PROPOSED FRAMEWORK FOR A DIGITAL AND NATURAL LANGUAGE

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Abstract:

For emotional communication to happen successfully, the sender and the receiver should be on same emotional level. The emotion can be set mutually agreed by the participants. Effective emotional communication happens with proper use of emotional level with having focus on feelings, responses, Exclamation. Love, Hatred, fear are the symbolic effects, based on which we decide the feelings has risen at the receiver's place. The emotion enabled communication considers these factors. This paper presents a novel framework based on communication that depends on factors. The proposed architecture will be a benchmark in machine learning, natural language processing, IoT (Internet Of Things), etc.

Keywords: Natural language, Emotions, Communication, Universal language, Basic instinct

Introduction:

Being humans, we communicate in languages; verbal, non-verbal. Languages evolve as a phenomenon of natural emotions. For harmonization we define and follow syntax, semantics, and pragmatics. Expression (Energy filled impression) initiates the communication. Expression differs based on the role performed; original performer, actor's role or viewer's role. The communication

feasibility depends on Physical Conditions, Intellectual Psychology and Emotional Psychology.

The emotion enabled communication considers the factors – Language (mother tongue language, foreign language, and unknown language), Region (the area), Gender (male, female, and transgender), Age (age groups), Education (Education levels), Role (the role played in family, society, team, and group), Social Format (Social status), Event sequence (the consequences that arise after a particular event), Preferences (subjects, interested objects).

For emotional communication to happen successfully, the sender and the receiver should be on same emotional level. The emotion can be set mutually agreed by the participants.Interviews, surveys, and studies of autobiographical memoryindicate that bilingual speakers experience reduced emotion whenspeaking their second language [1].Communication is commonly defined as an event mediated by the use of signs in which the action of an agent oragents (the senders) causes a reaction in one or more agents (the receivers) [2].

Though, natural or emotional languages do differ globally, there is a digital language common everywhere; in all digital devices. IoT in its digital communication form has digital language at the base.

Effective communication happens with proper use of language syntactic pause, punctuation, Emphasis, Stress, directives, etc.Animals communicate using iconicor indexical signals to refer directly to objects or actions [3].

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Universal Language Scenario:

The language scenario in digital era is now revolving around zeroes and ones i.e. bits. The form in which the binary information gets stored varies from device to device. At early stages the information was stored in the forms of magnetic, electromagnetic, etc. The data was just the digits. Introduction of emotional data or Semantic text is the need of hour. The data with emotions can be stored in emotional writing paradigm. The stored text, audio, video can be made full of different emotions. Emotional writing should be done with symbols or different coding techniques.

Restrictions – Loss of creativity:

The digital languages, binary languages, coding, etc. has now implications of restrictions on naturaland original creativity of human beings. Emotional feeling and original expressions are missing in this digital world.

Expression:

The communication taking place between sender and receiver will occur at the original performer or at the role player's (actor's) place or at the receiver's place. This place at which the communication takes place has the influences of the environment, states of mind, contemporary issues. The digital format of communication is happening without emotions and feelings.

From psychological perspective, states of mind can be broadly categorized as conscious state and unconscious state of mind. Most of the time due to lack of phenomenal experience the state of mind is unconscious of both sender and receiver. So, the communication without phenomenal experience will result in just delivery of information without any taste, feeling, and emotions.

To perform Heart to Heart Communication the content with its Propensity or instinct has to be looked out. Just exchange of dialogs or sentences does not mean complete communication.To evaluate the "First language more emotional" finding forimmigrants, it would be useful to investigate the robustness of the finding of greater skin conductance responsesto a first language across different contexts.Could heightened skin conductance responsesto Turkish stimuli be caused, at least in part, bynostalgia for L1-Turkish? The novelty of hearing one's native tongue ina laboratory room, when living in an English speaking country, couldincrease the emotional salience of these stimuli. To refute this"nostalgia" explanation for heightened skin conductance responsesto a first language, westudied bilingual speakers residing in the country of their first language rather than immigrants [4].

Any language having letters and words has its own limitations. Words mean symbolism of anobjective matter. Subjective feature of matters will be missing in plain words. And, in digital words, only exchange of signals happening. So, architecture with natural expressions with feelings and emotions is needed.By contrast, humans appear to be the only species to have developed a complex system of signs that interrelatewith one another. This form of communication - symbolic communication - is based on sign-sign relationshipsrather than the sign-object relationships of iconic or indexical communication. Symbolic

communication relieson one-to-many mappings between a sign or symbol and that to which it may refer. The meaning of symbolsdepends on a mutually agreed upon cultural context [5].

First language communication is more emotional than any other language. Digital language has to be more near to first language. There are many communication theories which try to depict the completeness of communication but they lack in terms of emotional aspect of communication.

Words defined in any language are basically; Categorical, Action based, Character based, and Directive. Research needs to be done to add the emotional flavor to these words. Lots of efforts have been taken to keep web development languages common. Smart web development languages with emotions are expected.
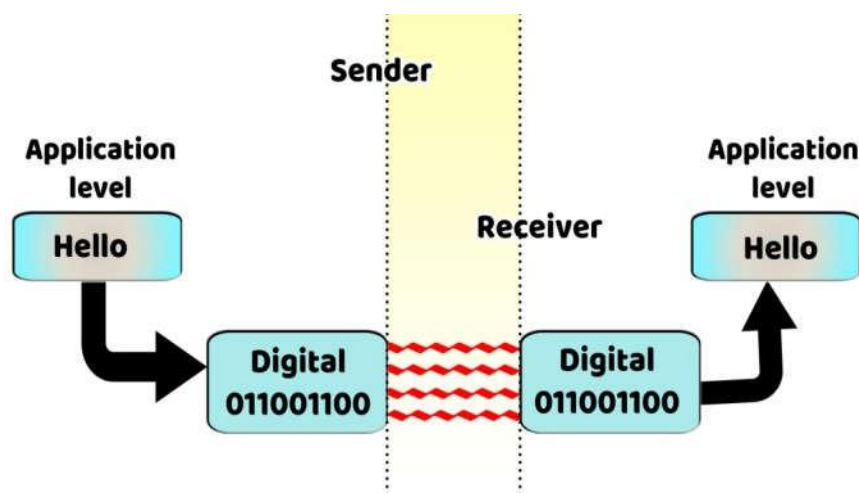
Existing framework:

Figure 1: The existing framework model of communication

As shown in figure 1, the existing model of communication emphasizes on the exchange of signal in digital format. Application level conversion of data into information is presented.
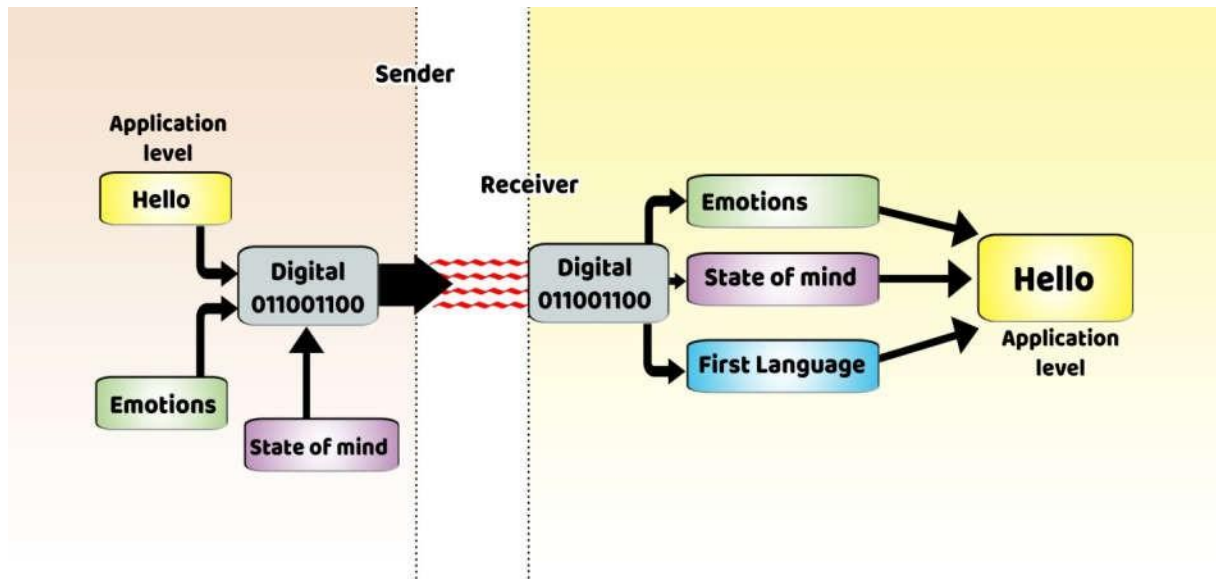
Proposed framework:

Figure 2: The proposed framework model of communication with Emotions, State of mind and language preference

Importance of Emotions cannot be denied or neglected in effective communication. At the time of receiving input message the devices enabled to read emotions and state of mind of sender will capture the complete data. From the receivers' perspective his state of mind and his language preference should be taken into consideration for communication.

Conclusion:

Love, Hatred, fear are the symbolic effects, based on which we decide the feelings has risen at the receiver's place. The emotion enabled communication

considers these factors. Digital languages need to be more natural. A combination of Digital language and Natural language with feelings, emotions, etc. 'Digural language' has to be developed.

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