

THE LOGIC OF XENOPHOBIA

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ABSTRACT

In this article I discuss the subjective rationality of xenophobic and racist beliefs. Although such beliefs are mostly non-rational from an objective perspective, because of their incongruence with reality, under certain conditions they may appear rational from people's subjective point of view – in particular in situations of uncertainty. The reason for this is mainly cognitive limitations and biased background information. I argue that xenophobic beliefs are often underpinned by categorization and inference biases. More specifically, xenophobic beliefs may arise out of invalid inductive inferences and by stereotyped categorization processes. Both these types of erroneous inferences result from thought processes that have the same form as cognitive mechanisms people use successfully in their daily lives, which give them good reason for relying on them without much reflection.

KEY WORDS • cognition • inference • racism • subjective rationality • xenophobia

Introduction

In the early 21st century, xenophobic and racist beliefs and attitudes are still widespread. According to Eurobarometer data presented in EUMC (2001), 15% of European Union citizens felt 'personally disturbed' by the 'presence of people of another race' in their daily lives. Moreover, during the past two decades, xenophobic parties – such as the French Front National, the Austrian Freedom Party, among several others – have emerged and obtained political leverage in several West European countries (Rydgren 2003). Finally, as a result of the xenophobic beliefs and attitudes held by individuals in strategic positions of power, immigrants are discriminated against in the labor market as well as in the housing market (e.g. EUMC 2002; Rydgren 2004).

Given these facts, it may appear strange – even provocative – to pose the question whether xenophobic and racist beliefs are *rational*. From an objective point of view, these kinds of beliefs are mostly non-rational or irrational because of their inaccurate correspondence with reality. Put another way, they are mostly false. Yet, while relying on Raymond Boudon (1989a, b, 1994), I argue that xenophobic and racist beliefs may be *subjectively rational*. Building on Max Weber, Karl Popper, and Herbert Simon, Boudon (1989b) argues that one of sociology's major tasks is to account for the subjects' own reasons for believing or acting in the ways they do. Although reasons for beliefs may be objectively wrong, the subjects themselves may perceive them as subjectively right. More precisely, according to Boudon (1989b: 176), '*subjective rationality* is the product of the discordance between the complexity of the world and the cognitive capacities of the subject'. For instance, people normally 'tend to consider invalid reasons as good when these reasons are valid in many [other] circumstances' (Boudon 1989b: 175).¹ As demonstrated in this article, xenophobic and racist beliefs may occasionally be subjectively rational in these ways. Cognitive limitations may make xenophobic beliefs appear reasonable for some people, in particular, in situations of uncertainty.

More specifically, I argue that xenophobic and racist beliefs may be seen as rational from a subject's point of view because of two basic types of erroneous inferences: one in which people draw dubious or false conclusions about individuals based on their knowledge about the social group and/or category to which the individual belongs (i.e. stereotyping)² and one in which people draw dubious or false conclusions about social groups and categories from observation of individual instances (i.e. inductive strategies and heuristics). Although analytically separate, these two types of erroneous inferences occasionally commingle, as when the 'specific traits' of a social group or category are attributed by means of erroneous inductive strategies, and when inductive reasoning proceeds from stereotyped propositions.

One basic premise of this article is that knowledge inevitably assumes the mobilization of *a priori* forms. These forms consist of linguistic concepts, categorizations, rules for inferences, etc. Hence, what we perceive and apprehend when confronting a new thing, individual, phenomenon, or situation is contingent upon what we already know. In this way it can be said that cognitive *a priori* forms shape our reality. Among the various types of *a priori* forms,

I discuss categorizations and inference strategies in this article. These *a priori* forms are normally – and often with good reason – perceived as self-evident (Boudon 1994).

I have entitled this article ‘The *Logic* of Xenophobia’. To be more specific, the logic under consideration is inductive strategies of inference. It is a well-established fact that people often use such strategies as ‘short-cuts’ in their everyday thinking; generally because they very often lead to reasonably satisfying results (seen from a subject’s own perspective). However, sometimes these strategies go awry and lead to incorrect inferences. Nevertheless, when people use such well-tried strategies, they tend to rely on the results; something that may help explain the conviction with which people sometimes hold on to dubious or even false beliefs. This is especially the case in situations in which little or no information is available to correct the incorrect inferences, and/or when the beliefs are expressed by individuals and/or institutions that are seen as authoritative.

Hence, the notion of *black boxes* (cf. Boudon 1994) is of great importance for this article. When individuals face unfamiliar situations, they have, at least initially, only two alternatives: either to use *a priori* forms valid in other situations or to put trust in information and/or theoretical propositions received from other people. The first strategy runs the risk that an *a priori* valid in one context becomes mobilized in contexts where it is inappropriate, while the other strategy may lead people to succumb to false information and/or theoretical propositions. Moreover, in black-box situations, especially in our first meetings with individuals, our perception may be governed by salient categorizing aspects in the form of stereotypes. When we lack information about an individual, we interpret him or her in light of our ‘knowledge’ of the social group or category to which he or she belongs. When this category is an ‘out-group’, from our perspective, our stereotypes may be mingled with negatively evaluated beliefs and/or affects. When this happens, we have a prejudiced stereotype.

As indicated above, I suggest that *authority* and *trust* play important roles in black-box situations. People believe in information received from sources they trust (whether institutions or friends). Whom you trust depends on who you see as authoritative and legitimate. It also depends, of course, on whom you frequently interact with (cf. the discussion on social capital; e.g. Burt 2001; Lin 2001; Putnam 2000).

However, a position holding that cognition plays an important role in the construction of xenophobia should not be seen as a plea for an atomistic approach. Individuals are social, thinking, and feeling beings with personal biographies. Not just reason and cognition, but also emotions and other motivational forces may influence our beliefs as well as our actions. Nor do I believe that this approach is appropriate for all research on xenophobia. The ambition of the theory is of the middle range: it is restricted to the understanding of xenophobic beliefs underpinning racism of 'the mundane'. In order to understand more manifest, extraordinary examples of xenophobia – such as ethnic cleansing – this micro-based approach would have to be complemented with structural and institutional analysis. Neither an analysis of *changes* in people's beliefs and attitudes nor the *practice* of xenophobic discrimination, for instance, should be based on cognitive aspects alone, but should also involve a consideration of transformational processes on the macro-level. Only then – by specifying the concrete situations people are embedded in – may we assess the reasons subjects have for their beliefs and actions. Yet, I argue that subjective rationality and cognition can say a great deal about why people hold on to xenophobic beliefs. Such beliefs are often underpinned by erroneous inferences resulting from thought processes that have the same form as cognitive mechanisms that people use successfully in their daily lives, and which give them good reason for relying on them without much reflection.

First, I introduce the concepts of *a priori* form, categorization, stereotypes, and prejudices. I then discuss various inference strategies employed by people in their everyday thinking; people's inclination to use inductive reasoning is discussed under the heading 'logical *a priori*', while two particular varieties of inductive 'short-cut' strategies – the 'Representativeness Heuristic' and the 'Availability Heuristic' – are discussed in the next two sections. In order to connect the notions of stereotypes and prejudices with inductive reasoning, I thereafter present my ideas about the *analogism*. Implications for the understanding of xenophobia are commented on – and exemplified – throughout the article. Finally, in the concluding remarks, I briefly discuss possible ways of minimizing xenophobic and racist beliefs in a society.

Importance of *a priori* Forms

In his theory of (false) beliefs, Raymond Boudon (1994) takes Georg Simmel's notion of *a priori* forms as his point of departure (Simmel 1977, 1978). According to Boudon (1989b: 195), social actors are often confronted with ambiguous and complex situations in the natural course of daily life which they master by using theories, principles, and conjectures.

This is also the core of so-called social cognitive theory (see Fiske and Taylor 1991). This theory states that adults almost never approach objects and events as if they were *sui generis* configurations, but rather perceive and conceive of them through the lens of pre-existing systems of schematized knowledge (i.e. beliefs, theories, propositions, and schemas). Without these *a priori* knowledge systems, life would be a 'buzzing confusion' (Nisbett and Ross 1980: 7, 36), something that we do not tolerate because of our innate striving for a coherent and meaningful interpretation of the events surrounding us (Tversky and Kahneman 1982b: 117). Hence, we meet our surroundings with the help of *a priori* forms that are normally taken for granted. However, at the same time as these *a priori* forms enable us to orient ourselves in the world, they occasionally lead to errors and/or oversimplifications.

These beliefs, theories, and schemas are acquired through a range of different channels, such as socialization in childhood, education, the media, and all kinds of social interactions in everyday life. Consequently, formal theories distilled from academic research mingle in people's stock of knowledge, with theories and schemas emanating from popular sayings, parables, myths, fables, epigrams, allegories, well-known songs, films or novels as well as anecdotes about famous people or personal acquaintances (see Nisbett and Ross 1980: 119).

What Simmel suggests, according to Boudon (1994: xi), is that all human thought and reasoning are set in an *implicit framework*. These frameworks are systems of propositions that people, with good reason, regard as *self-evident*. In this way, they can affect our reasoning, beliefs, and inferences in ways similar to how perceptual frameworks affect our perceptions. Because people have good reason to regard them as self-evident, the implicit frameworks impose themselves on the subjects and may often lead to weak and false beliefs (Boudon 1994: xii).³

To sum up the reasons mentioned above, human beings are obliged to use *a priori* forms in their everyday thinking, and often in a non-critical way. This is an essential feature of knowledge, but at the same time a major cause of errors and distortions in any thought process. As discussed below, stereotypes as well as simplified inductive strategies may become just such *a priori* forms.

Categorization, Stereotypes, and Prejudice

To recapitulate, reality is usually too complex to be perceived and apprehended without the help of social categorizations. These are necessary for us but can at the same time readily lead to stereotypes (i.e. a highly stylized and simplified image of the characteristics of a social category). Stereotypes (Bar-Tal [1989: 227] characterizes them as 'frozen contents of knowledge') are often employed when people feel the need to form a quick social category in order to process incoming information. As mentioned above, much of our stock of social categories, and among them also stereotypes, is the result of socialization and education. However, sometimes stereotypes are created and used in a way that can be described as a two-way process. A stereotype may be constructed at the aggregated level by individual induction from singular cases, which people, in turn, use to make generalizations about every individual sharing the group-specific traits. At this point it is important to separate between individual and social stereotypes (e.g. Augoustinos and Walker 1998: 210). Besides being a highly simplified and stylized image of a (social) category, a social stereotype is also socially shared in a fairly consensual way (Gardner 1994; Lippmann 1922).

Once a particular stereotype has been mobilized in the meeting with a person, our further perception of the individual will partly be dictated by the characteristics of the stereotype.⁴ Hence, we can make use of Rupert Brown's (1995: 82) definition of *stereotyping* as a process where someone attributes another person characteristics 'which are seen to be shared by all or most of his or her fellow group members'. In other words, while a *stereotype* can be defined as a socially shared, highly simplified, and stylized image of a (social) category, *stereotyping* is 'an inference drawn from the assignment of a person to a particular category'.

In the physical world, according to Nisbett and Ross (1980: 38–9), it is an approximate truth to say that ‘if you’ve seen one oak tree, you’ve seen them all’. Here we only need a limited number of properties to define objects as belonging to one category rather than another, and once we have correctly placed an object in the category of oak trees, we can with extremely high probability predict that ‘the tree will provide shade and acorns, [and] that its wood will be hard and burn slowly’. In the social world, however, this is rarely the case. Here the observed properties of an object are less diagnostic and not so sharply delineated; there are usually many possible categories in which the object may be placed, and once the categorization has taken place further predictions of properties of the categorized object are likely to fail. Hence, in the social world, categorizations and schemas are ‘rarely [. . .] more than rough outlines and tentative guides for perception and behavior. When they are relied on heavily, there are bound to be inferential errors and misguided actions’ (Nisbett and Ross 1980: 38–9; cf. McGarty 1999; for ‘the problem of categorization’, cf. Goodman 1978, 1983).

Moreover, although stereotypes may be based on statistically correct beliefs, they sometimes have an evaluative and affective ‘baggage’ called *prejudice*, which may be seen as an emotional disposition (see Elster 1999: 244). A prejudiced stereotype can be defined as an attitude or set of attitudes held toward a group or members of a group, encompassing over-simplified beliefs and a set of negative or positive feelings and evaluations.⁵ Hence, social categories may influence not only people’s cognitive processes, but sometimes also their affective feelings and evaluations of others (Operario and Fiske 1998: 45).⁶

Nevertheless, there are normally several ways in which an individual can be categorized in a given situation; for instance by age, gender, social class, and ethnicity, etc. (Brown 1995: 39). Which categories people choose is partly determined by the context and partly by the disposition of the categorizer. However, there are also studies indicating that ‘priming’ plays an important role: if an event ‘has occurred very recently which is evocative of a particular categorization then it is likely that subsequent events or situations will also be interpreted in terms of that same category system’ (Brown 1995: 66–7; cf. McGarty 1999, ch. 4). Since stereotypes are (highly stylized) images of social groups and categories, this indicates that the salience of various stereotypes in a society is dependent on the outcome of aggregated categorization processes.

This has significant implications for the understanding of xenophobic beliefs and attitudes. I am mainly concerned with racist and ethnic stereotypes and prejudices, which are probably the most important forms of xenophobia. As we have seen, people's first thoughts and impressions of others take off from social categorization and from beliefs and attitudes about the social group or category in question. Along with sex and age, racial and ethnic characteristics are among the most immediately visible and noticeable 'social tags' that we consistently bring with us into our social encounters. Because racial and ethnic appearances (e.g. skin and hair color, manner of speaking, ways of dressing) are among the first pieces of information we get about people we meet, and they evoke stereotypes and prejudices, race and ethnicity have the potential for influencing our further perception of, beliefs about, and behavior toward people we meet (cf. Operario and Fiske 1998: 43; Dovidio and Gaertner 1998: 6).⁷

Logical *a priori*

Cognitive *a priori* not only influences *what* we are thinking, but also the *way* in which we think. In this section, I discuss the logical *a priori* and especially people's inclination toward simplified and/or invalid *inductive reasoning*. Unlike reasoning based on *modus tollens*, that is,

A:

1. if p , then always q
 2. not q
-
3. not p

and *modus ponens*, that is,

B:

1. if p , then always q
 2. p
-
3. q

the following mode of inductive inference (which Boudon [1994: 77] calls 'sophism by affirmation of the consequent'), that is,

C:

1. if p , then always q

2. q

3. p

is in fact an example of logically invalid reasoning, since q can also arise for reasons other than p . However, although it is an unacceptable form of reasoning from a logical point of view, it ‘forms the basis of everyday experience’ (Boudon 1994: 64). Whether this inductive mode of inference turns out to be a useful principle or not depends ‘on the *content* to which it is applied’ (Boudon 1994: 82). More specifically, it depends on the conditional probability of $p|q$. A high probability indicates that the induction will lead to less erroneous inferences than will be the case when the probability is low.

At this point it is necessary to specify my usage of the concept of ‘probability’. In most cases discussed in the remaining parts of this article, it will not matter much whether we use the objectivist frequency theory or propensity theory, on the one hand, or the subjective theory of probability, on the other. Nevertheless, I argue that probability should, normatively, be based on frequency when possible (i.e. when we assess probability of events that are repetitive in one sense or another). In cases where we try to assess the probability of the outcome of a single event, we should, normatively, follow Ayer and use the principle of calculating the relative frequency of the narrowest reference class. According to Ayer:

[t]he rule is that in order to estimate the probability that a particular individual possesses a given property, we are to choose as our class of reference, among those to which the individual belongs, the narrowest class in which the property occurs with an extrapolable frequency (Ayer 1963: 202).

However, as indicated above, categories and classes of references in the social world are often arbitrary and not so sharply delineated. A given object, or subject, can often be placed in a range of different categories, and there are occasionally several ‘narrowest reference classes’ to choose between. Hence, when we assess probability about single events, we sometimes have to, or even should, involve subjective probability, which is ultimately based on $\Pr(E|K)$, where E stands for event and K stands for background knowledge (cf.

Gillies 2000). This kind of subjective probability might be particularly useful when we have sufficient information only about very broad and general reference classes; when we cannot easily choose between different, equally narrow reference classes; or when the event in question is unique. However, when based on insufficient and/or biased knowledge, this strategy might also lead to errors.

Nevertheless, since $\Pr(p|q)$ is much higher in Example D than in Example E (below), the conclusion drawn from the line of reasoning in Example D seems more plausible than the inference drawn in Example E.⁸

D:

1. If it is cold (p), people wear a lot of clothes (q).
 2. People wear a lot of clothes (q).
-

3. It is cold (p).

E:

1. Pneumonia (p) causes fever (q).
 2. I have a fever (q).
-

3. I have pneumonia (p).

Although we cannot be sure that our inferences are correct in the first example (people could, for instance, wear a lot of clothes because it is fashionable), it is a useful guiding principle to look out of the window to see what people are wearing in order to determine whether it is cold out or not (if fashion dictated a lot of clothes, you probably noted it earlier). Stated differently, most people 'know' that the conditional probability of $p|q$ is high. The second example, however, is considerably less certain as a guiding principle: my fever could have been caused by a multitude of other ills. However, since most of us have had the opportunity to experience that this is the case, we 'know' that the conditional probability of $p|q$ is low. This is probably why most people never draw the conclusion drawn in Example E.

Yet, in many cases we do not know whether $\Pr(p|q)$ is high or low because we lack information and/or prior experience. Often people have only arbitrary knowledge of the relative frequency of the reference class. Moreover, as indicated above, the categorization process might be influenced by social stereotypes. Furthermore,

people sometimes ascribe more certainty to their knowledge and/or information than they normatively should. In the following sections, I demonstrate that people sometimes come to rely on low-quality information because they are unaware of the notion of ‘information bias’. More specifically, because of lack of relevant knowledge and a need to save time and cognitive energy, people often assess probability by relying on various heuristic principles – which occasionally leads them astray.

Hence, people’s estimation of whether the probability of $p|q$ is high or low is often flawed. Of particular importance here is whether a person or institution seen as authoritative endorses the initial proposition of the induction. Actually, under certain circumstances, people may even come to believe in inferences similar to the one shown in Example E (above).

This may be exemplified by the many daycare sex abuse scandals in the US in the 1980s and early 1990s (Oberschall 2000). These all began when parents of one or two children suspected that a daycare provider had ‘touched’ their child; gradually, this developed into accusations of ‘dozens of adults victimizing many children in hundreds of acts of oral and anal sex, ritual torture of animals and babies [. . .] and killing unspecified babies with knives and guns’ (Oberschall 2000: 297, 298). There were no eyewitnesses to the abuse, and in addition no physical evidence from medical examinations. Still, not only the parents, but members of the juries too, believed that the abuse had really taken place. Why is that?

I argue that this can be explained by a combination of lack of prior experience and relevant information, a belief in a dubious authority (i.e. the therapists and the child protection workers), and the fact that most individuals involved preferred the risk of a Type 1 error to the risk of a Type 2 error (see below). The therapists and the child protection workers presented ‘a huge list of “symptoms”’ indicating abuse. In fact, everything ‘from bed wetting and nightmares to fears and aggressive play, excessive interest in sex, being uncooperative and uncommunicative, spending too much time on the toilet’ was viewed as signs of sexual abuse (Oberschall 2000: 303). Since the only ‘authorized’ information came from the therapists and child protection workers who were in charge of the interrogation of the children, it was they who greatly influenced the belief formation process. To put this into the logical form presented above:

F:

1. If children have been sexually abused (p), they wet their beds (q) *or* have nightmares (r) *or* play aggressively (s), etc.
 2. Since my child wets his/her bed (q) *or* has nightmares (r) *or* plays aggressively (s),
-
3. he or she has been sexually abused (p).

Since all these symptoms can be caused by a multitude of other things, the fact that the inference drawn from this line of reasoning became significant in the determination of guilt is unacceptable from a logical perspective. Yet this was what happened.

However, in this case the parents (but not the members of the jury) had reason to prefer a Type 1 error to a possible Type 2 error. In assessing the level of danger for their children, the risk of leaving out a relevant variable (which might lead to more abuse in the future) might have outweighed the risk of including too many variables (and hence condemning an innocent person). To continue our discussion on the formation of xenophobic beliefs, we can find examples of this kind. The fear of new skyjackings following the attack on the World Trade Center on 11 September 2001 resulted in a situation where 'Muslim looking' men were sometimes prevented from boarding aeroplanes if they bought one-way tickets or if they changed a flight reservation at short notice, etc., in particular if they were three or more traveling together. This is blatant discrimination based on ethnic and racial stereotypes that affected innocent people (i.e. 'non-Muslim looking' men were allowed to board planes when they bought one-way tickets, etc.). Still, since there was some reason for assuming that future hijackers would be 'Muslim looking', this behavior might in one way have been reasonable from a subjective perspective, because a Type 2 error would have consequences that outweighed a Type 1 error.

Yet, I argue that xenophobic beliefs are sometimes based on reasons similar to those demonstrated above even when reasons for preferring Type 1 errors to Type 2 errors are lacking. When people have insufficient or biased information about immigrants, for instance, a belief that 'immigrants are unintelligent' may be seen as reasonable because of the following inductive inference:

G:

1. Unintelligent persons (p) can only handle low-skilled jobs (q).
 2. Immigrants have low-skilled jobs (q).
-

3. Immigrants are unintelligent (p).

This is a flawed inference. Although the second step of the inference might be based on an accurate observation (i.e. most immigrants the subject knows about have low-skilled jobs), immigrants or other ethnic minorities might be forced to take low-skilled jobs because of factors other than *p*. In fact, this is a telling example of how structural factors may generate beliefs, which in turn may reproduce the structural situation.

Similarly, a belief that ‘immigrants are lazy’ may be underpinned by this kind of inductive inference:

H:

1. If people are lazy (p), they do not work (q).
 2. Immigrants do not work (q).
-

3. Immigrants are lazy (p).

Also in this example, the second step may be an accurate observation; immigrants (whom the subject knows about) do not work. Of course there may be a multitude of other reasons for this fact (e.g. immigrants are prohibited from working because they lack a ‘green card’; they cannot find a job because of discrimination in the labor market, and so on). However, when people have little information about immigrants as individuals, they may not be able to estimate the probability of $p|q$ and therefore believe in the inference above. Of course, few would actually believe that *all* immigrants are lazy and/or unintelligent, yet – which is my point – they might be led to believe that immigrants *in general* are lazy and/or unintelligent.

Heuristics

As indicated above, dubious or invalid inductive inferences are sometimes drawn because of biased information and/or faulty evaluation of the quality of the background knowledge. Hence, I continue

our discussion of inductive reasoning by looking at the different *heuristics* employed by people in their everyday thinking.

In order to 'economize our thoughts', we all use various strategies, or *heuristics*, which can be seen as a rapid form of reasoning (Fiske and Taylor 1991: 381). These heuristics, which we tend to use automatically, contribute greatly to our ability to navigate through our encounters with complex reality, especially in situations of uncertainty (i.e. black-box situations). Tversky and Kahneman (e.g. 1982d) argue that people often use heuristics in order to simplify complex problem-solving. By relying on a limited number of heuristic principles we are able to reduce 'the complex tasks of assessing probabilities and predicting values to simpler judgmental operations' (Tversky and Kahneman 1982d: 3).

Although these heuristics simplify complex problems and therefore often lead to inferences that are 'good enough', or at least better than might otherwise have been arrived at, they often lead to errors and biases as well. More specifically, it is demonstrated below that people sometimes, because of these errors and biases, rely on available information more than they normatively should. Since these heuristic principles have implications for how people estimate the conditional probability for $p|q$ (above), they indirectly contribute to the formation of xenophobic beliefs through inductive reasoning. However, as shown below, they can also promote xenophobic beliefs more directly.⁹

The Representativeness Heuristic

People are often faced with situations in which they must estimate the probability that Object A belongs to Class B; that Event A originates from Process B; or the probability that Process B will generate Event A. When we estimate such probabilities, we typically rely on the representativeness heuristic, that is, we judge the probability that A belongs to B to be high when A is seen as highly representative of, or similar to, B, and we judge the probability that A belongs to B to be low when A is not similar to B. The similarity between a category and an instance may, of course, be evaluated with the help of stereotypes.

Individuals often use the Representativeness Heuristic because (1) it has low cognitive costs, (2) it often leads to satisfying results, and

(3) people tend to overestimate the correlation between similarity and high probability (see Tversky and Kahneman 1982c: 89). While this heuristic strategy may be useful in many cases, it often leads to serious errors simply because many factors that could, and should, affect judgements of probability do not influence representativeness or similarity.

The first example of such an error is that most people do not recognize the importance of sample size. As Kahneman and Tversky (1982a) demonstrated in an experiment, most people judge the probability of obtaining an average height of 6 feet or more to be equally high in samples of 1000, 100, and 10 men, while it is in fact much more likely in a small sample. This is an example of the lingering belief in the 'law of small numbers', that is, that the law of large numbers applies to small numbers as well, and that even small samples 'are highly representative of the populations from which they are drawn' (Tversky and Kahneman 1982d: 7). A similar error is people's ignorance of the fact that data samples may be highly biased even though they are large. People tend, for instance, to be insensitive to the fact that 'their particular niches in the universe may funnel unrepresentative evidence or information to them in a thousand different domains' (Nisbett and Ross 1980: 262–3). As a result of our location in a social system and our lifestyles and personal preferences, we meet specific but limited slices of the social world. To this, certain *communication effects* can be added, that is, that individuals with similar location in a social space also tend to use similar information sources – not least each other (Bar-Tal 1989; Boudon 1994; cf. Moscovici 1976).¹⁰

These examples all have some bearing on the construction of xenophobic beliefs and attitudes. The most important of them is the insensitivity to selection biases, whether caused by one's own social location or by the selection logic of the media. This is commonly combined with a belief in the 'law of small numbers', although turned on its head,¹¹ and implies that when people see, or know about, only a small number of immigrants, for instance, they will regard them as representative for all immigrants. At the same time, some immigrants are much more visible than others (e.g. because they are criminals and are referred to in the media). Taken together, this may lead to strengthened prejudices and negative attitudes. As we will see in the next section, this effect is likely to be increased by the availability heuristic.

Availability Heuristic

There are also many situations in which people tend to predict the frequency of a category or the probability of an event by the 'ease with which instances or occurrences can be brought to mind' (Tversky and Kahneman 1982d: 11). Since we usually remember large classes better than small ones, the availability heuristic is often a useful means of estimating frequency or probability. Although often useful, there are factors other than frequency or probability that affect availability – and this may lead to biased inferences (Tversky and Kahneman 1982d). For instance, we often run the risk of an 'egocentric bias' when using this heuristic (i.e. an insensitivity to our own limited knowledge of the world that lies outside our experiences). Currently unemployed workers, for example, tend to overestimate the rate of unemployment, while currently employed workers tend to underestimate it (Nisbett and Ross 1980: 19). Moreover, most people readily recall classes whose instances are retrievable, well known, or salient (Tversky and Kahneman 1982a). Studies have also shown that we are more likely to correctly remember 'stereotype-relevant traits or behaviors' than stereotype-irrelevant characteristics (Hewstone 1989: 211).

Generally, vivid information is more readily remembered and accessible than pallid information. Information that is likely to attract and hold our attention because it is (1) emotionally interesting; (2) concrete and imagery provoking; and/or (3) proximate in a sensory, temporal, or spatial way, may be deemed vivid (Nisbett and Ross 1980: 44–5). The fact that information is often weighted in proportion to its vividness implies that certain types of credible and very useful information will have a low effect on people's inferences just because it is pallid. There is a risk that credible but boring information (e.g. academic reports) will be overlooked, while more vivid anecdotal information will have a strong effect on our inferences even though it is less credible and useful (Nisbett and Ross 1980: 55–6).¹² These findings have far-reaching implications for everyday beliefs, judgments, and inferences.¹³ A particular type of pallid information, which we consequently tend to overlook, is 'null' information about potential events that do not occur. For most of us, events that take place are more concrete and immediately real than the non-occurrence of potential events. This, of course, makes events that have actually occurred more available for inferences than events that have not occurred.

All of these examples have implications for the formation of xenophobic beliefs and attitudes. For one thing, they show how the feeling of insecurity, so typical of xenophobia, may be stirred up. That people recall vivid information more readily may give them the impression that the world (or country, or city, or block) is more insecure than it really is. When people lack first-hand information, which they often do, they rely on second-hand information in order to form an opinion of the surrounding world. In doing so, people tend to remember vivid reports about robberies, rapes, and murders more readily than other reports. Yet, at the same time they do not recall the days, weekends, or weeks when no robberies, rapes, or murders were reported. On the other hand, the fact that people tend to recall 'stereotype relevant' information better implies that memory biases in favor of reports that apparently 'verify' stereotypes (e.g. Blacks or Turkish immigrants are aggressive and inclined to criminal activity) are remembered better.

The Analogism

In order to better connect the discussions on stereotypes and prejudices, on the one hand, and inductive reasoning, on the other, I believe it is useful to discuss so-called *analogism*. More specifically, the discussion on analogism casts light on how the process of assessing conditional probability of single cases by means of using relative frequency of reference classes works in everyday thinking. Furthermore, of the various forms of inductive reasoning, I believe the analogism to be of particular importance for the emergence of xenophobic beliefs. As will become evident from the following examples, stereotyped thinking often follows this form of analogous reasoning. We have an analogism when we draw the conclusion from:

J:

1. the fact that Object A has the Properties p and q
 2. and the observation that Object B has the Property p
-
3. that object B also has Property q .

This mode of thinking is simultaneously stereotypical and inductive; it also implies the representativeness heuristic because two objects (or persons) are seen as related because they resemble each

other (i.e. they share property p , which places them in the same category). Although it is obvious that this type of reasoning can never be valid from a logical point of view, it is one of the most important and common mechanisms underpinning beliefs and attitudes, and it can, moreover, often be a very useful one. When we are facing a 'black box', we need some theory or guidance: and this is when analogism is commonly used. If you do not know much about wine, for example, and are going to have some friends over for dinner, it is likely that you follow the line of reasoning that

K:

1. since the bottle you bought last time (A) was a Bordeaux (p) and tasted good (q)
 2. among all the possible alternatives in the store, bottle B which also is a Bordeaux (p)
-
3. ought to taste good as well (q).

This decision-making mechanism, of course, is error prone; however, although it is fallible, the likelihood that it generates sound predictions increases with increases in relevant knowledge. If you learn to discern other properties of the wine (through practical experience or theoretical learning), your chances of finding a wine you like when using this heuristic will increase. In the terms of Ayer (1963), as discussed above, it enables us to use an even narrower reference class. Thus:

L:

1. The bottle I bought last time (A) was a 1995 (p) Bordeaux (q) made of Merlot grapes (r) and tasted good (s).
 2. Since bottle B has properties p , q and r ,
-
3. it ought to taste good as well (s).

This way of creating subgroups within a larger class of objects (or persons) reduces the sweeping character of our categorizations and increases our chances of arriving at sound predictions. It is, of course, still a stereotyped over-generalization (that all objects that have properties p , q , and r also have property s), but less so than in the example in which no subgroups were constructed (see Hamilton 1981: 341).

In this way, new information improves the usefulness of the analogism, or stereotype, as a guiding principle. Yet, the analogism may also result in dubious beliefs. One common analogism underpinning xenophobic beliefs is that

M:

1. since individual A is an immigrant (p) and a criminal (q)
 2. and individual B is an immigrant (p),
-

3. he is a criminal (q) as well.

The knowledge of individual A, who plays the role of ‘yardstick’ in the analogism, is seldom based on direct experiences, but more often on stereotypical social representations. Why, then, is the analogism a useful guiding principle in choosing wine, but not in this example? The plain answer is that the degree of heterogeneity is much greater among individuals than among wine, and the greater the heterogeneity the more information that is needed for the analogism to be able to generate reasonably sound predictions. Hence, this difference has to do with the already discussed difference between categories in the social and in the physical world; while a *pertinent* property of wine can be ascertained rather easily (e.g. the kind of grapes used), it is considerably more difficult to ascertain an indisputably pertinent property of being a criminal.

However, the initial proposition of Example M may also be based on the (sometimes true) fact that immigrants are over-represented among convicted criminals. In this case, Example M shows how lack of relevant knowledge (i.e. what is really meant by the notion of ‘over-representation’) may result in absurd forms of statistical discrimination.¹⁴

Nevertheless, in ‘black-box’ situations we have, by definition, no prior experience or theoretical knowledge. This, I would argue, makes *trust* and *authority* of crucial importance for the mobilization of the analogism. Social psychological research has long indicated that people are most easily influenced in situations of uncertainty (see Ross and Nisbett 1991).¹⁵ Hence, in black-box situations we readily adopt stereotyped social representations as *exemplars*. We often adopt these representations or statements either because (1) they have been put forward by somebody we regard as *authoritative* and/or (2) because we trust the intelligence and taste of others.

Thus, to return to the previous examples, we can see that the construction of xenophobic beliefs and attitudes sometimes follows this way of reasoning:

N:

- 1a. A friend (or relative), whom I trust, tells me that immigrants (p) are criminal (q) *or*
 - 1b. a politician, whom I see as an authority, says that immigrants (p) are criminal (q)
 2. and since person A is an immigrant (p)
-
3. I will presuppose that he is a criminal (q).

This way of thinking is quite frequently combined with the availability heuristic; for instance, we recall criminal cases that are reported in the media (which we trust) or believe in and remember friends' stories about (biased) personal experiences.¹⁶

Concluding Remarks

This article has been about the subjective rationality of xenophobic and racist beliefs. As shown, these beliefs are underpinned by categorization and inference biases, both types of cognitive *a priori* that people use for good reasons (because they often serve them well in other situations). More specifically, I have demonstrated how xenophobic beliefs may be formed by stereotyping, i.e. the drawing of inferences about individuals on the basis of the image of the social group or category of which the individual is a part. Moreover, I have shown how xenophobic beliefs may arise out of invalid inductive inferences, especially when people lack relevant knowledge and information and/or when somebody seen as authoritative endorses the initial proposition of the induction. As said, both of these types of erroneous inferences result from thought processes that have the same form as cognitive mechanisms that people use successfully in their daily lives, which give them good reason for relying on them without much reflection. In addition, I have argued that people tend to be ignorant of the notion of information biases, which sometimes make them rely on low-quality information.

Finally, I will briefly discuss what implications the discussion above has for strategies by which to minimize the presence of popu-

lar xenophobia. An important implication is that knowledge matters a great deal. Theoretical knowledge of the arbitrariness of social categorizations, as well as of how little can be inferred from single empirical cases, may contribute to a higher level of reflexivity (i.e. turning the 'taken-for-granted' foundations of people's everyday thinking into less taken for granted foundations). Furthermore, practical knowledge derived from social encounters with individuals from other social groups and categories may lead to an increased awareness that other social groups and categories are at least as heterogeneous as one's own, that is, that 'they' are not all the same. An increased interaction with people from out-groups (ethnic as well as otherwise) will also, sooner or later, lead to a falsification of the negative prejudices bound up with the stereotypes. Hence, while networks bridging different social groups and categories may create bridging social capital (Putnam 2000), they may also facilitate the flow of information that is qualitatively new from a subject's perspective (cf. Burt 1992; Granovetter 1973, 1982). However, segregation (of both housing areas and workplaces) and the decreased importance of broad civil society organizations may obstruct the creation of such networks. Moreover, as Allport (1954) and the research literature generated by the 'contact hypothesis' show, certain conditions must be fulfilled before increased contact between individuals from different social groups leads to reduced prejudice and xenophobia, especially the 'acquaintance potential' criterion, i.e. that the contact should be of such frequency, duration, and closeness that it has the potential to lead to meaningful relationships between the individuals concerned. If these conditions are lacking, the contact may lead to *increased* xenophobia, because of the risk of biased information provided in such occasional contacts (cf. Brown 1995: 239).¹⁷ Put in network theoretical terms, this indicates that ties bridging different social groups within a network should be strong rather than weak.

NOTES

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1. Cf. Coleman (1990: 18): 'the theoretical aim of social science must be to conceive of that action in a way that makes it rational from the point of view of the actor. Or put another way, much of what is ordinarily described as nonrational or

- irrational is merely so because the observers have not discovered the point of view of the actor, from which the action *is* rational.'
2. However, although I mainly discuss stereotyping in this article, discrimination may be the result of generalizations to individuals from the aggregated level, even when people hold an accurate image of the social group or category in question (and not, as in stereotyping, a highly simplified and stylized one).
 3. The presence of these *a priori* elements in all human thoughts and reasoning may also imply a potential discrepancy between the subject's reasoning as it is, and the same reasoning as the subject perceives it (Boudon 1994: 60).
 4. The same, of course, is true for social categories in general, that is, not just for over-simplified social categories. Studies have also shown that expectations generally influence the perceptual categories that are employed to organize and encode experience (Kahneman and Tversky 1982b).
 5. Hence, contrary to most definitions of prejudice (e.g. Jackson et al. 1998: 110), I stress that prejudices may encompass either negative or positive feelings and evaluations (cf. Augoustinos and Walker 1998: 230).
 6. We should also take note of the collective character of prejudices. Any member of a given out-group can potentially become the victim of prejudice, and it is not directed at individuals *as* individuals. Before such prejudice is acted upon, however, someone has to categorize a person according to one social characteristic rather than another. Hence, the foundation of prejudice is the cognitive activity of categorization (Brown 1995: 40; cf. Allport 1954; Tajfel, 1969). Language, cultural traditions, norms, power relations, and societal institutions all play a significant part in how we construe our world. These socio-historical factors determine a great deal of our stock of social categories (Brown 1995: 11; Operario and Fiske 1998: 40). The importance of language is stressed by Boudon (1994), who argues for the centrality of linguistic *a priori*. The philosopher Ernst Cassirer (1946: 28) argues that symbolic forms are 'organs of reality', and that all 'theoretical cognition takes its departure from a world already pre-formed by language'. According to Cassirer, we all live with our objects only as language presents them to us.
 7. It should be emphasized, however, that I conceive of race as a subjective rather than an objective reality. Racial categories are real in their consequences because there are people who believe them to be true. Races do not emanate from biological or evolutionary processes, but are rather reified human-made schemas developed in order to delineate the boundaries of social groups. Hence, although they do not correspond to an objective reality, for many people they have become taken-for-granted classification schemas to a meaningful reality (Operario and Fiske 1998).
 8. This is an example of when it does not matter whether we use an objective or subjective theory of probability. If betting, most people would accept much lower odds in example D than in example E.
 9. Experiments have indicated that these errors also arise when one controls for motivational distortions such as wishful thinking as well as for promises of pay-offs and threats of penalties (Tversky and Kahneman 1982d). We therefore suspect that the effects of inference errors and biases are at least as salient, and probably much more salient, in real-world settings.
 10. This is because individuals with similar location in social space are likely to meet at work, to live in the same areas, and/or to spend their spare time in the same

- civic organizations (cf. Burt 1990, 1992; Marsden 1987). All of this may lead to selection biases (Nisbett and Ross 1980; cf. Boudon 1994: 94). Nisbett et al. (1993: 20) indicate, however, that people may sometimes overcome sample bias by applying 'rules of thumbs', such as the sayings 'Don't judge a book by its cover' or 'All that glitters is not gold'.
11. Strictly speaking, the 'law of small numbers' states that we think that we 'know' a lot about the sample (even if it is small) if we know a lot about the population from which the sample is drawn. In my example, people think that they 'know' a lot about the population if they know a lot about a sample drawn from the population (even if the sample is small). Yet, the mechanism – the belief that small samples are as representative as large ones – is the same in both instances.
 12. This is not to imply that this kind of vivid information is always a bad thing. As Nisbett and Ross (1980: 59–60) note, 'vivid experiences and observations can be a source of new insights, can provide "phenomenological reality" [. . .] to otherwise poorly understood propositions, and can inspire action in circumstances in which previous knowledge or opinions had not overcome inertia'.
 13. Social actors may also deliberately try to influence – and even mislead – people by means of carefully selected concrete and vivid information.
 14. Let us say that 4% of the non-immigrant population have been convicted of criminal activity, while the rate for the immigrants living in the country is 7%. This is evidently a powerful over-representation. However, there are still 93% of the immigrants who have not been convicted of criminal activities, but who – in Example K – will be regarded as criminal.
 15. As already shown by Sherif (1937), when people are uncertain they tend to trust others who seem to be certain. Furthermore, experiments by Asch (1952, 1956) have shown that people are inclined to follow the majority opinion (even if they believe that the majority are wrong) in black-box situations, and Milgram's famous experiment showed that many will blindly follow authorities in situations of uncertainty (Milgram 1963).
 16. This suggests that centralization of power and mass media may matter a great deal in explaining outbursts of more manifest, extraordinary cases of xenophobia and racism. With only one strong locus of power – with a weak civil society – political leaders may foment xenophobic beliefs for political purposes by monopolizing the mass media. In such situations, there are few alternative information sources counteracting the propaganda.
 17. Black boxes may become more transparent through knowledge and experience, and false, implicit, or explicit, *a priori* conceptions (such as prejudiced stereotypes) may under certain circumstances be revealed by direct confrontation with empirical reality and with the fact that there are several possible points of view of a given phenomenon. It has been shown that inclination to simplifications is strongly correlated with ethnocentric, xenophobic, and authoritarian attitudes (e.g. Mayer 1999). These factors, in turn, and especially the inclination to simplifications and prejudices of all kinds, are 'inversely proportional to the number of years of education' (Mayer 1999: 65).

REFERENCES

- Allport, G. W. 1954. *The Nature of Prejudice*. Reading, MA: Addison-Wesley.
 Asch, S. E. 1952. *Social Psychology*. New York: Prentice-Hall.

- Asch, S. E. 1956. 'Studies of Independence and Conformity: A Minority of One Against a Unanimous Majority.' *Psychological Monographs* 70.
- Augoustinos, M. and I. Walker. 1998. *Social Cognition. An Integrated Introduction*. London: Sage.
- Ayer, A. J. 1963. 'Two Notes on Probability.' In *The Concept of a Person and Other Essays*, ed. A. J. Ayer. London: Macmillan.
- Bar-Tal, Y. 1989. 'Can Leaders Change Followers' Stereotypes?' In *Stereotyping and Prejudice*, eds. D. Bar-Tal, C. F. Graumann, A. W. Kruglanski, and W. Stroebe. London: Springer-Verlag.
- Boudon, R. 1989a. *The Analysis of Ideology*. Cambridge: Polity Press.
- Boudon, R. 1989b. 'Subjective Rationality and the Explanation of Social Behavior.' *Rationality and Society* 2: 173-96.
- Boudon, R. 1994. *The Art of Self-Persuasion. The Social Explanation of False Beliefs*. Oxford: Polity Press.
- Brown, R. 1995. *Prejudice. Its Social Psychology*. Oxford: Blackwell.
- Burt, R. S. 1990. 'Kind of Relations in American Discussion Networks.' In *Structures of Power and Constrains. Papers in Honor of Peter M. Blau*, eds C. Calhoun, M. W. Meyer, and W. R. Scott. New York: Cambridge University Press.
- Burt, R. S. 1992. *Structural Holes. The Social Structure of Competition*. Cambridge, MA: Harvard University Press.
- Burt, R. S. 2001. 'Structural Holes versus Network Closure as Social Capital.' In *Social Capital. Theory and Research*, eds N. Lin, K. Cook, and R. S. Burt. New York: Aldine de Gruyter.
- Cassirer, E. 1946. *Language and Myth*. New York: Dover Publications.
- Coleman, J. S. 1990. *Foundations of Social Theory*. Cambridge, MA: Harvard University Press.
- Dovidio, J. F. and S. L. Gaertner. 1998. 'On the Nature of Contemporary Prejudice'. In *Confronting Racism. The Problem and the Response*, eds J. L. Eberhardt and S. T. Fiske. London: Sage.
- Elster, J. 1999. *Alchemies of the Mind. Rationality and the Emotions*. Cambridge: Cambridge University Press.
- EUMC. 2001. 'Attitudes Towards Minority Groups in the European Union'. Vienna: Sora.
- EUMC. 2002. 'Diversity and Equality for Europe. Annual Report for 2001'. Vienna: Sora.
- Fiske, S. T. and S. E. Taylor. 1991. *Social Cognition*. New York: McGraw-Hill.
- Gardner, R. C. 1994. 'Stereotypes as Consensual Beliefs.' In *The Psychology of Prejudice: The Ontario Symposium Volume 7*, eds M. P. Zanna and J. M. Olson. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Gillies, D. 2000. *Philosophical Theories of Probability*. London: Routledge.
- Goodman, N. 1978. *Ways of Worldmaking*. Indianapolis, IN: Hackett Publishing Company.
- Goodman, N. 1983. *Fact, Fiction, and Forecasting*. Cambridge, MA: Harvard University Press.
- Granovetter, M. S. 1973. 'The Strength of Weak Ties.' *American Journal of Sociology* 78 (6): 1360-80.
- Granovetter, M. 1982. 'The Strength of Weak Ties. A Network Theory Revisited.' In *Social Structure and Network Analysis*, eds P. V. Marsden and N. Lin. London: Sage.

- Hamilton, D. L. 1981. 'Stereotyping and Intergroup Behavior: Some Thoughts on the Cognitive Approach.' In *Cognitive Processes in Stereotyping and Intergroup Behavior*, ed. D. L. Hamilton. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Hewstone, M. 1989. 'Changing Stereotypes with Disconfirming Information.' In *Stereotyping and Prejudice*, eds D. Bar-Tal, C. F. Graumann, A. W. Kruglanski, and W. Stroebe. London: Springer-Verlag.
- Jackson, J. S., K. T. Brown and D. C. Kirby. 1998. 'International Perspectives on Prejudice and Racism.' In *Confronting Racism. The Problem and the Response*, eds J. L. Eberhardt and S. T. Fiske. London: Sage.
- Kahneman, D. and A. Tversky. 1982a. 'Subjective Probability: A Judgment of Representativeness.' In *Judgment Under Uncertainty: Heuristics and Biases*, eds D. Kahneman, P. Slovic, and A. Tversky. Cambridge: Cambridge University Press.
- Kahneman, D. and A. Tversky. 1982b. 'Variants of Uncertainty.' In *Judgment Under Uncertainty: Heuristics and Biases*, eds D. Kahneman, P. Slovic, and A. Tversky. Cambridge: Cambridge University Press.
- Lin, N. 2001. *Social Capital. A Theory of Social Structure and Action*. Cambridge: Cambridge University Press.
- Lippmann, W. 1922. *Public Opinion*. New York: Macmillan.
- Marsden, P. V. 1987. 'Core Discussion Networks of Americans.' *American Sociological Review* 52: 122–31.
- Mayer, N. 1999. *Ces Français qui votent FN*. Paris: Flammarion.
- McGarty, C. 1999. *Categorization in Social Psychology*. London: Sage.
- Milgram, S. 1963. 'Behavioral Study of Obedience.' *Journal of Abnormal and Social Psychology* 67: 371–8.
- Moscovici, S. 1976. *Social Influence and Social Change*. London: Academic Press.
- Nisbett, R. E., D. H. Krantz and C. Jepsen. 1993. 'The Use of Statistical Heuristics in Everyday Inductive Reasoning.' In *Rules for Reasoning*, ed. R. E. Nisbett. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Nisbett, R. and L. Ross. 1980. *Human Inference: Strategies and Shortcomings of Social Judgement*. Englewood Cliffs, NJ: Prentice-Hall.
- Oberschall, A. 2000. 'Why False Beliefs Prevail: The Little Rascals Child Sex Abuse Prosecutions.' In *L'Acteur et ses raisons. Mélanges en l'honneur de Raymond Boudon*, eds J. Baechler and F. Chazel. Paris: Presses Universitaires de France.
- Operario, D. and S. T. Fiske. 1998. 'Racism Equals Power Plus Prejudice. A Social Psychological Equation for Racial Oppression.' In *Confronting Racism. The Problem and the Response*, eds J. L. Eberhardt and S. T. Fiske. London: Sage.
- Putnam, R. D. 2000. *Bowling Alone. The Collapse and Revival of American Community*. New York: Simon and Schuster.
- Ross, L. and R. E. Nisbett. 1991. *The Person and the Situation. Perspectives of Social Psychology*. New York: McGraw-Hill.
- Rydgren, J. 2003. *The Populist Challenge. Political Protest and Ethno-nationalist Mobilization in France*. New York: Berghahn Books.
- Rydgren, J. 2004. 'Mechanisms of Exclusion: Ethnic Discrimination in the Swedish Labour Market.' *Journal of Ethnic and Migration Studies* 30 (2).
- Sherif, M. 1937. 'An Experimental Approach to the Study of Attitudes.' *Sociometry* 1: 90–8.
- Simmel, G. 1977. *The Problems of the Philosophy of History*. New York: Free Press.

- Simmel, G. 1978. *The Philosophy of Money*. London: Routledge.
- Tajfel, H. 1969. 'Cognitive Aspects of Prejudice.' *Journal of Social Issues* 25: 79–97.
- Tversky, A. and D. Kahneman. 1982a. 'Availability: A Heuristic for Judging Frequency and Probability.' In *Judgment Under Uncertainty: Heuristics and Biases*, eds D. Kahneman, P. Slovic, and A. Tversky. Cambridge: Cambridge University Press.
- Tversky, A. and D. Kahneman. 1982b. 'Causal Schemas in Judgements Under Uncertainty.' In *Judgment Under Uncertainty: Heuristics and Biases*, eds D. Kahneman, P. Slovic, and A. Tversky. Cambridge: Cambridge University Press.
- Tversky, A. and D. Kahneman. 1982c. 'Judgments Of and By Representativeness.' In *Judgment Under Uncertainty: Heuristics and Biases*, eds D. Kahneman, P. Slovic, and A. Tversky. Cambridge: Cambridge University Press.
- Tversky, A. and D. Kahneman. 1982d. 'Judgement Under Uncertainty: Heuristics and Biases.' In *Judgment Under Uncertainty: Heuristics and Biases*, eds D. Kahneman, P. Slovic, and A. Tversky. Cambridge: Cambridge University Press.

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