

Social Hierarchies in Real/Virtual World Settings

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Aim

The aim of this project, as the title hints, is to conclude certain social factors or traits people tend to consider when communicating in the social hierarchy models they are a member of.

Background

There is no doubt that social hierarchies happen to be an integral part of the society we live in today. They are something that we encounter on a daily basis and which affect our form or way of communication with other members in those hierarchies. At the same time, we need language to recognize such hierarchical models as well. As noted by Heller (2010), language can be viewed not as simply a reflection of social order but as something which helps establish social hierarchies.

Communication between members of social hierarchies is always a very interesting event as it may include a conversation between a member that is in upper part of the hierarchy and a member, who is considerably lower in the hierarchy. It is at such instances, when the language helps to intensify or lessen the hierarchical distance between them in the conversation. History is also evidence to such events or a period of events when people in the upper part of the hierarchical model used language to attract more attention of the people in the lower part of the hierarchy. For example, as Harrington et al. (2000) found in their work, the acoustic analysis of the broadcasts of Queen's Christmas speech showed her accent drifting towards characteristics that are identified more with the members in the lower part of the hierarchy. Therefore, communication between members of social hierarchies is a very intriguing and inquisitive topic that should be studied in depth whether the setting is of real or virtual world.

Introduction & Motivation

As we have now seen, communication between members of social hierarchies is always a very interesting topic. When we go into the depths of such communication processes we recognize many different factors that come into play. Some of them are to create and maintain their identities, some of them to glorify their position in the social hierarchy, and sometimes to just save their own or other's face in conversation. This served as our main motivation for the project, i.e., finding those factors which affect how people communicate in social hierarchical models. The only challenge was

to combine it with different settings too, i.e., real and virtual world settings so it perfectly fits with our main project topic, i.e., Social hierarchies in real/virtual world settings.

Therefore, we decided that the main motive of the project will be to find the factors that people tend to consider when they communicate with fellow members in their social hierarchical models in both real world settings and virtual settings inspired from real world. This report will walk you through how the team carried out the different stages of the project, everyone's individual contribution, and finally conclude with all the important social factors discovered.

Outline & Methodology

As the title states, the project will consider social hierarchies in both: real and virtual worlds. Since virtual worlds are not a stand-alone setting like real worlds, i.e., they are inspired from real worlds themselves, we will consider the intersection of real and virtual worlds rather than virtual worlds alone. Thus, the settings to consider now are real world and a cross of real & virtual worlds. The fields in those respective worlds will be considered individually by the concerned team member.

Real world setting, in layman terms, translates to our daily lives and the interactions that take place in our social hierarchical models that we are a part of. The best way to gather information about real world is either through a first person experience or a third person experience. For first-person experience we settled for the option of creating a questionnaire, that will in turn serve as the basis for our survey. Due to pandemic lockdown constraints, we were forced to opt for questionnaire only, instead of also including one-to-one personal interviews with interested candidates. As for third-person experience, real world interview transcripts were considered as the best means to gather information about communication within real world social hierarchies. Jayant drafted the survey, and collected responses while Veeral was occupied with gathering data from print media, i.e., interview transcripts.

The cross setting between real and virtual worlds implies those

settings that are virtual but are inspired from real world settings. The best examples include: Theatre plays, Movies, Web/TV series, Short films, Advertisements. Due to pandemic lockdown constraints, we had to limit ourselves to digital fields like Cinema (strictly Movies and Web/TV series) and Advertisements. The trio of Akshett, Aaryan, and Nikhil gathered data from Cinema field while Tanishq collected important information from Advertisements of the late and recent past.

After the data collection stage, a thorough analysis of the collected data was implemented by every individual according to the best of their capabilities and calibre. The individual reports of the members contain the specific details of their data collections and analysis stage. The same analyses went on to reveal certain important social factors that people would consider whenever communicating within a social hierarchical model.

Individual contributions

Jayant

I took up the setting of real world for finding out different social factors that people consider when communicating in a social hierarchy. In order to gather data, I thought the best way was to approach people directly and record their responses. To do so and due to pandemic lockdown constraints, I drafted a small questionnaire containing 11 questions and circulated it among my friends and family. There was no particular target audience in our survey as every individual begins to experience communicating in a social hierarchy from a very young age. It was open to one and all. To our surprise, we got 389 responses for our questionnaire.

After I had collected the data, I began analyzing those responses in two stages. In the first stage, I would consider answers that were picked by a large number of audience, or general trends in answers. I termed this stage as *Collective Analysis* and the factors concluded from it as *Major factors*. The next stage involved analyzing the responses individually, considering the possibility that every single person's answer could go on to reveal new yet credible social factors. This stage was termed as *Individual Analysis* and consequently the

factors derived from this stage as *Minor factors*.

All in all, I was able to find 10 factors in total: 5 Major, 5 Minor. The major factors concluded were:

- Disturbance of Social hierarchy above oneself
- Relationship Intimacy
- Formalness of relationships
- Social Setting/Location
- Introversion/Extroversion

The minor factors on the other hand were:

- Cultural Background
- Respect
- Age
- General norms
- Pronunciation of names

Once I had concluded my factors, I tried to find relation between my factors and my teammates' factors. To our surprise many of them turned out to be common. I have drawn illustrative Venn diagrams later to highlight the same occurrences.

Tanishq

Advertising has brought in an advanced change in the manner of building awareness about any product or a service in the society. So we decided to include advertisements as a data source for our topic. We have collected a dozen advertisements that contain the concept of social hierarchy. We started collecting advertisements so as to help us gain some new insights about how these ads capture Social Hierarchy.

The criteria that I took into consideration are as follows:

- Language: Majority of advertisements were mainly in Hindi having code-mixing involving English. As our main focus was on Indian Languages we focused mainly on Hindi ads as Hindi was the only common IL in our team.
- Social setting: As mentioned above, social settings were captured from almost every sphere of life ranging from home to office or school etc. And in each setting different types of relationships can be captured for example in school, relationships captured can be student-student or teacher-student etc which makes our database rich in diversity.
- Relationship: Varied types of relationships were captured as

already mentioned before. We took into consideration age gap, gender, social class etc.

- Context & Manner of Interaction: We analysed ads having different interactions ranging from informal to formal. We found that manner of interaction was affected by many factors like social settings, age gap, relationships, gender etc. For example we saw siblings talking at home interact really differently as compared to when they are at some other place having a formal environment like school, shop etc. We noticed siblings use words like “tu, tum,tujhe, tera etc” in personal settings like home but when the setting becomes formal, words like “aap, aapne etc” are used to address elder sister/brother minding the age gap.

Many social factors were identified from all the ads like age gap, disrupting social hierarchy, relationship intimacy, respect ,general norms, introversion/extroversion, settings.

Akshett

As we could not go to people in the real world and collect data by observing or having conversations with them, we had to resort to cinema for best approximation of the real world. I was assigned this part with others. For this, I watched a web series(Pataal Lok) and two movies(Rocket Singh: Salesman of the Year Gangaajal). But one of them did not give me any data on which I could make any conclusions. Finding these films was the part where I faced difficulties. I had posted on online forums for sociolinguistics asking for suggestions but there was no reply. The web series was chosen by me because I had watched it some time earlier and when I read about the project topic, I recalled some instances from it. The movie Gangaajal was suggested by my parents.

For analysis, I watched them twice, once for getting familiar with them and then the second time to make observations. Then I distributed the data into different groups depending on the factors that I observed by taking a look at the data. Then those factors confirmed by me and a few new factors were also discovered.

- Respect
- Emotions
- Social Settings

- Personal benefit
- General Norms

Aaryan

I've analysed the film Article 15, since it has multiple occurrences of our project idea, the film being loosely based on the discrimination against lower castes, so naturally classes come into conflict, and the social hierarchy comes into play.

To study and analyse the linguistic variations in the movie, all the interactions and conversations taking place in the film was subdivided into 5 categories:

- Protagonist's Language
- Language of his subordinates
- Language of his superiors
- Language of Regional people (Further distinction between literate and illiterate)
- Mode of Addressal

The major factors which got highlighted were :

- Bridging the social gaps through language
- Retention of the local "features" of the language
- Social settings

Further analysis, observations and challenges have been made and they are mentioned in detail in the final report. The link is given in the references section.

Veeral

Social hierarchies have been identified across a broad range of organisms, from simpler model systems such as insects, to nonhuman and human primates. For example, reliance on status cues to organize important social behavior is identified in ants and other insects, such as bees, who infer higher ranking in the social hierarchy based on physical body size. Many species of fish are also known to rely on social hierarchies. For example, in *Cichlasoma dimerus* males (South American cichlid fish known to have stable and linear hierarchies), a greater social position within the hierarchy has been linked to lower relative stress levels and increased reproductive success, Jasmine Cloutier(2016).

By definition, some individuals within the hierarchy those at the top will be afforded more resources and benefits than others, thus affecting morbidity and mortality. Despite that fact that there are

always losers in this scenario, social hierarchies are highly pervasive across human cultures (Sidanius Pratto, 1999) and they appear to emerge naturally in social groups.

My task in the project was to study Hindi print media. I chose written interviews in that interviews are generally in formal language. I collected 13 interviews in total. Analysis on interviews on the basis of social hierarchy. Collection of sentences in different categories. Categories are on the basis that they use to address someone in interviews. Like sir/ma'am, name/first name, aap/aapka, etc.

It is a little hard to find variety in the form of language in interviews. As generally they held in formal language. But still when accent and dialect comes in picture, we can extract some different varieties and social hierarchy. Because both (accent and dialect) are generally non-standard for anyone. That's why because of dialect, where they live, their occupation, their income, their family background, or better to say their social class, social hierarchy comes into picture. In print media (interviews) it's hard to find all of these, but we can see or ask where they live, what they like to do, and more about how they talk.

They can be of different speech communities also. The same linguistic variable is likely to have different values in different speech communities. In an interview, say there is someone from UP and other from Maharashtra, then their dialect will be different. As "tum" is considered a formal (with respect) language whereas in Maharashtra it may be considered informal language. Factors affecting social hierarchy I found in print media are cultural background, introversion/extroversion, respect and age.

Nikhil

<EMPTY>

Observations & Conclusion

Since our methodology was divided into two different settings: real world and a cross between real and virtual worlds, we must consider the observation and results also separately at first.

As stated earlier, to collect data about the real world settings, only two fields were considered, namely, Survey and Print media. The area of Print media was strictly limited to real life interview transcripts, as they offer a brilliant insight about the communication between members in a social hierarchy. The observations were, obviously, in terms of the factors concluded. For a better insight, consider the following diagram:

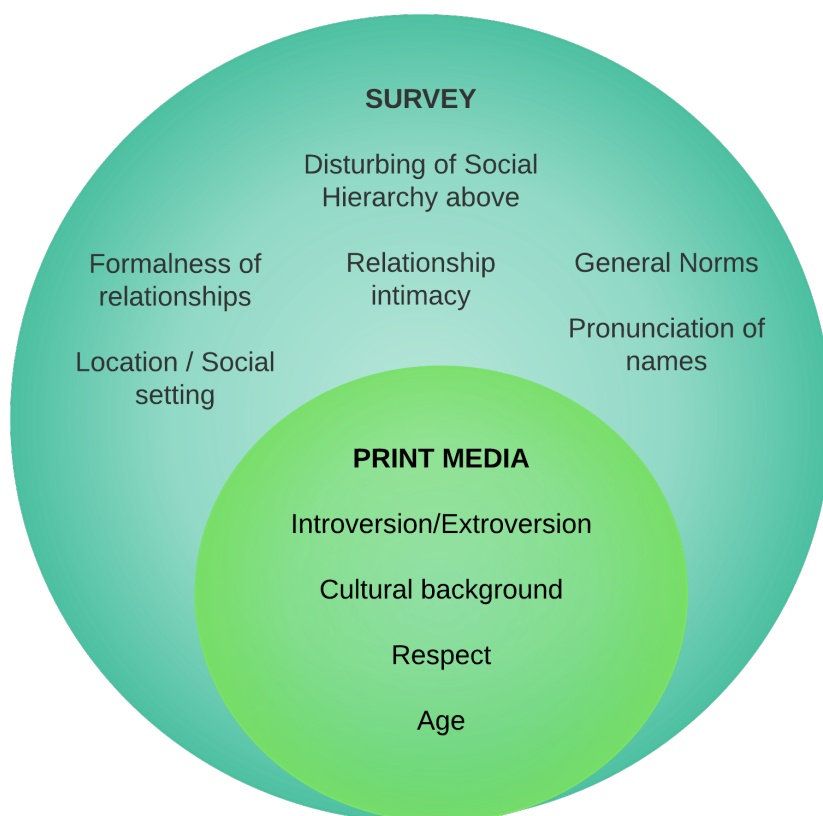


FIGURE 1: *Mapping factors in real world settings*

As visible from the mapping, the factors concluded from analyzing survey results serve as the super-set for the factors inferred from print media. The print media factors include some of both Major and Minor Survey factors and are a proper subset of them. This is

evidence for the hypothesis that people tend to consider the same set of factors, no matter which real world social hierarchical model they are a member of at a certain point of time. It is very much possible that if we had also done one-on-one personal interviews with interested candidates, we might have got more factors, which may not necessarily be a subset of factors concluded from the questionnaire survey.

The next important setting was a cross between real and virtual worlds. As stated earlier, Cinema and Advertisements were chosen as the desired areas to collect data about the cross settings between real and virtual worlds. To gain a better outlook about the factors concluded from studying this setting's data, consider the diagram below:

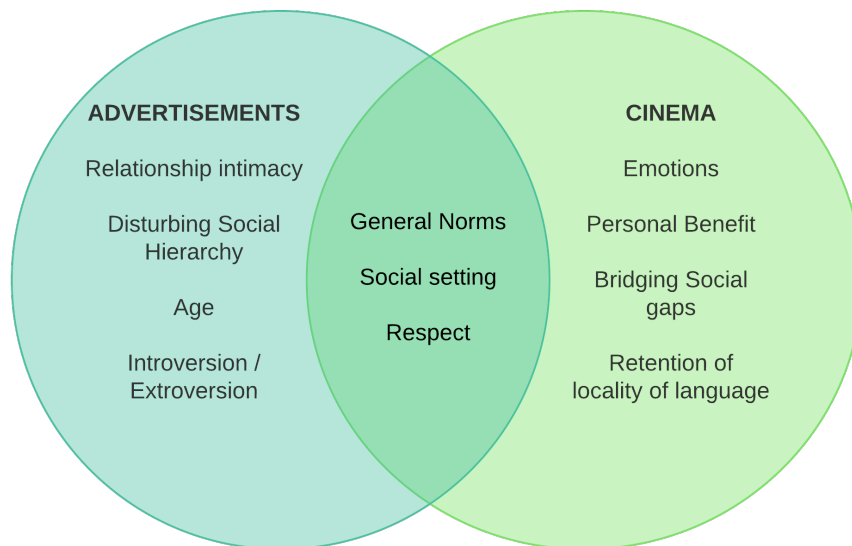


FIGURE 2: Mapping factors in a cross of real and virtual world settings

As visible from the Venn diagram, this time the two fields are not a proper subset or superset of each other. They do have common factors, but there also exist a considerable number of factors exclusive to a certain field. For example, *Emotions* and *Personal benefit* are concluded from the Cinema field but cannot be concluded from the Advertisements field with respect to the data collected by the

team in those fields. Again, it is very much possible that more factors could have been concluded if we had considered a greater number of ads, movies, and shows. Nevertheless, we still got three common factors between the two fields, namely, *General Norms*, *Social setting*, and *Respect*. Therefore, these three factors will have a larger probability of being more prominent when people communicate within social hierarchies of social settings based on real and virtual worlds.

Since the cross setting of real and virtual worlds was inspired from real worlds itself, there was bound to be a certain level of similarity in the manner people communicate within social hierarchies. This is very much supported by the diagram below:

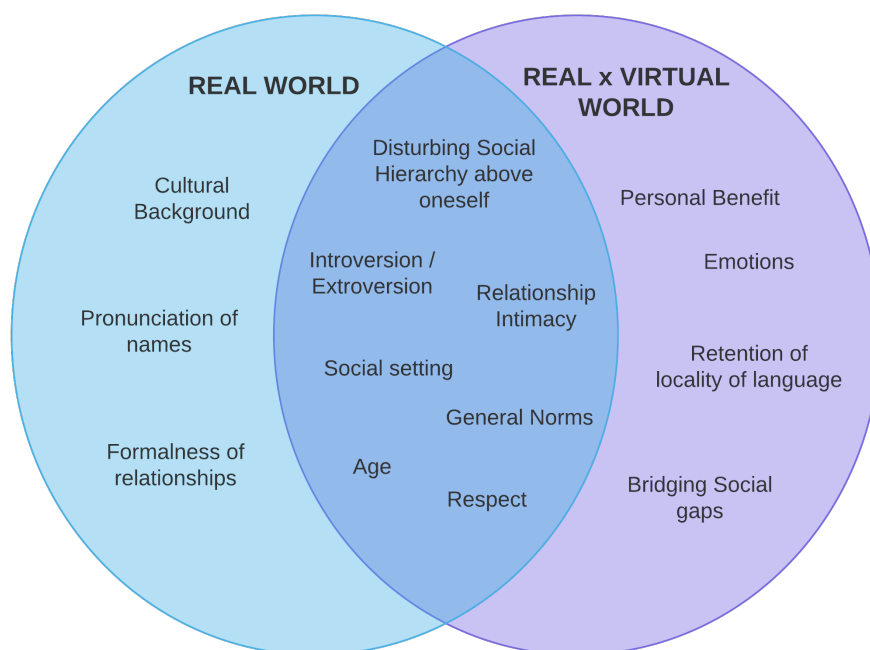


FIGURE 3: *Mapping factors between real worlds and a cross between virtual and real worlds*

It is clearly visible that exactly half of the total factors concluded in our project are common to both the settings. This goes on to further assert our hypothesis that people tend to communicate in

a certain manner in social hierarchies, which tends to be similar across different settings. On the other hand, if we ignore the idea of two different settings and consider each field a different setting, i.e., Cinema will be a different setting from Advertisement and Print media a different setting from Real-life people responding to a survey, then there is only one common factor. That factor is *Respect*. This goes on to show how important *Respect* is as a factor that people consider when communicating within social hierarchies. But still we cannot entitle it as the most important factor due to the limited amount of fields we have considered. It is very much possible that including more variety and more number of fields in our project may have returned more important common factors or not a single one common among all those fields. Therefore, it is not advisable to assume that *Respect* is the most important factor.

However, the aim of the project that the team set out to accomplish has been achieved. A lengthy process involving different stages of data collection and thorough analysis has resulted in the team concluding a total of 14 important factors people consider whenever communicating in real world social hierarchies or those hierarchies that are inspired from real world:

- Age
- Bridging Social gaps
- Cultural Background
- Disturbing Social Hierarchy above oneself
- Emotions
- Formalness of relationships
- General Norms
- Introversion / Extroversion
- Personal benefit
- Pronunciation of names
- Relationship Intimacy
- Respect
- Retention of locality of language
- Social setting / Location

Future considerations

Just like any other piece of important work or study, there is scope for future improvement in ours too. For starters, we should try to consider more fields like Theatre plays, One-on-one personal interviews, etc. to gain more raw data about the way people communicate in different social hierarchies in different social settings. Apart from that, we can improve on our own existing fields for collecting data. For example, we can try to make our questionnaire-survey reach more than 390 people and add in more questions to reveal different factors. We can also hold personal one-on-one interviews with interested people that responded to the questionnaire. We can look at a greater number of Advertisements, Shows, Movies, and Interviews to gain more knowledge about the already concluded factors or to conclude new factors.

We believe that considering these improvements will surely increase the credibility and value of our work even more if we decide to further expand it. Even though it is very hard to conclude all the factors all the people consider in today's world when they communicate within their social hierarchies, these improvements will bring other new factors to spotlight which we did not consider before, which in turn will bring us closer to the real unknown number of factors people consider in their communication with hierarchy members.

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