. The signs analysed in the study referred to: 1. imposed social distance of at least 1,5-2m; 2. imposed face covers – limiting non-verbal facial clues; 3. prohibition of certain gestures/greetings – imposition of the new ones; 4. promotion of hygienic habits – hands washing. Therefore, it was assumed that the quality of human communication could significantly deteriorate. Furthermore, it was also assumed that in addition to visual messages also the language used on signs could build a negative image of the public space and of any kind of interaction as creating dangerous health hazards. All of the above assumptions were analysed with the use of questionnaires and in reference to the theory concerning the meaning of space, distance, face mimics and gestures. Further, they served to assess the perception of the public space during the pandemic times.

Abstrakt: Wybuch pandemii COVID-19 znacząco zmienił sposób komunikowania się ludzi. Z dnia na dzień w przestrzeni publicznej zaczęły pojawiać się nieznane wcześniej znaki. Ich forma (wizualno-tekstowa) miała na celu nakłonić użytkowników przestrzeni publicznej do określonego rodzaju zachowań, co w znacznym stopniu wpłynęło na najbardziej podstawowe formy i sposoby komunikacji. W niniejszej pracy przyjęto, że komunikaty wizualne umieszczone w przestrzeni publicznej mogą być w sprzeczności z intuicyjnymi zachowaniami ludzkimi, jako przymuszanie ludzi głównie do nienaturalnych zachowań. Znaki analizowane w badaniu odnosiły się do: 1. narzuconego dystansu społecznego wynoszącego co najmniej 1,5-2 m; 2. nakazu zakrywania twarzy – ograniczającego niewerbalne sygnały mimiczne; 3. zakazu niektórych gestów/powitań – narzucenia nowych; 4. promowania zdrowych nawyków – mycia rąk. W związku z tym założono, że jakość komunikacji międzyludzkiej mogła ulec znacznemu pogorszeniu. Ponadto przyjęto również, że poza komunikatami wizualnymi, również język użyty na znakach może budować negatywny wizerunek przestrzeni publicznej i wszelkiego rodzaju interakcji, jako stwarzających zagrożenia dla zdrowia. Wszystkie powyższe założenia zostały przeanalizowane przy użyciu kwestionariuszy oraz w odniesieniu do teorii dotyczącej znaczenia przestrzeni, dystansu,

mimiki twarzy i gestów. Ponadto posłużyły one do oceny postrzegania przestrzeni publicznej w czasie pandemii.

Keywords: space, face, mimics, distance, touch, gestures, language, signs, COVID-19 pandemic

Słowa kluczowe: przestrzeń, twarz, mimika, dystans, dotyk, gesty, język, znaki, pandemia COVID-19

Introduction

The outbreak of COVID-19 pandemic significantly changed how people communicated. From day to day the public space started to be filled with signage unknown to people before. The character of the signage (visual-textual), aimed at enforcing a specific kind of behaviour, which to a large extent affected the most basic forms and ways of communication. This resulted in the transformation of the image of the public space and hence its perception and the way people interacted with it.

In order to understand the peculiarity of the social interactions during the pandemic and how certain restrictions and imposed rules could influence people and their perception of the surrounding environment, one has to understand the importance of the concept of space, understand the meaning of social distance and the function of face mimics, touch, gestures.

1. The characteristics of public space and human interactions

Space seems to be an abstract term and hard to define. Its intangibility, however, may also be its great asset and opportunity for human development, and for this reason it is probably treated as a symbol of freedom (Tuan, 1987). Nonetheless, despite freedom, urban space is controlled and, therefore, people's actions are restricted by formal and informal regulations (Jałowiecki & Szczepański, 2006: 337). The former one concerns legal regulations which impose certain behaviour on space user's, e.g. prohibition of smoking, while the latter ones are created by social norms, which for instance tell people how to behave in particular places or circumstances. Hence, in this context, when people take control over space it becomes a "place", with its rules, norms and values. People need both the limitations that places give them as well as freedom guaranteed by space (Tuan, 1987: 75). It also has to be pointed out that urban space "undergoes a variety of processes; it can be created, shaped and adjusted to specific factors" (Grzeškowiak, 2010: 15). It is subject to various influences and is shaped both by its inhabitants as well as city and governmental authorities (Jałowiecki & Szczepański, 2006: 317).

The organization of space very strongly influences people's behaviour, and can have detrimental effects on their behaviour. This concerns both open spatial

organization e.g. the public outer city space, as well as the interior space of the buildings. The space users adapt their behaviour to the surrounding, hence how they experience it depends on how they perceive it, i.e. whether as formal or informal, warm or cold, private or public, known or unknown, limiting of giving freedom, far or close (Knapp, 1978). The structure and perception of space depends on fixed and semi-fixed components (Hall, 1968). The former one concerns elements that are immobile, such as layout of buildings, walls, doors, windows. The latter one describes the elements that create the layout of space, ones that can be moved, such as chairs or tables etc. How these two components are arranged and designed have a significant influence on the perception of space. They may either create a sociofugal (separating people) or sociopetal (bringing people together) space (Marquardt & Greenberg, 2012).

2. Distance

One of the crucial communicative strategies is the control and management of distance during interactions. In human communication one can distinguish intimate, personal, social, or public distances (see e.g. Hall, 1966). Rules which govern distances are learnt from an early age and it is socially expected and required to properly apply distance in various situations. This also largely depends on people's needs, their motives and all different information and clues which are read from the surrounding and the situation. In social interactions people always assess the character of the relation with another person and choose proper physical distance (Janda-Dębek, 2003: 61). Furthermore, Skarżyńska (1981) reminds us that during the communication process people assess the external features of another person (the appearance, the image), behaviour, mental states, social and professional roles. This is a dynamic process in which most people are intuitively able to read the changing context as well as changes in other persons' behaviour (Janda-Dębek, 2003: 70). This ability, as Bernieri and Rosenthal (1991) noticed, is practiced since the moment of birth and allows people to be successful participants in social interactions in which they compare each other's acting and adapt to it. However, there may appear situations in which an interactant does not present the ability to synchronously read the emotional state of others and apply the proper distance, keeping it too large or too small. This could lead either to the feeling of rejection or of invasion into someone's private space respectively (Janda-Dębek, 2003). Social interactions are governed by some agreed patterns of behaviour, which people are expected to understand and follow (Abelson, 1981; Baldwin, 1992). These patterns, in some cases, could be even called scenarios (e.g. fixed greeting scenario), allow people to interpret the situations which are not clear and give guidelines for proper behavioural response (Kenrick et al., 2002). Any change in the application of distance, whether due to formal or informal circumstances, undermines the predictable rules of social interactions. One of such contexts was COVID-19 pandemic.

3. The role of face in human communication

The face is the main component of people's identity that shows one's uniqueness allowing others to distinguish one person from another. By looking at someone's face we are able to gain information about "identity, gender, sex, age, race, ethnicity, sexual orientation, physical health, attractiveness, emotional state, personality traits, pain or physical pleasure, deception, and even social status" (Jack & Schyns, 2015). Furthermore, in human interactions, the face is an active participant and as Puppel and Puppel (2025: 51) notice, it cannot "remain neutral or 'unmasked'". Face expresses 6 basic universal emotional states, such as sadness, anger, disgust, fear, surprise, joy (Morreale, 2007) and attitudes towards other people. This undeniably influences the dynamics of interaction, and ascribes face a regulatory function. Face expressions, as flexible communicative tools, change depending on the context of interaction and the character of interactants, whether they are real people, virtual figures, or maybe animals (Crivelli & Fridlund, 2018). They simply reflect the changing behaviour of people who are involved in conversation. This concerns for instance situations in which by presenting threat, aggression or sometimes submission on face, people protect themselves against encounters that can be harmful to them (Jack & Schyns, 2015).

Despite being one of the most significant tools in communication, face sometimes loses its communicative potential. Puppel and Puppel (2025: 52) notice that sometimes people fail to recognize facial expressions because of the so-called 'face blindness' or 'face agnosia', due to different functioning of the nervous system. Such a condition "may have a profound effect on our daily communication practices in the oral order of communication" which further influences "its effectiveness, successfulness and comfortability" (Puppel & Puppel, 2025: 52). Furthermore, the potential communicative obstacle stems not only from failure to recognize human face but also from inability to show emotions. This, as stated by Jack and Schyns (2015: 5) may result "in an increased risk of social isolation [3–5], or even physical or mental harm". Inability to show emotions on face, however, does not always stem from medical conditions.

In human communication, the face usually stays uncovered allowing others to read it and interpret interactant's emotions. The exceptions are usually culturally-driven, for instance by religious laws, as in Islam niqabs or veils which cover women's faces are related to religious beliefs and are an expected practice. "Veiling is one of the most important indicators of female religiosity" (Fidan, 2017: 190). Cultural practices, however, are not the only reasons for covering face. Some social situations, such as the COVID-19 pandemic also introduced face covering practices in the form of facial masks. Without a doubt these protective measures could limit the number of infections, however, they also posed "challenges on daily face-to-face communications" as Mheidly et al. (2020: 2) emphasise. They point to the fact that "wearing face masks hindered the ability of seeing and understanding people's expressions during conversations, and

decreased the impact of communicated material” (ibid.). Masks on face cover nose, mouth, chin and partly cheeks. Hence communicative potential of the face is significantly weakened. There is more reliance on eyes, eyebrows or forehead. Another challenge concerns the production and reception of sound. When applied properly, masks rather tightly cover the mouth. This as Mheidly et al. (2020: 2) explain “muffles sound and makes it challenging to understand speech and some higher pitched voices.” As a result unnatural louder production of sounds as well as more focus on interlocutors’ speech is required. Facial mimics are particularly important for people with hearing disabilities and with special needs. Face supports their communication, sometimes being the only source of information from another person, as for example in reading from mouth. Hence, unclear audial production is not supported by mimics if the face is covered.

4. The importance of touch and gestures

Human interactions involve a great variety of non-verbal tools. Facial expressions and the use of proper distance are just some of them. Communication, however, also includes other significant elements such as touch, which further also constitutes some of the gestures. The discussion conducted here focuses on a very peculiar context, that of pandemics, which changed the natural dynamics of interactions. The role of touch and the consequences of limiting it for safety purposes, will be discussed in this section and further in reference to the conducted study.

Touch appears in intimate and personal distance between people and also sometimes in a restricted form in a social distance. It follows social norms of behaviour. Of significance here is the notion of ‘social touch’ defined by Puppel and Puppel (2025: 111) as transformed from touch which “has been accorded a very social status very early in our social history”. Its “reciprocal character [...] is best demonstrated by the handshake, hugging and kissing” (Puppel & Puppel, 2025: 113). Touch supports fundamental needs of a human being, feeling of safety, comfort, relaxation. The absence of touch may have a detrimental effect on human mental well-being. This may lead to the so-called ‘skin hunger’ (or ‘touch starvation’, as named by Puppel & Puppel, 2025: 111). In relation to that, this study discusses among others, the impact of regulations concerning distance between people as well as forms of gestures, during COVID-19 pandemic.

Touch is present in some of the widely-applied gestures, such as handshakes. Undeniably gestural communication facilitates verbal messages, as Puppel and Puppel (2025: 93) indicate, gestures “may replace speech [...] regulate the flow and rhythm of various nonverbal interactions, maintain attention of communicators, add emphasis and/or clarity of speech”. While gestures can be categorized into emblems, illustrators, affect displays, regulators and body manipulators (classification put forward by Ekman & Friesen, 1969, 1972), the current discussion focuses on emblems, particularly on greetings in the form of handshakes. These,

due to COVID-19 restrictions concerning distance and touch, were strongly limited. As Mheidly et al. (2020: 1) noted, the “spread of the virus necessitated a shift in the communication paradigm when it comes to greetings and handshakes”. The arising situation required people to adopt salutations that do not entail physical contact, such as the “peace sign,” the “hand on chest,” and the “namaste””. The World Health Organization encouraged people to use gestures imitating a fist bump, to greet others with a bow, share an air-five, tip their hat, nod their head while making eye contact or simply wave and say hello.

All of the above mentioned notions, i.e. space, nonverbal components of communication – face, mimics, touch distance, gestures, were affected by pandemic regulations. Behaviour that had been natural before, had to be significantly altered and modified. The tools that were used to support health protective measures included, among others visual-textual signs, which dictated the expected behaviour. These have been analysed and the results of the study are presented in section following.

5. The study

In reference to the earlier discussed concepts of space, distance, the role of face mimics, touch and gestures (greetings), the study was conducted to measure the relative impact of signs in the public space on the perception of space and human interactions in the context of COVID-19 pandemic.

The aim of the study was to verify whether messages in the public space, which expressed:

1. imposed social distance of at least 1,5-2m
2. imposed face covers
3. prohibition of certain gestures/greetings
4. promotion of hygienic habits,

can create a severe contradiction of intuitive innate human behaviour in people's minds, forcing them to act unnaturally. It was assumed that as a result of the undertaken safety measures the quality of human communication could significantly deteriorate. Furthermore, it was also assumed that the language used on signs in combination with visual elements may build a negative image of the public space and any kind of interaction as creating dangerous health hazards. The characteristic forms of language included the use of imperative forms, messages expressing bans/prohibitions, forms of reminding and instruction. All of the above assumptions will be later discussed in reference to the theory concerning the meaning of space, distance, face mimics, touch and gestures.

5.1. Methodology

A qualitative-quantitative approach was applied to verify the proposed questions and assumptions. A questionnaire consisting of 4 questions was distributed among 40 university students. Question 1 concerned 4 specific signs (Fig. 1, Fig. 2, Fig.3, Fig.4), which appeared in the public space during the pandemic and each of the sign was analysed in reference to the following emotional responses:

1. the feeling of limitation
2. the feeling of anxiety
3. the feeling of threat
4. the imposition of unnatural behaviour
5. the feeling of safety
6. other

These categories were identified on the basis of the author's prior content analysis of signs. The respondents were asked to identify a presented sign with a given category and they were further encouraged to present a more elaborate explanation of the chosen option.



Figure 1. “For your safety keep the proper distance” (author’s translation).
Source: https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcRA4aqnzmoaX_Qxm_qDwrUdN-LXbQgYnwQLt9g&s

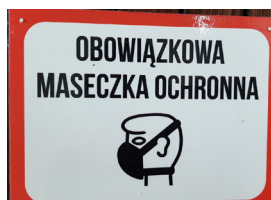


Figure 2. “Face masks compulsory” (author’s translation)
Source: <https://a.allegroimg.com/s1024/0c1d61/434533ff4a7c82aa37bd87a1365e>



Figure 3. Don't greet people with a handshake (author's translation)

Source: https://www.avery-zweckform.pl/sites/avery.pl/files/styles/crop_1_1_ratio_style/public/2020-04/powstrzymaj_zarazki_0.jpg?itok=Yx40KeCh

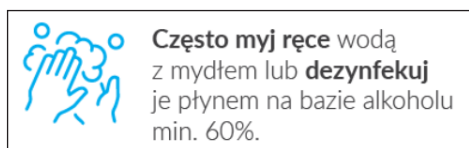


Figure 4. Wash your hands frequently with soap and water or disinfect them with an alcohol-based hand sanitizer containing at least 60% alcohol (author's translation)

Source: <https://hive.forms.usercontent.microsoft/images/73689ee1-b42f-4e25-a5f6-66d1f29bc092/be432962-117e-4317-ace5-1cbff4c01033/T7ZIWO389BQRUX68VWU0TT9UXS/375df7b0-f922-4f32-8c8d-6756e3bc8c90>

The remaining 2 closed questions (each followed up by an open question encouraging the comment) dealt with the perception of the language of orders and prohibitions used on signs, for example: “wear a mask,” “wash your hands,” “keep your distance,” “do not greet others with a handshake,” “avoid gatherings,” “cover your mouth and nose,” “follow restrictions,” “remember to protect the elderly,” “stay at home.” In Question 3 the respondents were asked to evaluate these messages and choose a response these messages could evoke. They could choose from the following options concerning feelings and responses: negative, resistance, sense of obligation and obedience, neutral, positive, other (specify). The 4th question focused on the influence of signs on the perception of the image of space. The respondents were asked to give opinions about the image of space by referring to the following options, which described the pandemic space: 1. space which enhances human communication 2. space which is communicatively neutral or 3. space which may disrupt natural human communicative behaviour.

5.2. Results

5.2.1. Evaluation of signs

1. wear a mask/cover your face

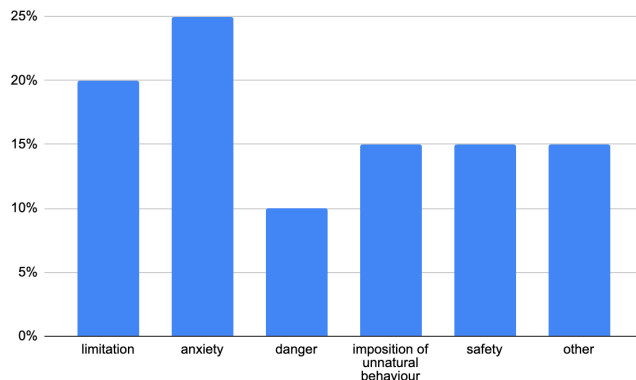


Chart 1. Responses to the sign requiring the wearing of a face mask

Signs depicting the face covered with a mask most often evoked the feeling of anxiety (25%) and being somehow limited (20%). Some of the respondents further explained that seeing a sign which imposes covering the face with a mask makes them aware of the seriousness of the situation. Moreover, wearing masks had not been common on a daily basis before 2020, hence it was perceived as an unnatural component of face image (15%). Interestingly the 10% of respondents pointed out that the presence of this sign could also evoke the feeling of threat, as the sign indicated the potential danger. Nevertheless, this perception is outnumbered by the feeling of safety (15%), which masks could guarantee.

2. keep distance

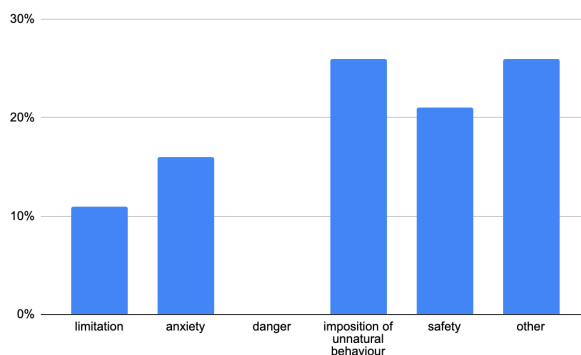


Chart 2. Responses to the sign imposing 2m distance

The survey revealed that signs encouraging people to keep 1,5/2m distance in the majority of cases evoked the feeling that it is unnatural behaviour (26%). It also, however, brings the feeling of safety (21%) among the respondents. The survey participants also pointed to the feeling of anxiety (16%), which may appear in public places, such as shops or other public buildings, because it may be difficult or even stressful to keep a required distance. As further indicated by some of the respondents, keeping distance is also difficult with very close relatives inside the buildings. As the sign was most often placed outdoors and also in places which may easily become crowded, hence some of the respondents treated it as a reminder and a guideline.

3. don't greet people with a handshake

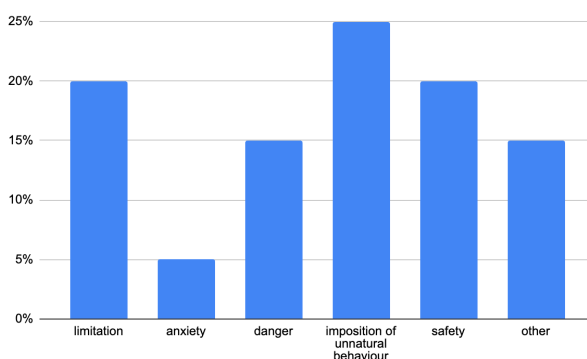


Chart 3. Responses to the sign forbidding handshakes

For 25% of the respondents avoiding a handshake as a greeting is unnatural behaviour. It also evokes the feeling of limitation (20%). On the other hand, the survey also indicates that people feel safer (20%) when their behaviour is dictated, as others have to comply with the general regulations as well. The survey participants noticed that before the pandemic, handshakes had always been a well known common way of social greeting, especially with people we do not know. Such sudden prohibitive suggestions may evoke anxiety (5%). Furthermore, some of the respondents indicated that they generally avoid physical contact and prefer verbal greetings. It is not always necessary to enter the other person's personal space, hence this sign did not limit their usual way of behaviour.

4. wash your hands

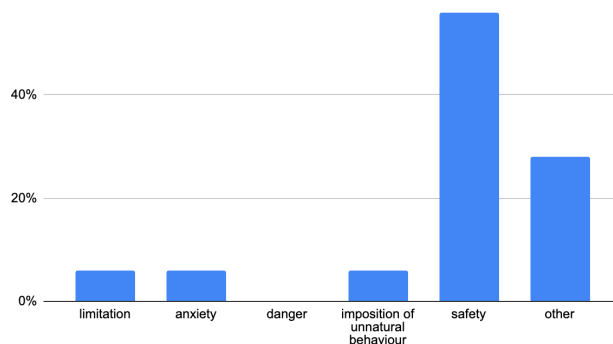


Chart 4. Responses to the sign reminding people of frequent hand washing

The survey shows a rather unanimous attitude toward the sign reminding people of frequent hand washing. For 56% of respondents this message evoked the feeling of safety. Reminding people about this behaviour is actually a reference to people's everyday habit even from before the pandemic, which does not require any extra effort from people. As indicated by some of the respondents, the presence of this sign in the public space can only have positive results, as it will motivate some people to maintain hygiene better. Spreading the knowledge about hygienic standards can have a positive effect on the society also in the future, as it develops some kind of a habit to wash hands. Treating it as a limitation, unnatural or as evoking the feeling of anxiety, is expressed by the minority of respondents (6% for each response).

5.2.2. Language on signs

Except for visual images, some of the signs also contained verbal messages in the form of imperative statements expressing regulation or a ban. As the language is said to strongly influence people's behaviour and their way of thinking, the survey also aimed at finding the opinions about the language used on signs. The following examples of the imperative statements could be found in the public space on the signs presented in this study: "For your safety keep the proper distance", "Wear a face mask", "Don't greet people with a handshake", "Wash your hands frequently with soap and water or disinfect them with an alcohol-based hand sanitizer containing at least 60% alcohol". The study focused on 4 signs, which contained these texts. However, the author decided to provide more linguistic examples, as only 4 phrases could not be enough to build and assess the perception of space among the participants. The additional phrases included: "avoid

crowds”, “cover your mouth/face”, “follow the restrictions”, “remember to protect elderly people” and “stay home”.

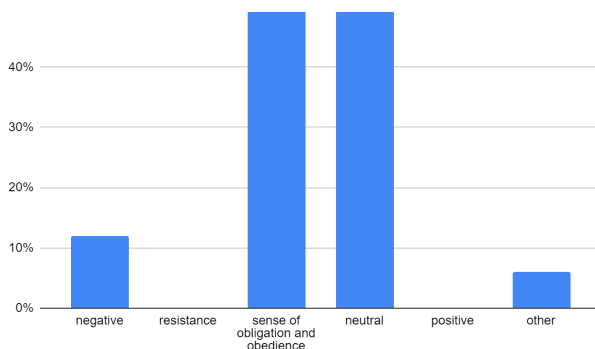


Chart. 5 Responses to the language used in public space during COVID-19 pandemic

Verbal messages, their form, were accepted by the majority of respondents. The texts create a sense of duty and obedience to orders/prohibitions (42%). On the other hand, neutral emotional responses (42%) were also identified. Some respondents stated that after one year’s presence, signs and language no longer evoke such strong emotions as before and are treated as a fact of life. However, for most of them texts do not seem unnatural, rather necessary in their form (imperative) and content. The respondents know that these forms of signs work as a reminder of the required behaviour and social responsibility. Interestingly there also appears an opinion suggesting the change in the form of the message, from simple short often one-word statements, to more elaborate instruction of how to behave, specifically with the use of words, such as for example: “please”, “remember”, “take care of”. Additionally, 11% of the respondents expressed negative attitude towards the signs, which was explained as unnecessary imposition of behavioral rules. In general the language used neither evoked positive responses nor aroused/incited resistance.

5.2.3 The image of space as influenced by the signs

The last question in the study concerned the general image of space as influenced by the presence of signs. Respondents were to consider whether the signage creates the image of space which enhances human interactions, is communicatively neutral or maybe disrupts natural human communication.

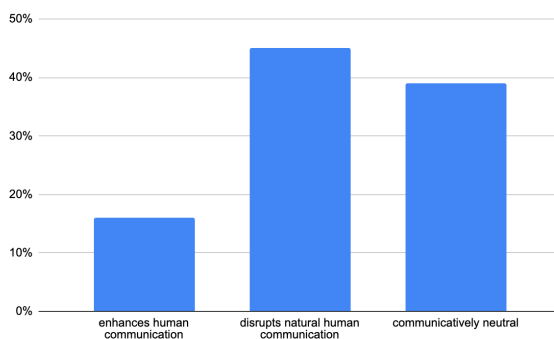


Chart 6. The perception of the public space in reference to the presence of COVID-19 signs

The survey revealed that 44% of the respondents claim that signage disrupts natural human communication. As the contact with other people is limited, there appear barriers and restrictions. Interestingly, the disruption in communication may appear due to fear of communication, finding oneself in a communicative context which could pose some danger (contraction of virus). There have also appeared responses which drew attention to non-verbal aspects of communication, e.g. face mimics or proper distance. As they were also controlled, communication could become disturbed, especially in the situations in which closer social distance is a norm and also generally in close contact cultures. According to the respondents, people are not used to the imposed forms of communication. They are not natural. Interestingly, the study also revealed that there are people (17%) who accept the signage and restrictions. They do not see them as a communication barrier but as a new form of communication. They perceived it as successful as the majority of people obliged to the rules. Some of the respondents did not see any influence on human communication (39%). Even though different signs that restrict or control our behaviour can be found, they usually do not limit basic intuitive activities, such as e.g. greetings, even if in another form.

6. Discussion and final conclusions

The aim of the conducted study was to analyse the influence of visual-textual signage, which appeared in the public space during COVID-19 pandemic, on the perception of public space. The analysis concerned signs which expressed imposed social distance of at least 1,5-2m, face covers (masks), prohibition of certain gestures/greetings and an intense promotion of hygienic habits (hands washing). The study also focused on the forms of language used on signs during the pandemic.

The first studied notion concerned signs presenting face masks, which were supposed to encourage people to cover their faces and remind people that it was one of the ways to prevent the virus from spreading. Despite the face being a part of the body with one of the greatest communicative potentials, covering it was treated as a safety measure. Sometimes it could evoke the feeling of potential danger (hence the anxiety) and threat. Interestingly the responses, which pointed to the fact that masks seriously limit/restrict non-verbal communication and facial clues, are scarce. It should be remembered that face tells who the person is, it is crucial in social interactions as people make inferences about the other person's emotional state, attractiveness or health on the basis of facial cues (Henneberg, 2003; Jack, 2015). The perception of facial expressions can prevent social encounters that may be dangerous. Further, if people are unable to show their emotions clearly and hence identify emotional states of others, this may seriously influence social relations, making those more sensitive, more isolated and seeing communication as a difficult process. Some of the already conducted studies (Jones & Schlogl, 2020) revealed the negative impact of masks social interactions. This is not only related to hindering face mimics but also significant influence on the clarity of speech, forcing people to adopt different communicative strategies not common before, e.g. slower speech, clear slow articulation of utterances – not natural conversation strategy. It seems however that the participants in general did not see the undertaken safety measures as the loss of face's communicative potential. They approached the problem from a medical perspective and a challenge in human interaction. This may be caused by the fact that the questionnaire was conducted over one year after the outbreak of the pandemic and people got used to face covers. Furthermore, it has to be pointed out that although face covers were imposed in the public space, virtual interactions, in which the face covers were not necessary, were more common.

Human communication also requires proper understanding of how to control and apply distance in various social interactions. This knowledge is learned within a particular culture and people usually are able to apply the rules of proper distance in accordance with a social situation. Any changes in standard rules of distance may create negative reactions, feelings of anxiety, misunderstandings (see Hall, 1968; Janda-Dębek, 2003) as a result of cognitive inconsistency, as what was once learnt and established as a rule, suddenly does not match the reality and cannot be applied. In the times of pandemic, people were in a way forced to keep the required distance at minimum 1,5-2 m, both in the open air public spaces (street, parks etc.) and in closed public spaces (shops, cinemas etc.). The conducted study confirmed that fixed distance is perceived as unnatural and difficult to keep. It also creates the feelings of anxiety, as people feel stressed whether they will be able to keep this distance or not. Even though in the context of the pandemic the signage enforcing fixed social distance was meant to impose responsible behaviour and ensure safety, still inability to intuitively assess and

apply proper social distance, even when interacting with people we know, was perceived as a challenge.

Imposition of distance also had an impact on the gestural communication. Gestures, just as face mimics are intertwined with any social interaction, they support it and for some groups of people (e.g. deaf people) they become the dominant language and form of communication. In different cultures people tend to adopt different forms of greeting, with touch or without touch, sometimes only verbal, sometimes combining both verbal and non-verbal components. In the times of pandemic characterised by imposed social distance, using certain touch-gestures became impossible. In the touch-greeting cultures people were strongly encouraged to replace the familiar hand shakes with other forms. In the beginning these were elbow bumps or fist bumps but with time they were also considered as creating too close distance between people, hence posing potential threat of contracting or transmitting the virus to another person. The World Health Organization recommended for instance, bowing, sharing an air-five, tipping your hat, nodding your head with eye contact, waving and saying hello. Some researchers (see e.g. Mheidly et al., 2020) also suggested hand on chest or the namaste. The survey revealed that banning handshakes forced people to act unnaturally. This restriction could create the feeling of uneasiness. However, as it was also shown in the survey, avoidance of this greeting gesture did not seem to be very harmful or negatively influence social interactions. Initially it could only require greater self-control and focus on the gesture people want to use in a given situation.

The next notion which could influence the perception of space concerned hands washing activity, which is a standard basic daily routine. As such, it should not evoke either surprise nor the feeling of danger. Even though the extensive presence of this sign in the public space could be seen as communicating something more than just basic routines, the survey proved that promotion of everyday habits is rather perceived as motivating.

Except for the visual images, the public space has been filled with textual messages. Language is a powerful tool in changing people's behaviour. Texts present on signs in the public space represent directives, Searl's (1969) category of illocutionary acts. This particular type is supposed "to get the hearer to do something" (Searl, 1969: 71). These usually appear in orders, requests or commands, which can be identified in the presented examples of texts from the signs. The survey showed that these texts present on signs in the public space did not evoke strong negative emotions nor resistance, despite imperative forms which very often create defiance.

The study assumed that increased presence of prohibitive and regulative signs in the public space should influence the perception of space and hence how people feel when interacting with it. As people are used to their natural ways of behavior especially in the field of human communication, forcing them to change their habits could evoke the feeling of uneasiness, sometimes even the resistance, which could initially be observed – resistance to wear masks in public spaces,

in crowded areas etc. The adopted safety measures in the form of face masks, controlled greetings, extensive hygienic practices, greater control of distance between people also significantly influenced public space and how it changed its purpose and reception among its users. From socio-petal, friendly context for interaction it transformed into a socio-fugal environment which aimed at separating people.

However, despite the fact that space became more controlled, the survey did not confirm negative perception of space, as e.g. being less friendly, limiting. Imposition of isolation, also by means of extensive distancing, bans on meetings seems to be perfectly understood by the respondents. The question arises why people accept to live against natural human need to be with others, close to them, with the sense of touch, with the possibility to interpret facial expressions. As the survey was conducted after one year of the outbreak of pandemic, the general acceptance of the imposed regulations may be explained by the fact that people learnt to live with limitations, that they developed new ways of communication and they tried to approach the situation as a common responsibility to act together to overcome the pandemic. In the light of the pandemic the undertaken measures seem to be understandable, and such image seems desirable as it does not encourage human contacts and hence lowers the number of unnecessary interactions, so the threat of easy spread of the virus. It should not however be forgotten that all mentioned signs, hence regulations, bans may have deteriorated human communication, taking from it the basic innate behaviours and needs. The study also confirmed that human beings are able to adapt to the changing circumstances, social situations, norms and ways of behavior for the sake of the common good.

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