

The Effect of Prestige and Expertise on Perceptions of Credibility of Communication

A Short Survey of Relevant Research¹

By Anders Lisdorf

A central question of much research on religion is why people believe in some things and not others. What makes information credible? In order to begin treating this question, we should look at the psychological mechanisms for evaluating the credibility of information received from other persons. How do we handle information such as “the Earth’s climate is endangered by human influence”? Common sense tells us that we would assess the credibility of this sentence differently depending on whether we were told this by a cleaning lady or by a university professor. But why exactly and what is the difference? In a recent review of the evaluation of testimony from others, Bergstrom, Moehlman and Boyer conclude that “Surprisingly, there is no tradition of empirical cognitive research into the process whereby the identity of a speaker results in an evaluation of reliability” (Bergstrom, Moehlmann, & Boyer 2006: 536). While that is true it is possible to learn something from various sources of previous research.

If we start from the everyday example above, what makes a university professor more credible than a cleaning lady? A working hypothesis could be that it is the prestige of the professor that gives him more credibility. This is also suggested by Joseph Henrich and Francisco Gil-White. They suggest that prestige in general is an important bias in cultural transmission. Prestige is understood as standing or estimation in the eyes of people (Henrich & Gil-White 2001: 167). It is important to distinguish prestige from dominance. They explain “(.) *prestige* processes as an emergent product of psychological adaptations that evolved to improve the quality of information acquired via cultural transmission. Natural selection favored social learners who could evaluate potential models and copy the most successful among them” (Henrich & Gil-White 2001: 165). Prestige is seen as a cue to success and it is stipulated that a psychological mechanism exists for copying models, in this case copying information as credible, from prestigious individuals.

They supply precise ethological criteria to distinguish prestigious individuals: Prestigious individuals can be distinguished by certain cues such as 1) the amount of freely conferred benefits and displays an individual receives, 2) by observing wealth, such as hunting returns, 3) the state of health and lack of disfiguring and 4) the age and sex, that is, old and male (Henrich & Gil-White

¹ This is part of a chapter from my ph.d. dissertation

2001: 175f). There are different ways of measuring credibility, but in general something that influences behavior may be a solid indicator. I have chosen to focus on the concept of truth value as a measurement of a piece of information's credibility. It is potentially misleading since truth value in philosophy usually designates a binary property. This is emphatically not the understanding used here. Truth value falls on a continuum and is used to designate the value or resources a person would risk on the information being not true. It is relatively insignificant if a person says he believes something, because he might be lying or affirming an identity as a believer or something else. What is more important is what that person is willing to risk on that belief being true. The more he is willing to risk the higher the truth value of the information². If a person says he believes in the horoscope in the paper it is relatively difficult to make anything of that belief and how deep it is held. If for example the horoscope warns him to stay indoor today and he knows that it would get him fired if he didn't show up for work, we would have a situation where we could evaluate the truth value the person attaches to the horoscope. If it is low he will go to work anyway and if it is high he will stay indoors and risk getting fired.

We can now state the hypothesis that the credibility of information known through another person will depend on that person's prestige. A number of different studies allow us to investigate this³. The biggest group of studies involves opinion or attitude change. They do not approach credibility directly, but it is assumed that opinion change depends on the new opinion being truer. Opinions should change more easily from credible than from non-credible information. In these studies the changes of opinion are measured depending on whether the information given is represented as coming from a prestigious source or from a non-prestigious. Richard M. Ryckman and colleagues made a study of opinions about student activism (Ryckman, Sherman, & Rodda 1972). They wanted to study the amount of influence on opinion change by a high prestige source either with relevant or irrelevant expertise. In the beginning the participants' opinion of student activism was measured. They were then introduced to a faculty member who was introduced either as having irrelevant expertise (about the Chinese Ming Dynasty) or as having relevant expertise (about student activism). A number of questions were read aloud and the faculty member should answer to the question first. This answer was visible to the participant who was subsequently asked to answer as well. The result was that participants exposed to the high prestige source change their opinion significantly more than a control group not exposed to any high prestige source. What is more

² There may be some connection with costly signalling theory, but space unfortunately does not permit to follow this idea. See however (Bulbulia 2004).

³ All of these studies were carried out in the 60s and 70s and were designed to test other theories such as cognitive dissonance.

important is that participants seemed to be influenced by prestige even when the source did not have relevant expertise (Ryckman, Sherman, & Rodda 1972: 111). It seems that a high prestige person in himself influences credibility regardless of whether the person has any expertise on the subject.

A similar study focused more on the difference expertise had. It was carried out by Ramon J. Rhine and Robert M. Kaplan. They investigated participants' opinion about the amount of sleep humans needed. They introduced different levels of discrepancy between the participant's attitude and that communicated to them. The information about the amount of sleep needed was framed as coming from either a high prestige but no expertise source (a professor of law), a high prestige with expertise source (a professor of biology) and a low prestige no expertise source (a private from the US Army). The results showed that the biology professor and the private could better get away with very discrepant utterances (such as only 0 hours of sleep was needed) than could the law professor, without reflecting badly upon ratings of their personality and intelligence. The reason was probably that the biologist was protected by his expertise, while nothing was expected of the private anyway because of his low prestige. But because of his high prestige it was expected that the law professor would not make such incredulous claims (Rhine & Kaplan 1972: 264). Thus there seems to be some distinction in high prestige on the basis of relevant expertise. Relevant expertise seems to heighten credibility.

This aspect is more thoroughly investigated in a study by Elliot Aronson and colleagues (Aronson, Turner, & Carlsmith 1963). They used opinions about poetry. First the participants read a number of stanzas and were asked to rate them. Then a supposed essay on poetry was read. It was introduced as authored by either a highly credible communicator (T.S.Elliot), a mildly credible communicator (a student of English literature). This equals a high prestige/expertise and low prestige/expertise communicator. They found that communications by mildly credible communicators can influence opinion change up to a certain degree of discrepancy. If the discrepancy between the mildly credible source becomes too high it ceases to produce opinion change (Aronson, Turner, & Carlsmith 1963: 34). The prestige of the source thus has a limit to its credibility depending on how discrepant from the expectations it is.

All the previous studies have been done with American students, but cross-cultural evidence also exists. Elliot McGinnies & Charles D. Ward gave participants in 5 different countries (USA, Sweden, Australia, New Zealand and Japan) an essay with an argument for the expansion of borders in to the sea. One group was given a presentation of the author as an expert on international law with a doctoral degree. A second group was given a description of the author as a journalist at a neo-

Nazi newspaper with no specific knowledge of maritime law. A third group was not given any description of the author. They were then asked to rate their attitude toward expanding the borders into the sea. The results were a significantly higher rating for the doctor group compared with the journalist group for all countries (McGinnies & Ward 1974: 366). There was however no significant difference between the control and the doctor group (369). This could indicate that the subjects either assumed that the essay was written by a knowledgeable source as in the first group, or that information without any representation of its source is seen as true by default. The last point has also been suggested by others (cf. Bergstrom, Moehlmann, & Boyer 2006: 532). This could indicate that the credibility is automatically assumed. This cannot, however, be the case in all cases since the study by Rhine and Kaplan above used a control group who were not told about the author. Here there was a distinction based on prestige.

Since all the previous studies do not address the effect of prestige on credibility directly, I did a study to ascertain whether differences in prestige resulted in differences in credibility. As part of a questionnaire 90 Danish high school students, 40 Male, 50 female, 16-21 ($M = 18,24$, $SD 1,34$)⁴ were asked to rate how likely the predictions of 20 different categories of persons⁵ were to come true. The most credible was the doctor followed by the professor⁶. The least credible was the 6th grader followed by the cleaning lady. If we recall the ethological characteristics of prestige one was age and sex where low age and female gender were associated with low prestige. This fits with the two lowest scoring categories in this study. High age and male gender belonged to high prestige. While this is not guaranteed for doctors and professors, most doctors and professors are male and comparatively old. They are also comparatively wealthy (I don't know about hunting returns though). Further the professor was frequently used as the high prestige source in the other studies. It is therefore possible to say that the professor and doctor are typical high prestige persons and that the 6th grader and Cleaning Lady are typical low prestige persons.

⁴ This was part of the second part of the booklet handed out in Experiment 1 and 2 in above. The method and procedure is described there. It thus followed a task on the credibility of divination.

⁵ The question was : "Følgende personer siger at de kan forudsige fremtiden. Hvor sandsynligt finder du det at deres forudsigelser vil ske?"(The following persons claim to be able to predict the future. How likely do you find it that their predictions will come true?). The categories were: Numerologist, 6th grader, Chiropractor, Politician. Tarot Card Reader, High School Teacher, Priest, News Reader, Palmist, Doctor, Astrologist, Ophthalmologist, Cleaning Lady, Professor, Shaman, CEO, Clarivoyant, Parents, Spiritist, and Engineer.

⁶ 15 responses were excluded from the study since the respondents had either circled the same answer for every person, or had failed to supply answers to one or more persons.

	6 th Grader t	Cleaning Lady t**	Professor t	Cohen's d	Doctor t	Cohen's d
6 th Grader		2,594	7,925*	1,06	8,805 *	1,95
Cleaning Lady			7,483*	0,58	7,903*	1,27
Professor					2,194	
Doctor						

Table 2.3.1 difference in average rating of credibility between high prestige and low prestige persons (* significant at the 1% level in a paired samples t-test, ** df=74).

It can be seen from table 2.3.1 that high prestige persons are rated as significantly more credible than low prestige persons. The differences between low and high prestige are in all cases significant at the 1% level and effect size is large in general. It could be argued that for the doctor the participants implicitly rated the doctors' ability to predict the outcome of a disease, which they often successfully do. This would indicate that prestige was confounded. It is not impossible to rule out, but other items in the questionnaire seemed to indicate that doctors were also more credible in other contexts. Second, this would merely amount to a doctor being a high-prestige/expertise person known from the previous studies. Third, the professors are not routinely attributed skills at predicting anything and they still had a significantly larger credibility.

It seems possible to conclude from these five studies that prestige is an important indicator in assessing credibility of information known by proxy: the credibility of Low prestige < High prestige and the credibility of no expertise < expertise. Table 2.3.2 shows schematically which studies address the different aspects of this. This is naturally merely a preliminary result which awaits further research to clarify many issues.

	Low prestige		High prestige	
	No expertise	Expertise	No expertise	Expertise
Ryckman et al.			X	X
Rhine et al.	X		X	X
Aronson et al.		X		X
McGinnies et al.	X			X
Lisdorf	X		X	(X)

Table 2.3.2

A few other studies add further to the picture of how prestige influences credibility. A study of Danny L. Moore and colleagues show that increasing the cognitive burden increases the effect of source credibility (Moore, Hausknecht, & Thamodaran 1986: 98). They tested a number of different factors and found that source credibility was the most important factor in determining credibility of a commercial; even more than argument strength. A last factor that deserves mention is past experiences with the person. Even children from 4 years track relatively accurately persons past performance and base judgments of their credibility on whether they have been credible in the past (Koenig, Clement, & Harris 2004).

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