

SOCIAL COGNITION: MAKING SENSE OF PEOPLE

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Abstract

In this age of complex interpersonal relationships and expanding virtual world, it is becoming increasingly difficult to understand people around. Study of social psychology, especially social cognition, its components and its processes, throw light on the mechanisms of assimilating and evaluating information in a social situation or interpersonal relationships and may help us acquire an understanding of the behaviours of people around us giving us an insight on the underlying causes of such behaviour at the same time. Knowledge of the academic terms and concepts may give a more objective perception of the people we interact with and a more empathetic relationship with them.

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Suppose it is Joe's first day in college and he is looking for friends to spend his college years with. He enters the college canteen and strikes up a conversation with a timid boy for the first time at the table, expecting to be friends with him. He happens to gel with him and eventually their friendship flourishes. Now the question is, what made Joe "choose" this boy over others or what made him "expect" that this boy could be his college buddy or why he "gelled" so well with him? The answers to ALL the questions probably lie in the concept and processes of *social cognition*.

In social psychology, social cognition refers to the cognitive process of gathering, processing and executing the external information in the context of social relationships. It involves attention, perception, memory, emotion, thinking and all other major cognitive fundamentals to understand, interpret and apply information within the fabrics of a social situation.

"Thus the study of the processes involved in perceiving each other and coming to "know what we know" about the people in our world is essentially a question not only of what behaviour we have seen, but of our cognition as individual perceivers-our social cognition. Social cognition, therefore, is the study of the mental processes involved in perceiving, attending to, remembering, thinking about, and making sense of the people in our social world."^[1]

Components of Social Cognition: Schema, Stereotype, Prototype

Schema (singular:schemata) may be defined as a cognitive structure of guidelines aiding in the perception, understanding and categorization of information and their inter-relationships. For example, the schema of a "college" would include concept of a multi-storied building with numerous classrooms, office, lounge, play area, students belonging to a young age bracket, various academic streams, faculty for teaching, staff for administrative work, inter-college fests, seminars, teacher-student relationships and all other information that one could possibly accommodate in his set of cognitions regarding the conceptualization of a college. Again, at a more specific level, a "college" might have further classifications having distinct features, like an engineering college, vocational college or open college. Schemas were introduced in psychology and education by British psychologist Sir Frederic Bartlett (1886–1969). Bartlett proposed that people use unconscious mental structures that represent generic knowledge of the world^[2].

Schematic processing has many advantages. According to Taylor, Peplau, Sears (2006), schema has the following roles to play in the processing of social inputs^[3].

1. *Schema aids recall*: Memory is facilitated by schematic representation of past events or people.

2. *Schema speed up processing*: It helps us process new situations without having to interpret them afresh.
3. *Schema aid in automatic inference*: It helps people make quick judgments and associations based on references given by the schema.
4. *Schema add information*: It is potent enough to fill up gaps in information or knowledge.
5. *Schema aids in interpretation*: Ambiguous information is easily interpreted with the help of schema by relating one domain to another.
6. *Schema provides expectations*: It can lead to predictions.
7. *Schema contain affect*: The affective undertones in schema help us judge the pleasantness and unpleasantness of the situation or object leading to approach or avoidance behaviour. Eg: Schema of a 'principal' or 'terrorist'.

If we take the first example of Joe, the schema supplied him with the confidence of approaching the boy at the canteen without having to fear the consequences like being turned down or being bullied (Interpretation/ Expectation). The schema also helped him infer about the characteristics of the "timid" boy by associating him with "kindness" and "friendliness" (automatic inference/affect).

There are five major types of schema namely: self-schema, person schema, role schema, event schema and group schema-used in social information processing. Self schema is the cognitive structure related to self attributes on the basis of past experiences. (Eg: Joe thinking himself to be in need of affiliation and seeking friendship). Person schema refers to the cognitive generalizations about different personalities (Eg: Our perception of Adolf Hitler or Florence Nightingale). Role schema is the mental abstraction of the social roles typical of persons (Eg: Role of a 'doctor' or 'mother'). Event schema is also called *script*, the mental picture of an event with both its abstract and concrete elements (Eg: activities, relationships, décor and food served in a 'birthday party')^[4].

Group schema is referred to as *stereotype*. Stereotypes are schema regarding a person owing to his membership in or affiliation to a certain group or class of people^[5] We individuals, in a society, share common characteristics, roles, beliefs, circumstances and behaviours forming a group, thereby making "stereotypes" structurally and functionally important in making generalizations. Eg: Joe may have perceived the boy at the canteen belonging to the 'Fresher' group as 'shyness' is a characteristic found mostly in freshmen. So the stereotype here is that "college freshers are inhibited or shy". This is formed as a result of collective sharing of beliefs by a group of people. Like schema, stereotypes are aids to explanation speeding up our perceptions of the external world, energy saving devices thereby reducing time and effort and shared group beliefs helping in forming predictions about the behaviours of group members^[6]. Like, teachers judging inattentive or unwilling students as "incompetent", south Indian people judging north Indian population as "loud and uncultured", extroverts judging introverts as "boring", countrymen judging political leaders as "godly", men judging women as "compromising and serving" and so on. Stereotypes could, therefore, be racial, cultural, gender-based, accurate or inaccurate reflection of the reality.

Schema is also closely related to the concept of a prototype. *Prototype* in social psychology refers to the cognitive or neural image of a thing, with a set of defined characteristics and qualities, serving as a standard. These images are used as standard for making true matches with objects in the real world. Therefore, prototypes help in object perception and identification. For example, a stool will be perceived as a closer representative to 'chair' as its functional utility resembles that of a chair. Or a 'sparrow' will be most typically identified as a part of the category 'bird' and not 'insect' because of the characteristics it shares with that group. Even a 'penguin' will be identified as the same though it cannot fly because of the flexibility that prototype allow in generating "matches". Thus prototype is an abstraction that represents a typical class or group of object. Prototypes are highly influenced by societal, cultural, linguistic and developmental factors^[7]. Eg: 'Cup' may be perceived by certain cultures as synonymous to 'bowl' used for both drinking and eating.

Dual Processing Theory: Use of Heuristics

Fritz Strack and Roland Deutsch (2004) proposed the *dual process theory* in social cognition which highlights the two different systems of decision making in a social situation: *Reflective and Impulsive*. The former is intensive, methodical and time-taking wherein decisions are made using valid analysis and understanding. The latter is more effortless and

superficial wherein decisions are validated by often resorting to shortcut processes of interpretation ^[8]. Interpretation could be based on either of the two systems or on a collaborative result of both the processes in the practical situation. The dual process of social cognition has maximum impact on person perception including stereotyping, categorization, and judgment. Given the luxury of being “cognitive misers”, humans adopt the former mode of cognition to save up on time and effort imposed by “information overload” in a particular social situation. These shortcut processes in cognition are often referred to as ‘heuristics’ ^[9]. *Heuristics* are “mental shortcuts” or cognitive strategies used in making judgments or decisions where information is limited ^[10]. If we consider the above example, Joe chooses to strike a conversation with this boy probably because he “looked” approachable, or maybe Joe associated the boy with himself on the basis of age, gender, appearance and demeanour. So, Joe adopted the heuristic mode in order to initiate this friendship immediately.

Heuristics may be categorized into various types, the two most popular ones being representativeness and availability heuristic. According to Tversky and Kahneman (1972), *Representativeness heuristic* is based on the cognitive rule of associating or comparing a person with the typical members of a given group, where more the similarities, greater the tendency to draw an association ^[11]. For example, the prototypical ‘professor’ might be a grave, intimidating, bespectacled personality. If the person one is judging is similar to this prototype, then the person is likely to be placed in that category of a ‘teacher/professor’ and not in the category of a ‘salesman’ or ‘nurse’ or any other category for that matter. Similarly, if a film has too many comic sequences and funny dialogues, it will be categorized as a ‘comedy’ as it has highest degree of representativeness from a comedy film. If we consider Joe’s case, he befriended the boy out of all other boys present in the canteen as the boy may have resembled a typical college freshman or a student. In reality, that boy could have been a young professor, enjoying some “alone time” at the canteen. In most of our daily lives, we tend to use this heuristic to draw immediate inferences about people around us.

Availability heuristic is based on readily available information in consciousness. In this case, evaluations and judgments rely heavily on recent experiences or latest information. This was well demonstrated by a study by Tversky and Kahneman (1982) ^[12]. Joe, here, could have had a string of similar experiences in school or other places prior to this which led him to expect a fruitful relationship with the new boy. This heuristic is extensively used in evaluating situations. For example, this heuristic is probably the most used by parents. As media is commonly flooded by news of brutal murders and rapes, these come to their minds readily when their daughters or sons stay outdoors till late in the night, causing them to fret and worry. It may also be used by HR personnel while making assessment reports of employees, grading employees on the basis of the frequency with which they have taken part in interaction programs or made noticeable contributions in projects. Sometimes, we evaluate a person on availability heuristic when knowledge about that person is limited.

Other commonly used heuristics include Anchoring and Adjustment heuristic and Simulation heuristic. The *anchoring and adjustment heuristic* is one in which evaluations are made by anchoring one’s judgment to a “reference point” and then adjusting his judgment to come to a conclusion. When a situation is ambiguous for us to make valid conclusions, we use this strategy. Eg: When we go shopping in flea markets, we know exactly how and where to start our “negotiations” before making a final deal. Like if a product is priced at Rs 800, we start the deal from Rs 500 depending on our previous experiences with similar product purchases. Or when you are asked who is the smartest in class, you know exactly how to decide that by comparing yourself with the rest of the class. According to studies, judgments based on anchoring and adjustment has an effect upon self-efficacy and behaviour. ^[13]

Simulation heuristic is one where we visualize the possible alternatives to a situation before arriving at a decision. ^[14] For eg: imagining all the possible outcomes of not appearing for a class assessment; if the teacher would penalize you for that or if the teacher would call for the parents or if it might come to the principal’s notice. These are all mental simulations of the situations succeeding the incident. Simulation can go backwards too, termed as *counterfactual thinking* when people imagine all the possible alternatives to an untoward incident that has taken place. For eg: when a robbery takes place, we tend to “undo” the specific outcomes by thinking of how the doors could have been kept tightly locked and how the robbers could have been prevented from entering, or how an alarm could have been raised. When heinous crimes like rape takes place, we engage in counterfactual thinking. People all across India were horrified by the Delhi rape case in 2012,

thinking at the same time that the victims might have avoided the crime had they not taken an empty bus in odd hour of the night. Therefore, counterfactual thinking is imagining alternative versions of actual events or facts.

Priming and Framing Effects

There are certain effects that may intrude in the process of social cognition, namely priming and framing effects. *Priming effect* is the process by which certain categories of information are brought readily to mind as a result of exposure to stimuli or events without conscious intention of bringing it ^[15]. Usually priming is more effective for response to a stimulus after exposure to a stimulus in the same sense modality. Eg: We visually perceive shadows and figures in the dark after watching a horror film at night, because the mind is “primed” with stimuli from the horror scenes. Research shows that the word “nurse” is more easily recognized as a pair to the word “doctor” than to the word “bread” indicating that priming occurs at semantic level too ^[16]. Priming can take place across modalities as well.

Framing effect refers to the fact that our judgments regarding objects or persons are affected by the way information about them is presented to us. Positive framing leads to higher evaluations compared to negative framing ^[17]. For eg: We judge a person as “good” or “bad” depending on whether that person has been labelled “selfish, rude, unsocial” or as “helpful, kind, resourceful” by others. Consumer Psychology draws heavily upon framing effects as sale and promotion of products are based on how product information is framed. The possible explanation underlying framing effects may be the emergence of favourable associations with the object leading to positive judgements in case of positive framing. Like how the product looked in the light and gleam of the showroom and the detailed description of the product written beautifully on the package. On the contrary, negative framing would draw unfavourable experiences or associations, leading to negative judgments. Like less popularity of the product brand or failed effects of the product in past.

Errors in Social Cognition

Social cognition is not free of errors. The sources of these errors are mostly rooted in cognitive and affective biases:

1. *Negativity Bias*: It is the tendency to be attentive to information that is negative in nature over and above information that is positive. For eg, Joe may decide not to talk to the boy as he sits isolated in a corner, taking that as a cue to his inability to interact or be friendly with others. This decision of Joe could be attributed to ‘negativity bias. The possible underlying explanation for this may be based on man’s natural instinct for self-protection and survival, due to which people tend to be sensitive to threatening information and protect themselves from impending dangers. A study on this was conducted by Ohman and his associates. ^[18]
2. *Optimistic Bias*: This refers to being too positive in making social judgement, often overlooking the threats that may arise. This could be due to *overconfidence barrier* and *planning fallacy*, i.e. being too sure of positive outcome and making wrong predictions with respect to planning results respectively. For eg, a student may keep all his assignments pending to be finished on the last few days before the examination failing to judge delaying factors that can stall the completion of work or affect the quality of the performance like illness, family problem or lack of time to corroborate the work with good research support, thereby affecting the grades. Government projects are subjected to planning fallacy also whereby the officials underestimate the duration of completing the project and fail to see the risks. The role of motivated reasoning and hopes on optimistic bias was elaborated by Buehler and his associates in his study. ^[19]
3. *Prior expectations*: Using personal expectations to interpret information may also lead to erroneous judgment, though expectations beforehand may work in favour of making inferences or interpreting information that might otherwise seem ambiguous. Like meeting someone for the first time, going to a new place, joining a new company. Work on prior expectations leading to inaccurate inferences has been done by many researchers like Nisbett and Ross. ^[20]

4. *Affect*: Emotions and affect may have an impact on how information is perceived and subsequent decision is made. One such phenomenon is ‘*affective forecasting*’. It is using one’s emotional content to judge or make a future decision. For eg, if Joe’s overtures are highly appreciated and reciprocated by the boy at the canteen, he may use that feeling of ‘happiness’ to make a decision of being ‘friends for life’ with the boy. This may be due to being too focussed on the event and forgetting to weigh the consequences of the other events in future.^[21] *Affective forecasting* is also seen in case of astrological predictions that are too emotionally overwhelming to make us decide in a certain manner for the future. *Motivational content* may also lead to inferences and judgments may be heavily influenced by information that is self-serving in nature.^[22] Relating one’s positive attributes to prediction of desirable outcomes and vice versa is the highlight of this phenomenon. Like Joe judging the situation in his favour while talking to the boy may point at his motivational belief that he is a well-mannered and soft-spoken person, therefore, increasing his acceptability to others. *Suppression of thought* is another affect related social cognition which involves active efforts to restrain thoughts coming on the surface. Eg, a student trying to suppress thoughts of evaluation and failure while studying for an entrance examination. This is a difficult mechanism, governed by two processes- automatic monitoring process and operating process.^[23] *Automatic monitoring* is associated with providing a warning signal about the thought coming to consciousness and *operating process* is about making effortful and controlled exercises to distract oneself from those particular intruding thoughts. Failure of thought suppression is likely to lead to *rebound effect*, i.e., an increased frequency in the intrusion of the thoughts in question.

5. *Co-variation and Illusory Correlation*: Most of our judgements are based on *covariation* or the way associations are drawn between two variables. Like judgment on dating in teenage years is most likely to be based on an association between “good looks” and “fun” and in adult years is most likely to be between “intellectuality” and “success in relationship”. Stronger the association, higher the rate of the judgment. However, this judgment of association may not always stand foolproof. Variables may seem to go with each other but real outcomes contradict the seeming part of the associations.^[24] This is referred to as *illusory correlation*. In this example, good looking boys may end up ‘boring’ and intellectual men may end up ‘abusive’ at the cost of the relationship in reality.

Conclusion

The concepts, theories and phenomena discussed in this section may give us an insight into Joe’s set of cognition when he was in that situation that subsequently marked his decision to be friends with the boy and set off their interaction.

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