

The Logic of Inference and Influencing Prejudiced Beliefs:

Hans Van Der Heijde, Dept. Political Science, Noordelijke Hogeschool, Leeuwarden, Holland

To begin with, I would like you to consider the following two statements:

Men swim faster than women;

Swedes, the people of Sweden I mean, are tall, blond, blue eyed men and women.

These statements have at least three characteristics in common. They are generalisations, many people believe them and, thirdly, there is hardly any truth in them. Take for instance the first statement - Men swim faster than women. Although male top class swimming-athletes certainly do swim faster than their female counterparts, these female top class swimming athletes swim a whole lot faster than 99.99% of the male world population. The second statement cannot be refuted by pure logical reasoning. Let us look at the facts, delivered by research records of the Swedish army. Of all the recruits entering the army over a period of 25 years, a lot were tall, a lot were blond and a lot had blue eyes. But no more than 11 % were tall and blond as well as blue eyed. So, tall, blond and blue-eyed Swedes form in fact only a small minority of the Swedish population. Still, the picture most of us have in our heads when we think or speak about Swedes is the one expressed in that statement. In fact, a lot of our common knowledge of the social world around us is made up of, or related to these kind of generalisations. Our minds work that way, simply because only by the means of generalisation and categorisation are we able to organise, so to speak, the innumerable impressions entering our brain. Without the capacity to categorise the “hard disk” we call “the mind” would be overloaded within a few hours. This is our disk-operating system: the mind's DOS-version and, Bill Gates, owner of Microsoft, would, no doubt, give millions to know its precise functioning!

Based upon singular perceptions and experiences, different forms of socialisation such as education or simply just hearsay, the mind constructs social categories, using generalisations as building material.

This thought process of social categorising involves great risks. In general the mind tends to neglect, or at least overlook, differences between individuals identified as belonging to one specific category, while at the same time giving all the attention to differences between individuals belonging to different categories. Similar traits of individuals identified as belonging to different categories will be over looked and neglected, because the mind tends to concentrate on the categorical differences. Indeed this is more likely to happen when positive or negative emotions and attitudes towards these social categories are involved.

The nasty result may be, that once our mind has established a firm idea about a specific social group in the form of a social category, like for example the Swedes, it tends to block the entering of information, which might prove that some, or even a lot, or even a great majority of the members of that group actually don't fit into the picture we constructed in our heads. That picture has become a stereotype and indeed, many of the pictures in our heads of social groups are stereotypes. Without much exaggeration one might say that all statements beginning with: The Germans are ...; the Dutch are ...; the people in that neighbourhood are ...; youngsters of today are ...; politicians are ...; girls have ... (you will not find it hard to fill in the blanks) are stereotypes.

These stereotypes influence our behaviour towards other people and strange though it may sound, behaviour based upon stereotypical images often results in responding behaviour on the part of these people, exactly fitting the stereotypical images, thereby strengthening them. For example, a stereotype concerning the Dutch says that they are a rather stingy people: I guess you are all familiar with the expression " a Dutch treat " .

Now imagine a group of Dutchmen in a restaurant in Belfast. The waiter, a man with strong stereotypical beliefs of this kind thinks he knows, that he is not likely to get a generous tip from these customers, simply because they are Dutch. That is why he will not serve them in as friendly and fast a manner as he serves other customers. This behaviour of course results in feelings of irritation on the side of the Dutch customers and when they pay the bill they will show this by not tipping him. And the waiter sees his stereotypical belief confirmed and thereby strengthened.

This phenomenon social scientists call it the self-fulfilling prophecy can have very serious consequences, especially in education.

Another example. Imagine a maths-teacher with strong beliefs on intellectual differences between boys and girls. He believes that girls in comparison, to boys have no talent for mathematics whatsoever: their brains simply have never genetically developed the necessary instrument to tackle highly abstract problems. This belief influences his behaviour towards the girls in his class: he will show less patience or stimulating enthusiasm and never encourages them the way he does the boys. As a result of this behaviour most girls in his class lose their self-confidence, become demotivated and start disliking him, his lessons and mathematics in general. And of course, as a consequence, their levels drop. QED: *Quod erat demonstrandum*, this teacher will think, never realising that it was his own behaviour that produced that result.

As long as our minds are open and we are able and willing to change our stereotypical beliefs, when we are confronted with information that shows they are inaccurate, we are also able to avoid behaviour that produces the effect of the self-fulfilling prophecy. As long as we know that our stereotypical beliefs are nothing more than rough generalisations, which are never completely true and sometimes contain hardly

any truth, we have that ability. But unfortunately, our minds are often not so open. All too often we jump to conclusions: once we have identified a person as belonging to a category, of which we have in our heads a stereotypical picture, we simply assume that this person will show all the features of that picture. And even if that person, upon a closer look, differs somehow from that general picture, we will not let this affect the general, stereotypical picture in our heads. To return once more to our maths teacher: suppose there is a very stubborn girl in his class who reacts quite differently from the other girls. "So you think girls are worthless once it comes to mathematics? I will show you something then!", she says. She makes a great effort to solve every mathematical problem and produces nothing but A level marks. What do you think, will this change the teacher's opinion on girls? Probably not. In his mind she will be the exception. The exception that proves the rule, to use a common Dutch proverb.

As I said before, stereotypes represent not only beliefs, that is distorted knowledge of the social world around us. Emotions are involved. Feelings of sympathy and affection on the one hand, fear, antipathy or even outright hatred on the other. Taken together, the cognitive and emotional elements, constitute and determine our attitudes towards other groups of people and individuals, identified as belonging to such or such a group.

Once a stereotypical belief is firmly based in our minds, so firmly that it has become almost immune to information that might prove its generalising and therefore inaccurate character, and if in this belief strong feelings of dislike are involved, we become prejudiced. And once prejudiced the mind closes itself off from social reality by simply rejecting facts which show that it is wrong, or by distorting and interpreting facts in such a way that they become accommodated to our prejudice. In the process the prejudiced mind develops its own very illogical logic. Again let me give you a few examples to show you how this logic works. Consider these short dialogues:

Mr.X: Blacks are lazy, that is why I don't like them.

Mr.Y: I don't agree with you. Take sports for instance. Almost half the American athletic team for the Olympics are black. I wouldn't call top class--athletes lazy. They must make endless, almost inhuman physical efforts in their sports to reach top level.

Mr.X: That exactly proves my point. They are only into sports to win a medal and a lot of prize-money, so that they don't have to work a day longer in their life after that.

End of dialogue.

Strange logic is it not, that equates hard work with laziness?

Another dialogue, like the first not made up by myself, but taken from real life. Mrs.X: I don't like Jews in my neighbourhood. They are sly, tricky and greedy, they think of nothing but money and only take care of their own group.

Mr.Y: But the record of the neighbourhood community chest campaign shows that they give more generously than the non Jews in this neighbourhood.

Mrs.X: That proves how smart they are in concealing their true nature. See how sly and tricky they are?

End of dialogue

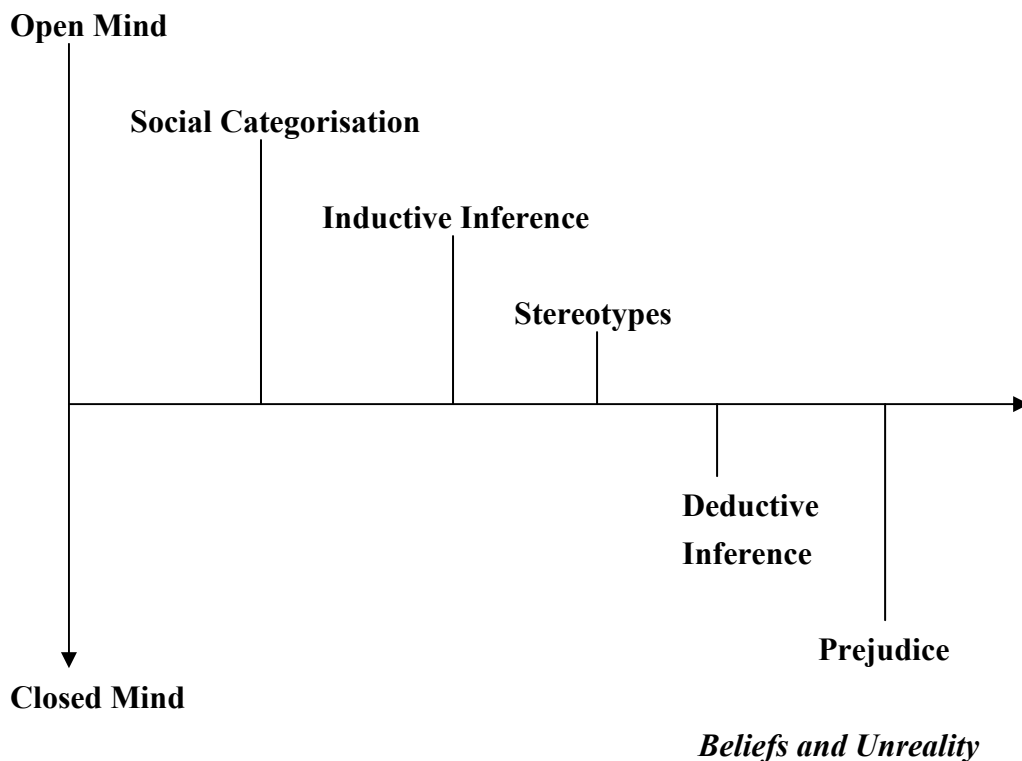
Now that is a strange, and not very smart kind of slyness, concealing greediness by giving generously, don't you think?

And what do you think of this statement, made by a member of a Dutch right wing extremist political party? “The Turkish and Moroccan foreigners in our country should be forced to go back to their homelands, because they take our jobs and only come to the Netherlands to collect from welfare.” Now, logically it is either, or, but not both at the same time. Either they take jobs and then don't receive any welfare, or they are unemployed fulfilling the necessary condition to receive welfare.

Neither facts, nor logical reasoning have any positive influence on the prejudiced person, so it seems. A prejudiced mind is a closed mind. Instead of thinking about how to open it, we would do better to concentrate on the problem of how to preventing prejudiced thinking.

But first, let me briefly summarise with the aid of the following diagram.

Beliefs and Reality



Let's move from left to right first, beginning with elementary forms of social categorisation, and then to, what I call here forms of inductive inference, by which I mean that the mind, once it has identified a common feature in a limited number of persons belonging to a social category, it constructs a generalisation, supposing that all persons belonging to that category have that feature. Moving on we see here stereotypes, pictures in our heads about social groups, made up of a number of generalisations. From there to deductive inference, by which I mean the presupposition that an individual, identified as belonging to a specific category of which the mind has formed a general picture, must and will show all the features of that general picture. On the far right, we see outright prejudice. On this axis, from left to right, the relation between beliefs and reality gets weaker and the picture of social reality gets more distorted. Moving from top to bottom, we see a decrease in the ability and willingness to adjust beliefs to plain logical reasoning and established facts. From an open mind, open in the sense that external influence is accepted, we go down to a closed mind, which does not accept such influence. Tragically, the more distorted beliefs are and the greater the distance is between those beliefs and reality, the more the mind closes itself off from reality and external influence.

I don't tell you anything new when I say that in societies with sharp internal dividing lines between two or more groups, stereotypical and prejudiced beliefs and behaviour based upon those beliefs pose enormous problems. The question that I now would like to concentrate on is: what can be done in the sphere of education - teachers, the school organisation, local government educational policy-makers - to influence in a positive way stereotypical or even prejudiced beliefs and behaviour based upon those beliefs?

As a strategy we might try to influence and change those beliefs, hoping~ that by doing so in the end behaviour based upon those beliefs - discrimination, aggression, violence - will also change or even disappear. This strategy appeals very much to our common sense logic.

What we would have to do then is train the school-population in, what is called the logic of inference. As I said in the first part of this lecture the mind, in the process of social categorisation, neglects differences between members of one category and stresses differences between different categories. At the same time, what members of different categories have in common is neglected, whereas what members of one category have in common is stressed. By doing this a more or less distorted view of social reality is produced. As long as these views, like those of young school children, are not completely hardened, having become immune to facts and logical reasoning, they can be influenced. In fact, young children can be influenced, because we know, thanks to sociological research,

that children up to the age of around ten, have not yet formed any prejudiced beliefs. Their minds are not yet fully closed.

By stressing what members of different categories have in common, by stressing the differences between members of one and the same category and by showing with simple facts that the pictures in our heads are mere generalisations, containing all too often not much truth it, it is possible to create, so to speak a warning system in the mind. A red warning light, which starts to flash whenever the mind is deducing from generalisations, making it aware that it is risky to do so.

To illustrate how a teacher can do this, here is another example. In a class of young school children the boys and girls are split up into groups of, say, five. Each of the groups is given the assignment to discuss and write down their views of the other sex as a category. So, each group of boys will come up with a number of stereotypical statements in the form of :

girls are ...;
girls have;
girls always do

Each group of girls will produce the same type of statements about boys in general. These statements are then collected and presented to the whole class, after which individual girls and individual boys are asked to tell if and to what extent they recognise themselves in the general picture. Next individual boys or girls are asked whether they identify each individual of the opposite sex with the general picture. This will produce a lot of discrepancies between the general picture and their self image and between the general picture and the image they have of specific individuals of the opposite sex. And because they have produced these results themselves, they become aware of the discrepancy between the general picture in their mind and their direct social environment.

This is just one example, taken from a whole package. I could give you many more. I won't do that, but I will tell you what all these examples have in common. They all refer to categories and stereotypes that don't directly relate to group relations that involve great social tensions and about which very strong feelings exist in the minds of the children. That is very important. It is important to start with examples of a non threatening character. Our goal is to initiate a process of critical self-reflection about the creation of stereotypes. The use of social categories should be avoided, especially in the beginning. To confront pupils with issues concerning certain social groups about which they, or at least the people in their daily social environment, maintain strong beliefs, tends to block self-reflection. The critical notions it develops places the person in a position of conflict with his or her daily social environment.

A simple method to prove the lack of truth of certain stereotypical beliefs is to confront those beliefs with facts, as I did in the case of the Swedes. But using that method, you should be

aware of the fact that is not so much the power of the truth that convinces people, but the trust they have in you as the source of information, compared to other sources in their daily social environment. Of course, most teachers are trusted in this regard by their pupils as information sources.

Training in the logic of inference deals with the mind, with the world of thought and ideas. But we also have to deal with behaviour. Behaviour related to stereotype beliefs or worse, prejudice, often implies forms of rejection others, or even discrimination, aggression and violence. Here lies an important task too.

Social behaviour is determined by attitudes, made up of cognitive and emotional elements on the one hand and the social rules or norms of the environment, like for instance laws, on the other.

While we are free to think what we want, we are not free to do or even say what we want. Given that we would like to rule out behaviour, based on prejudice, and that we would like to create a social climate, at least within the school boundaries, in which such behaviour is effectively penalised, it is necessary for every school to have a set of clear rules, known to the whole school population, explicitly condemning and penalising that behaviour. It should be clear to the whole school-population, teachers as well as pupils and students, that the school cannot and does not tolerate discrimination, violence and other forms of aggressive behaviour. It should also be clear to everyone that the school and the school premises are a safe haven for all members of its population, regardless of social background, skin-colour, religion or nationality and that the school as an organisation permanently sees to it that it is.

Discrimination can sometimes be very subtle; sometimes dominant groups that discriminate are hardly aware that they do so. To make them aware of the effects of their behaviour the method of reversing roles can be used. Some very interesting simulation games have been developed, in which some of the participants, in real life hardly ever subjected to discrimination, are placed in exactly such a position, in of course socially innocent circumstances. For instance, only because of the size of their shoes they cannot get access to specific information or influence decision-making, which affects the whole group, including themselves. You can perhaps imagine their frustration. Harder to imagine may be the attitude of those, who, only because they have the right shoe-size, were given a dominant role. They often accept their dominant position and their privileges as perfectly normal and natural, implicitly accepting as normal and natural the fact that others do not have those privileges.

The debriefing of the simulation game afterwards is almost always an eye opener to all those involved. Social behaviour is partly determined by attitudes. As I showed you before, once a person is prejudiced, he or she is almost immune to information and logical

reasoning proving the prejudiced beliefs to be wrong. So, trying to influence those beliefs through the method of training in the logic of inference is fruitless.

Here we should start at the other end, using the strategy of influencing behaviour. I know that it sounds authoritarian, but what is needed is a set of strong and strictly enforced rules that penalise behaviour based on prejudiced beliefs. That is where the school organisation comes in. It should make it clear to everyone that at least within the boundaries of the school premises that kind of behaviour is not tolerated. And I should add that with behaviour not only doing things is meant, but also saying things, or carving them in toilet doors !

There is an important other reason to maintain rules penalising behaviour like discrimination or racism. Some of you may remember the problems in the United States in the sixties concerning the federal nullification of school - segregation laws that existed in southern states, where black children could not go to the same schools as white children. By bussing black children to white schools the government tried to accomplish integration. The busses that took black children to white schools and sometimes even the children themselves were attacked by racist whites. But the government stood firm and after a few difficult years integration was more or less accepted.

Long term social scientific research showed that after a number of years not only the enforcement of integration was accepted, but also the integration itself. The ultra-negative attitude towards integration had softened. What was discovered was that effective influence on behaviour, for example by imposing strong rules, in the end also influences attitudes or beliefs. Behaviour, enforced by rules, may lead to attitudes and beliefs consistent with that enforced behaviour. As I said before, the prejudiced mind is almost immune to logical reasoning and facts which show the lack of truth of its prejudiced beliefs. But the prejudiced person cannot be immune to the rules of his or her social environment. If these rules repress and eliminate behaviour based upon prejudiced beliefs, then these beliefs may be positively influenced in the end.

Educational policy makers have an important task in fulfilling the necessary conditions to put these strategies into use. They will have to create the necessary space in the curriculum. They will have to supply the means, time and money to train teachers so that they can effectively train their pupils in the logic of inference. Furthermore, they will have to supply the schools and the teachers with material, like schoolbooks, course-ware and what have you, in which the information given is not polluted with stereotypes or even prejudiced beliefs. You would be amazed to see how much of traditional used material is indeed polluted in this sense. With the help of screening lists, developed over the past few years, which contain explicit and useful criteria, it is not very difficult to analyse such materials.

Education is embedded in society. Perhaps the most important law of the sociology of education says that education cannot compensate for society. Consequently, a necessary condition for educational strategies directed at changing attitudes and behaviour to be

successful, is a certain minimum of consent in society about the necessity of such changes. To put it more plainly: if, in general, parents feed their children prejudiced beliefs and stimulate discriminative and aggressive behaviour towards certain groups in society, you cannot expect a lot of positive results. So, a great responsibility rests on the shoulders of opinion leaders, leaders of political groups and parties and other social organisations to create at least a minimum of social consent about the necessity for changes in attitude and behaviour.

You will have noticed that, although I have used examples to briefly point out what training in the logic of inference and influencing prejudiced beliefs is about, not one of those examples was taken from the particular situation in Northern Ireland. I had my reasons for that. The first one of course being that I, as an outsider, would not run the risk of blundering my way through a minefield of problems with very sensitive aspects, at least in part unknown to me. You may have worked out the second reason from the contents of this paper yourselves. If you want to train people in the logic of inference, aiming at starting a process of critical self-reflection, then you should avoid, at least in the beginning, to confront them with examples with a possibly threatening character. The third reason is of a different kind. Educational programmes and policies, developed in Europe and America, aimed at influencing stereotypes and prejudice, and research done in that field, have been directed mainly at problems of multiculturalism, with regard to the relation between the dominant majority and ethnic minorities. How and to what extent these programmes and strategies can be put to use in education in Northern Ireland is a question that can only be answered by you.