Communication Ecosystem Contexts: From Mass Audiences to Mass Messages

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Abstract— **Mass media used to have 'mass audiences'. Nowadays, and with the emergence of the Internet and other new media technologies, messages themselves have turned into 'mass'. These 'mass messages' have different densities, varieties, and dynamics in different societies and different countries. Accordingly, in this paper, we take an ecological perspective and resemble mass messages to living organisms that form 'communication eco-systems'. We then introduce 'communication ecosystem context' as a new umbrella concept encompassing various previously known communication contexts. Based upon historical evidences, communication ecosystem contexts are classification into long-term and short-term, which can be formed normally, forcefully, or due to turn of certain events. In this paper the impacts of communication ecosystem contexts on message perception and interpretation have been studied primarily in Iran, and comparison have been made with five different communication ecosystems of Germany, UK, Australia, USA and Canada.**

Keywords: Iranian Communication context, communication ecosystem context, mass messages, message perception and Interpretation.

I. INTRODUCTION

As a social practice, communication is a context-dependent process. In many ways, communication emerges and takes various forms in complex circumstances or situations, that is, 'contexts' which insert new realities to physical landscape of prosaic life [21]. Context is a boundary where communication happens [20, p. 182]. It serves for distinct social purposes, and hence changing the meaning of communicative action as it is practiced in a given situation. For example, when one shouts 'fire,' it has a different meaning if it is done at a military camp or if it done in a crowded movie theatre [7, p. 16].

Communication contexts can be classified from different perspectives, *see Section 2*. For example, contexts can be classified into three classes based on the physical environment: physical, situational, and relational. Physical context allows communication to become concrete, and yet operates not just as background but as a landscape wherein communication becomes meaningful. Situational context is about the situation in which the communication happens, like telling 'go away' in a friendly dialogue or in a family fight. Relational Context is related to communication actors. For example, when a salesman says 'don't worry' to a customer, it is different from the exact same words when they are said by a girl to her father when she is asked to come home not too late [7, p. 16].

The main argument in this paper is as follows. What is commonly referred to as communication context is typically limited to a short period of time, a small location where the communication takes place, or a small group of communicators and communicatees. However, there is a need to understand context also at *societal* level. Such context would encompass the three classes of contexts in the previous paragraph, yet it is longer-lasting and has a wider societal and locational coverage. For example, the presence of Saddam Hussain's portrait in all public places in pre-occupied Iraq could create a communication context in Iraq's society that *one cannot explain with the existing definitions of context*. As another example, the very different volumes of advertisements of different kinds in the U.S.A. compared to Iran may create different communication contexts in these two countries.

The kinds of societal contexts that are of interest in this article are different from *culture*. Specifically, they may or may not be affected by culture. For example, posting Saddam Hussein's portraits in all public places is not necessarily part of the Iraqi culture. But the high volume of advertising in the U.S.A. could be linked to the American culture.

The communication context that is introduced in this article is a framework that is referred to as 'ecosystem communication context'. It carries some characteristics of *ecosystems* in Ecology, i.e., *energy*, *material*, and *organisms* [5, p. 172]. Specifically, we argue that the regulations, laws, norms, etc in a society may resemble energy in an ecosystem; the environment factors, such as the telecommunications, mass media, and new media hardware may resemble materials, and the mass messages may resemble the organisms.

The main message of this article is two-fold. *First*, it is important to study the concept of communication ecosystem context using locational and temporal evidences. This would help us better understand different communication ecosystem contexts in different societies and at different periods of their history. *Second*, the evidently common characteristics between the ecosystem communication contexts and the ecosystems in Ecology may shed light on how a communication ecosystem context can be understood by communication researchers.

II. DIFFERENT CLASSES OF COMMUNICATION CONTEXTS

Communication context has been categorized from different viewpoints and for various environments. Based on the type of communication, communication context has been classified as person-to-person communication context [17, p. 131] and public communication context [23, p. 19]. Communication context may also be classified as physical, relational, and situational. Physical context operates not just as background but a landscape with both tangible and concrete spaces wherein communication becomes meaningful [6, p. 10]. Relational Context is about the communication actors. For example, when a salesman says 'don't worry' to a customer, it is different from the exact same words when said by a girl to his father when he asks his daughter to come back home not too late [7, p. 17]. Focusing solely on inter-personal communication, relational context can be further classified into multiple subclasses: formal versus informal contexts, friendly versus unfriendly contexts, and equal-status versus unequal-status contexts [11, p. 45]. Situational context is about the situation in which the communication happens, like telling 'go away' in a friendly dialogue versus in a family fight [7, p. 16].

Non-physical communication contexts can be classified as social, cultural, and historical. However, these three classes may *overlap* at certain instances. For example, social context may have major presence in collectivistic societies, where persons are fundamentally interdependent with others. In these societies, the 'self' cannot be separated from the surrounding social context [17, p. 255]. For example, in the Indians' status, caste, age, and hierarchy are important contextual and situatio-nal factors in communication [12]. In the example of India, one can describe the role of caste in inter-personal communication as all three social, cultural, and historical contexts.

Some other communication contexts include psychological and temporal. Psychological context is about the state of mind among communication actors, like the amount of emotion that exist in the communication [10, p. 12]. Temporal context refers to different time factors that influence communication process [17, p. 121].

Before we end this section, we reemphasize that while the above classifications can help us understand communication contexts, there also inevitably exist overlaps across some of these classifications, especially when it comes to non-physical contexts as it is well-articulated by Mooij: 'Individuals are products of their culture and their social groupings. Culture is not a system of abstract values that exist independently of individuals. Neither can culture be separated from the historical context. Culture to society is what memory is to individuals. It includes the things that have "worked" in the past. It also includes shared beliefs, attitudes, norms, roles, and values found among speakers of a particular language who live during the same historical period in a specific geographic region. These shared elements of subjective culture may transfer from one generation to another. Often people refer to culture as an environmental influence as if it is outside the person, but it is an integral aspect of a person' [17, p.177].

III. AN ECOLOGICAL VIEW TO COMMUNICATION CONTEXT

Having considered different classifications of context in Section 2, one can see that most classifications often focus on individual or small group communicators, rather than a large group of communicators at the level of the whole society. Furthermore, some of the common classifications of context are often limited to short periods of times or small locations.

Once a communication process initiates, different communication contexts begin to *interact* with each other. For example, when the room's temperature increases in a meeting (change in Physical context), one may also expect changes in the Psychological context [6, p. 10]. Such interactions across different contexts, together with the common overlaps across certain contexts that we explained at the end of Section 2, create characteristics for communication contexts that are similar to those of *climate* and *weather*. Communication climate, as defined by Ronald B. Adler, refers to 'the emotional tone of a relationship'. As Adler further explains, 'personal relationships are a lot like the weather. Some are fair and warm, whereas others are stormy and cold; some are polluted and others are healthy. Some relationships have stable climates, whereas others change dramatically –calm one moment and turbulent the next. However, you cannot measure the interpersonal climate by looking at a thermometer or by glancing at the sky, but it is there nonetheless. Every relationship has a feeling, a pervasive mood that colors the interactions of the participants' [1, p. 206].

While communication climate is an interesting analogy to explain certain contexts, we argue in this article that there exist communication contexts that *last longer*

and *cover larger geographical regions* (such as a country), which are more like an 'ecosystem' than a 'climate'. For example, the presence of the portraits of lifelong leaders at all public places (on the wall at schools, banks, public and private offices, in sport stadiums, on bills, etc.) in certain countries creates a rather long lasting communication context. In such societies, such portraits appear in 'mass'. This simple example and various other examples that we will explain in the rest of this article suggest that the communication contexts that such 'mass messages' create are complex subject matters with long lasting impacts beyond climate, which are more similar to an ecosystem.

The term 'ecology' did not exist prior to 1935. The developments in technologies since the beginning of the 20th century have led to considering the differences between varieties of ecosystems, making Ecology a science [22, pp. 284-307]. Seven years later, Lindeman defined an ecosystem as "a system composed of physical-chemical-biological processes active within a space-time unit of any magnitude" [13, p. 279]. More recently, ecosystem is defined as 'a unit comprising a community (or communities) of organisms and their physical and chemical environment, at any scale, desirably specified, in which there are continuous fluxes of matter and energy in an interactive open system.' [26, p. 270].

A. Organisms, Materials, and Energy

The modern definitions of ecosystem commonly use three key components to define an ecosystem: organisms, energy, and material. The following general characteristics and aspects are often discussed for organisms in an ecosystem: biological structure, trophic structure, predation rate, succession, resilience, diversity, mutualism, passive and active dispersal, etc. [8, p. 5]. It is of interest to note that, the term 'nutrients' is also sometimes used in the Ecology literature instead of the term 'organisms' [25, p. 424].

Some of the above characteristics can also be identified for messages when they turn into 'mass'. In order to explain the central concept of 'mass messages', we note that because of the new media technologies; one can no longer assume 'mass audiences'[1]. Instead, we now live in an era where a significant growth in the density and volume of messages can be recognized in every moment of our daily lives. Individuals are facing news websites or papers from the beginning of the day, to papers, electronic magazines, TV screens in home to big screens in streets, radio in car, SMS, posters, billboards, and the screens of computers, tablets, and laptops. Given the *density*, *variety*, and *dynamic* of messages, one can resemble them to living

organisms with similar usable[2] and nutrient-like features that form a communication ecosystem.

Materials in an ecosystem can be understood by explaining the ecosystem's landscape. Most simply, a landscape is a spatially heterogeneous area, characterized by structure, function, and change [24, p. 17]. Structure refers to the spatial relationships between distinctive ecosystems, that is, the distribution of energy, materials, and species in relation to the sizes, shapes, numbers, kinds and configurations of components. Function refers to the interactions between the spatial elements, that is, the flow of energy, materials, and organisms among the component ecosystems. Change refers to alteration in the structure and function of the ecological mosaic through time [24, p. 178].

To further explain landscape-level patterns and processes, we must also discuss 'boundary dynamics', which determine why a boundary is located where it is, how it influences ecological processes within patches and over the larger landscape, how boundaries affect the exchange/ redistribution of materials, energy, and organisms between landscape elements, and how these transfers can, in turn, act to change the location and nature of boundaries [25, p. 422].

Energy in an ecosystem is what creates the flow of material [3, p. 738]. It is sometimes referred to as a vector. Both abiotic and biotic energy vectors may create disturbances through their actions, which in turn may alter boundaries. Such vectors also contribute directly to movements of materials, energy, or organ- isms over the landscape, both within and between patches, and thereby may determine the spatial patterns of the spread of perturbations through the system [25, p. 421].

In communication contexts, all regulations and rules, whether written or unwritten (such as self-censorship) and the overall norm in society can resemble energy in an ecosystem.

B. Definition of Communication Ecosystem Context

We are now ready to define a communication ecosystem: "In a communication ecosystem context, organisms are any type of written, vocal or visual messages that normally, forcefully, or due to a particular event turn into a 'mass'. In each society, the organism-like messages interact with the materials (ancient, old, and modern communication means) and energies (written and unwritten norms, regulations, and rules) in that society. A communication ecosystem is an umbrella context over all other kinds of communication contexts."

The outcome of interactions among organisms, materials, and energies in the above definition forms the

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[1] The term "mass audience" is defined as the great body of people, as contrasted to some special body like a particular social class, that is very large but amorphous set of individuals that engage in similar behavior, under external influence, such as media [16, p. 562].

[2] N. Windahl talks about 'using' messages, i.e., an action that is beyond the common term 'receiving' and is more along the line with nutrients [15, p. 40].

freedoms and non-freedoms, equalities and inequalities, pluralisms and non-pluralisms in a society. Each communication ecosystem often has its own particular types of organisms, materials and energy. Accordingly, the perception and interpretation of certain messages by those who live in a communication ecosystem context can be affected by that particular communication ecosystem context. This issue will be investigated in Section 4.

IV. CLASSIFICATION OF COMMUNICATION ECOSYSTEM CONTEXTS

An important issue in the classification of communication ecosystem contexts is the fact that a communication ecosystem context may not be permanent, as it may rather change due to the changes in the characteristics of its organisms, energy, and materials over time. Specifically, whenever some particular messages in a particular society and during a particular periods of time take the characteristics of a 'mass', they can become similar to the organisms in Ecology and form a communication context. Such transformation of messages to 'mass messages' can occur in long or short durations of time.

Another issue in the classification of communication ecosystem contexts is that, just like plants, animals, and microorganisms that are not the same in ecosystems at different geographical regions, communication ecosystems are different in *different societies*. For example, communication ecosystems may not be the same in North Korea, Saudi Arabia, and United States. Therefore, one may not necessarily categorize communication ecosystem as part of the classifications for context that we overviewed in Section 2. It is rather a different concept that may require more careful investigation.

A. Long-term Communication Ecosystem Contexts

Same as cultural norms, which are written and unwritten [9, p. 63], in a communication ecosystem context there are some 'dos' and 'don'ts' which are written or unwritten. These norms sometimes can rule a society or the communicational interactions within the society, and make a lifetime element in the communication ecosystem context of that society. One example of such norms can be seen in some countries by hanging or attaching pictures of the leader everywhere, from the façade of tall buildings to top of the movie theatre screens, in offices, and even in classrooms. These pictures like portraits of Ben Ali in Tunisia, Saddam Hussein in Baathist Iraq and some other cases appear as an 'always present element' in those communication ecosystems, while such an element could not be found in the U.S.A.

By comparing the communication ecosystem context of the above countries with the one in the U.S.A., one can better characterize this type of context. As an example, in

an experiment, an ointment of vitamin A+D was purchased in Iran and an exact similar ointment was purchased in the U.S.A. at the same time. They were both packed in cube cans with a surface of nearly 152 cm under print (the U.S.A. ointmentwas is slightly larger). However, the American ointment had a place on its package to print messages. As a result, the American customer receives an ointment which its under-print surface for messages is nearly 2.8 times more than the Iranian one.

Fig. 1: Two exact same ointments: the one on left is purchased in the U.S.A. and the one on right is purchased in Iran.

Similarly, the volume and variety of printed advertising messages that one receives in his home's mail box is much higher in the U.S.A. than in Iran due to the large amount of printed advertisements that are common in the U.S.A. This is to the extent that one may refer to the advertising messages in the U.S.A as 'mass messages'.

If we take messages in a communication ecosystem similar to plants, the above comparison would be like comparing two geographical regions in which the volume of plants in one is much more than the other. Here, our focus is not on what portion of the received messages are used - as says Sevn Windahl [19] - but rather we are interested in the existence, varieties, and interactions of the mass messages in these two different communication environments.

A long-term communication ecosystem context could be affected by the culture in a society; however, communication ecosystem is not necessarily the same as culture. To see this point, as another example, we note that playing music has thousands of years of cultural history in Iran. In fact, some evidences, such as ancient statuettes showing people with harps (Nairnoory, 1996, p. 747) and fifes [2, p. 125], reveal that Iranians had used musical instruments in 3000 B.C. Even after the advent of Islam, music remained as an important part of the Iranian culture. For example, Farabi's biography, a renowned Islamic-Iranian philosopher, explains that he was good in mathematics, acceptable in medicine, and excellent in music (Moin, 1985, p. 1288).

Despite this ancient cultural background of music in Iran, musical instruments and performers have been banned

to be shown in all government-monopolized TV broadcasting stations since the Islamic Revolution in 1979. Instead, the TV stations display pictures of nature, flowers, and birds whenever music is played. Yet, at the same time, in most Iranian cities, there are music classes or music academies and we can see men and women walking on streets and subways carrying music instrument cases. In this way, an Iranian communication ecosystem context has existed for 35 years which poles apart from other communities and also from its own past. In such ecosystem, not showing the musical instruments in the media has turned to a 'mass message'.

B. *Short-term Communication Ecosystem Contexts*

A communication ecosystem context may also appear in short-term, where 'mass messages' are formed in a short period of time. A fine example occurred in Tehran on September 4, 1962 at midnight which is somehow similar with the case of Orson Welles radio broadcast 'The War of the World' in October 1938.

The event of interest began with a severe earthquake near Tehran on September 1, 1962 (coincided with Iranian Muslims fasting days of Ramadan). Using media and traditional social networks, Tehran residents found out soon that more than 100 villages were destroyed and 20,000 people were killed. International news agencies announced that the destructiveness of the earthquake was comparable with 20,000 hydrogen bombs explosion and the UN Secretary General asked for help to survivors. These mass messages, affected Tehran's communication ecosystem context, quickly changed the communication ecology.

To better explain the change, first, it should be noted that since two years before the earthquake, the US army had its own TV station in Tehran named 'Television of The Armed Forces of The United States', a one kilowatt TV transmitter. All programs of this TV channel were in English, and were sent daily via the United States Army Airline from the U.S.A. to Tehran. Based on the reports, only 5% of Iranians watched TV due to the lack of Persian subtitles for the programs (Mojtabaee, 1968, p. 88). Although that TV channel was under the Iranian government permission, it was completely independent from the Iranian media regulation system. For instance, when Iranian National TV ended its programs sooner during the day, to respect the Muslim fasting month, the U.S.A. Army TV continued the programs to midnight.

It was during one of these nights on September 4, 1962 that a stranger called the United States Army TV, introduced himself as a police officer, and asked them to notify American individuals in Tehran about the probability of an earthquake in the capital and the necessity of taking safety measures. The TV night-shift agent stopped the program to announce that hoax message. Shortly after, the American social networks and then the Iranian ones were activated through telephones; and in less than an hour later, a large percentage of Tehran residents left their houses to the deserts surrounding the city due to the social panic.

With a perplexity, the Iranian National Radio entered the field just a few minutes later to encourage calmness during the escape. Finally, the next morning, some cars with loudspeakers circulated throughout the streets announcing the end of threatening situation and a few days later, John F. Kennedy, the former President of the U.S.A., formally apologized to Iran for the mistake [4, p. 6].

Hence, a stimulus like a TV night-shift agent's mistake built under the effects of a disaster may influence the communication ecosystem context and change its interactive elements significantly, quickly creating a 'mass message' in the society. This is yet another evidence for our overall argument in this article that societal context may exist beyond the categories that we overviewed in Section 2.

V. IMPACT OF COMMUNICATION ECOSYSTEM CONTEXT ON PERCEPTION AND MESSAGE INTERPRETATION: A FIELD STUDY

Every ecosystem has its own organisms. For example, in Iran we can find dozens types of vegetables, called 'Sabzi Khordan' (meaning 'eatable vegetables'), which are eaten raw beside the meals. Each vegetable has its own name, which is known to many Iranian women. Therefore, they can percept and name them upon seeing them, while in other countries where these vegetables are not planted, such a perception is not occurred. The simple case study in this section will show that persistent messages in a communication ecosystem context - like the above example - can lead to a specific perception and interpretation in that context, while it cannot lead to that perception in another ecosystem context. This point alludes to the concepts of 'selective perception' and 'selective interpretation'. According to the above two concept principles, people usually percept and interpret the same message differently due to some mediated factors like their mood, first attitudes, motivations, expectations and so on [27, p. 161]. For instance, it is said that during perception of a collection of messages – like a movie - people usually notice a character as a happy one or sad according to their own mood at that time [18, pp. 853-864].

A. *Methodology*

To understand the impact of communication ecosystem context on selective perception and selective interpretation, a simple limited-scope field study based on Mixed Method was conducted in Iran, Germany, United Kingdom, Australia, U.S.A. and Canada.

We initially started with 27 caricatures. For each caricature, we interviewed the caricaturist to understand the purpose for drawing the caricature. Based on the results, we selected four caricatures (see Fig. 2) to be circulated in Iran and the other five countries. The first caricature (caricature #1) was about rural migration to cities, a controversial topic in Iran and possibly many other developing countries. The other three caricatures (caricatures #2, #3, #4) were more or less global topics, i.e., related to gender discrimination, parent-child relationship, and traffic.

In each country the survey was done by showing a printed version of each caricature on a 21 x 24 cm piece of paper. In each case, the interviewee was asked about the purpose of each caricature. More specifically, the interviewee was asked to express his/her understanding, perception, and interpretation about each caricature.

Here, we only present the results for one of the four caricatures, i.e., caricature #1 in Fig. 2. It is about the migration of villagers from small villages to big cities. This particular caricature was selected because of the importance of rural migration in many societies. Based on the sources, rural to urban migration has been considered as a normal and usual phenomenon during the first years after the World War II. But since the advent of its undesirable consequences in developing countries, this type of migration has become an *abnormal issue* under the focus. In Iran, due to the land reforms in 1962, the rural to urban migration had a spike to the extent that after only four years at 1966, about 16 thousand villages were announced to be haunted. This number was doubled within twenty years, and reached as high as 38,600 'haunted' villages in 1986 [14, p. 122]. As a result, the Iranian media were filled with many news items, articles and even caricatures about this social problem since four decades before the experimented caricature was selected. The caricaturist (Sharareh Samadian) of caricature #1 has intended to show the social problem of rural to urban migration as she explained: 'The villager in the caricature goes to the city to sell his sheep. He smokes Chopogh (an Iranian traditional smoking pipe popular among villagers) to smoke the tobacco planted in his own village and puts on a wad hat which was made there. Then he returns to the village, using urban hat and sunglasses and smoking urban cigarette, losing his sheep instead.'
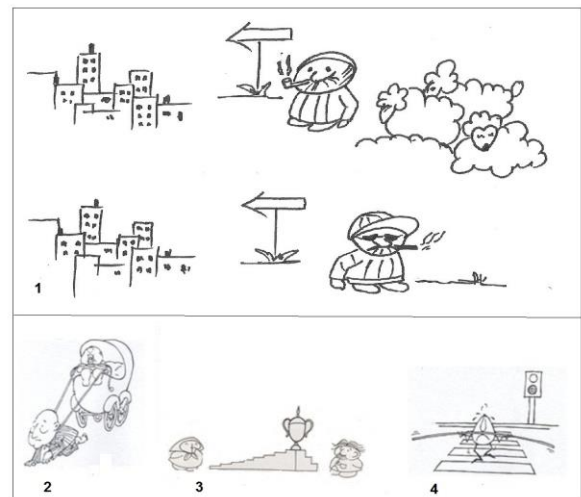

Fig. 2: The four caricatures that are showed to interviewees. The first caricature is about rural to urban migration.

B. Experimental Results

A comparison between the Western and the Iranian responses reveals a meaningful difference with 99% of confidence (Chi-square = 35, dif. = 3). Considering the perspective of 'communication ecosystem context', the most important difference is that 12% of Western respondents have said 'I don't know', glazing at the caricature while there was no Iranian without any idea of that particular caricature. Perhaps, the social problem of rural to urban migration cannot be the subject of caricature humor in the Western communication ecosystem context. This supposition can be tested through considering the details of 41% of Western answers which have described the caricature neutrally – without any negative or positive orientation. For instance, a 55 year-old British man said: 'villagers like to experience the urban life and town people like to experience the rural life'. Also, a 75 year-old American woman said: 'the shepherd wants to bring his wealth to the city while the townsman does not like wealth, but likes his cigarette instead'. Also, a 28 year-old British man said: 'a man is going to the village and another is leaving for the city' and finally, a more interesting response was given by a 30 year-old British man who said: 'the villager always goes to the city, sells his sheep and returns to his home, happier than before'.

On the other hand, more than half of the Iranian respondents had negative orientation toward rural to urban migration. For example, a 44 year-old Iranian man said: 'These are people who leave the rural nature and bring their money to the city and spend it for nothing but some useless things like hat or sun glasses'. Another 36 year-old Iranian man said that 'a villager who had gone to the city is returning now but without anything except that he is now just more classy and upscale'. A 23 year-old Iranian woman also said that 'a villager has left his village to the city with his sheep, but on return, he does not have

anything but addiction due to the lack of urbanization skills'.

It should be noted that 8% of the Western respondents had a negative orientation toward such migration. For instance, a 44 year-old Canadian woman said that 'a villager went to the city and some negative changes such as addiction have occurred in his character which is significantly transformed' and an 18 year-old American teenager said that 'the healthy farmer who had gone to the city with great expectations, became tired and stressful of urban life in return'.

As mentioned earlier, those Westerners who had not considered the migration negatively were three times more than Iranians (41% vs. 12%). But putting the quantitative differences aside, some major qualitative differences can also be seen in the Iranian responses and maybe these differences are caused by the *selective interpretation* of people living in the Iranian communication ecosystem context. As an illustration, we can consider the answer of a 20 year-old Iranian man who said that 'villagers are tired of the rural life and towns people are tired of the urban life'. A 38 year-old woman also said: 'towns people are tired of living in a city and villagers are in the desire of living in urban'. A 25 year-old woman had said likewise: 'villagers are trying to migrate, yearning for an urban life. On the other hand, townsmen are bored of living in the urban and going to go to a village where they can run away from the problems of urban life to the nature'. A 48 year-old man also said that 'the villager wishes he would go to the urban while the townsman wishes he would run away from the city to a village'.

The clues of selective perception can be seen in the experiment. For instance, respondents have put some components of the picture aside from their perception as it can be seen in the response of a 42 year-old Iranian woman who did not consider the arrows and said: 'A man who has a specified aim and sense of responsibility due to his sheep belonging to him, would reach his destination. But an alone man returns from the way and goes wrong as a result of thinking only about himself'. As another example, a 60 year-old Canadian woman has perceived two different man in the caricature and told: "the man at the top is seeking the arrows and his sheep are following him while the other man at the button is going wrong without knowing the destination". Selective perception was more common among Iranian as it can be seen in 13% of Iranian responses which was more than twice of westerns ones (13% vs. 6%).

Interpretation	Iranians		Westerners		Total	
	#	%	#	%	#	%
Negative attitude to migration with sympathy	135	50.0	8	16.3	143	44.8
Concern, but neutrality	32	11.9	20	40.8	52	16.3
Concerning another thing in the caricature instead of migration (such as smoking)	34	12.6	3	6.1	37	11.6
Concerning another thing non-existent in the caricature (such as happiness)	69	25.6	12	24.5	81	25.4
He/she does not know the purpose	0	0.0	6	12.2	6	1.9
Total	270	100	49	100	319	100

Table 1: The results of the caricature field experiment.

Besides selective perception, the effects of selective interpretation also can be seen in this experiment, where the portion of both Iranian and western answers affected by their selective interpretations are nearly the same (about 25% in both Iranian and western respondents). These effects of selective interpretation can be seen in some completely different and somehow surprising responses. For instance, after watching the caricature and with surprising perceptions, a 44 year-old Iranian woman said that 'a shepherd whose sheep has been eaten by wolves is smoking anxiously in front of his home'. As another case, a 56 year-old Iranian man said: 'he is a townsman who has become wealthy and has bought a lot of sheep'. A 47 year-old Iranian woman also said that 'a man has gone to the city to sell his sheep, but he has been deceived and has become anxious now'. As another surprising example, a 45 year-old Iranian man has said: 'people are usually the followers of the leaders and follow them without considering their own thoughts just like sheep'.

Revealing the effects of selective interpretations among western respondents, a 21 year-old Australian woman also said that 'the man is trying to get rid of the sheep with puffing the smoke of cigarette toward them'. A 30 year-old British man said that 'the sheep are following the man slavishly'. A 25 year-old Arab residing in Britain has also said that: 'the Palestinian man has lost his own sheep which have been seized by the Israeli man'. Finally, an 18 year-old American boy said: 'a man has taken his sheep to the city, wearing a jacket woven by their wool'.

VI. CONCLUSIONS

In this article, taking an ecological perspective, the concept of 'communication ecosystem context' is introduced to describe the situation where certain written, vocal or visual messages normally, forcefully, or due to a particular event turn into a 'mass'. These 'mass messages' then affect the acts led to what and how the communication

process works. It is suggested that these mass messages can resemble the living organisms in a societal ecosystem that interactions with the society's materials (ancient, old, and modern communication means) and energies (written and unwritten norms, regulations, and rules) in that society.

Using historical and contemporary evidences, it was discussed that some real-world cases in the society can reveal the durability and the persistence of the mass messages in a communication ecosystem context, allowing us to classify communication ecosystem contexts as short- and long-term. Broadcasting music without displaying musical instruments in Iran in the government-monopolized TV since the 1979 Islamic Revolution is a long-term case. The wide spread of false news on an upcoming earthquake at midnight on Sept. 4, 1962 in Tehran and the following events is an example for a short-term communication ecosystem context.

Furthermore, the communication ecosystem context can influence the selective perception and selective interpretation of messages. To study this important issue, we conducted a case study which was held in Iran and some Western countries on a caricature about the social problem of rural-urban migration. According to the experiment, it seems that due to the wide negative view of rural to urban migration in the Iranian communication ecosystem context, since several years ago, 50% of the Iranian respondents perceived the caricature truly as the caricaturist intended it. However, among the Western respondents who reside in the countries without such a communication ecosystem context with negative view on migration, the portion of correct perception was significantly lower.

While this article takes the first step in introducing the concept of communication ecosystem context, there is room to extend the study in this paper in several directions. For example, based on the argument by Ecologist Arthur Tansley (1871-1936), who first introduced the term ecosystem [22], we cannot separate organisms from their spatial environment. That is, although the organisms are the most important parts of an ecosystem, there are some other inorganic factors that are also very important in defining an ecosystem – because there could be no system without them, and there is constant interaction between the organic and inorganic parts [5, p. 172]. Similarly, one should take into consideration not just the messages, but also the interactions between the messages and the environment factors, such as the telecommunications, mass media, and new media hardware and the written and unwritten norms, regulations, and rules.

Furthermore, it is important to study the concept of communication ecosystem context based on the evidences in different parts of the world. This would help us better understand different communication ecosystem contexts in different societies and at different periods of those societies' history, and their specific characteristics of their living messages. For example, communication ecosystem context which surrounded Russians under Stalin, Chinese under Mao, Afghans under Taliban, Iraqis under Saddam Hussein could have different characteristics.

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