

To Frame an Opponent. Cognitive Science and (Legal) Negotiations

0. Introduction

The use of theories formulated amongst such disciplines as psychology, neuroscience and – in a broader scope – cognitive science, is nowadays a common phenomenon in the philosophy of law.² Based on the outcomes of those disciplines, theorists of law often consider such matters as the nature of guilt and legal responsibility (which refers to the problem of free will). Moreover, neuroscience – at least in the USA – has also become embedded in evidentiary issues. For example, methods of detecting lies based on neuroimaging techniques are becoming increasingly popular.³

The aim of the following study is to determine the suitability of the outcomes of cognitive psychology and cognitive linguistics in negotiations, especially in legal negotiations. It is evident that psychological analysis in the context of negotiations is nothing new,⁴

¹ The Pontifical University of John Paul II in Kraków; Copernicus Center for Interdisciplinary Studies.

² Cf. e.g. A. Belcher, W. Sinnott-Armstrong, “Neurolaw”, *Wiley Interdisciplinary Reviews: Cognitive Science*, no. 1, 2010, pp. 18–22; R. Zyzik, “Neurolaw: A New Paradigm in Legal Philosophy”, in: *Studies in the Philosophy of Law: Law and Biology*, eds. J. Stelmach, B. Brożek, Wolters Kluwer, Kraków 2010.

³ Cf. e.g. J.R. Merikangas, “Commentary: Functional MRI Lie Detection”, *Journal of the American Academy of Psychiatry and the Law* (American Academy of Psychiatry and the Law), no. 36, 4, 2008, p. 499–501.

⁴ Cf. for example *Negotiation: Social-psychological Perspectives*, ed. D. Druckman, University of Michigan Press, Beverly Hills 1977; G.I. Nierenberg, *The Art of Negotiating. Psychological Strategies for Gaining Advantageous Bargains*, Hawthorn Books,

nor is it my ambition to create a “cognitive theory of negotiations”. I am not even sure whether any kind of scientific theory of legal negotiations is possible. Yet I am utterly convinced that a deeper insight into the nature of human cognitive processes may bring positive outcomes in explaining of the phenomenon of negotiations, as well as in the perfecting of the art of negotiations. In the following paper, I will focus mainly on one type of cognitive phenomenon, which is the *framing effect*.

The structure of this paper is as follows; first I will describe the existing models of legal negotiations, trying to determine the suitability of scientific knowledge about cognitive processes for each one of them. Secondly, I will discuss the famous experiments conducted by Daniel Kahneman and Amos Tversky, which show the power of the framing effect. Then, I will explain what exactly constitutes the mental frame and will consider possibilities of using them in the negotiations. The text will end with the formation of several practical suggestions.

1. Legal Negotiations: State of the Art

The phenomenon of legal negotiations has a major importance not only because of its practical significance, but also because it fits into the never-ending debate between the supporters of the positivist and anti-positivist understanding of the law.⁵ Negotiations belong not only to the sphere of *praxis*, but they also have an effect on the ontology and epistemology of law. I am in complete accordance with the statement of Jerzy Stelmach and Bartosz Brożek who – in the context of negotiations – defend the anti-positivist view of the law:

New York 1968; see also Ł. Kurek, “Legal Negotiations and the Theory of Mind”, in this volume.

⁵ Cf. M.H. Kramer, *In Defense of Legal Positivism*, Oxford University Press, Oxford–New York 1999; B. Leiter, *Naturalizing Jurisprudence*, Oxford University Press, Oxford–New York 2007, pp. 15–80.

One could – and should – look at the law from the perspective of negotiation, even though it is difficult to accept for a positivist science of the law. The contemporary ‘continental’ lawyer is anything but a keen negotiator. She prefers procedural safety and the judge as an arbiter. Afraid of the unforeseeable results, she is not willing to negotiate. Nonetheless, in the near future, she is destined to become a negotiator. With the current dynamics of the economic and social changes, the perspective of winning a costly trial which lasts several years is unacceptable. We require immediate outcomes, not legal rituals. Thus, we need to become negotiators searching for the compromise at any price, saving both ourselves and our clients’ money and time. This much is unquestionable. Moreover, negotiations should not be located at the distant borders of legal practice by identifying some spheres in which negotiation is possible. One can negotiate at any time and any type of legally relevant problem, as well as at any stage of the proceedings. Of course, the choice of negotiation for dispute resolution does not relieve us from obligations to the existing laws and from applying the criteria of correctness demanded by the process of negotiating.⁶

According to this statement, the law is an ‘internally negotiating’ phenomenon due to its nature. Yet what are successful negotiations about? There are as many answers to this question as there are theoretical approaches to the problem of legal negotiations and negotiations in general.⁷ I will briefly describe three of such models, reconstructed by the authors of above *passus*: the Argumentation Model, the Topic-Rhetorical Model and the Economic Model. Then, I will try to evaluate the suitability of cognitive neuroscience for each of them.

⁶ J. Stelmach, B. Brożek, *The Art of Legal Negotiations*, Wolters Kluwer, Warszawa 2012, pp. 11–12.

⁷ I fully agree with Stelmach and Brożek, that “negotiations are not so special a case in practical discourse. They do not force us to accept a rigorous notion of a legal rule. Thus, they become a kind of legal discourse with no special constraints. Of course, they have their own peculiarities; but it is insufficient to speak of a special character of legal negotiations.” (*ibidem*, p. 17)

In the Argumentation Model,⁸ the criterion of successful negotiations is procedural justice (rightness). The conclusion of the negotiated situation takes place due to the application of the adopted formal rules.⁹ Examples of this rule are: “speak only this, what you are sure about it is truth”, “be consequent” etc. Application of such rules is superior to the negotiated case concerned. As a result, it is a ‘top-down approach’. The argumentation model has an objective nature – within it, we seek an objective solution. A necessary step for the application of this model is the resignation from particular interests in favour of objective rightness (justice). This model assumes an ethical/moral minimum, but it does not assume any kind of specialist knowledge (for example, economical or psychological).

The Topic-Rhetorical Model¹⁰ fits the conception of instrumental rationality. Negotiations that are successful for one side are efficient negotiations. The goal of negotiations, which should be achieved with the least expenditure costs, may have an economic, ethical or psychological nature. In the last case it is about obtaining an advantage over the other side. By the application of this model we do not assume the rules of behavior for both sides, but we focus on the particular case, which is the subject of negotiation. It is a ‘bottom-up model’. Each of the sides has its particular goal, which can be achieved by any measure that is available (obviously, within the limits of the law). This model does not assume any ethical minimum, but it can appear, as an instrument which is useful for achieving a particular objective. What is crucial, “topic-rhetorical model refers to a broad and differentiated background knowledge. In particular, negotiations carried out according to the topic-rhetorical rules require solid theoretical and practical psychological knowledge.”¹¹

⁸ Cf. *Ibidem*, pp. 24–25; 37–67.

⁹ Cf. J. Stelmach, B. Brożek, *Methods of Legal Reasoning*, Springer, Dordrecht 2006, pp. 111–166.

¹⁰ Cf. J. Stelmach, B. Brożek, *The Art of Legal Negotiations*, *op. cit.*, pp. 25; 68–99.

¹¹ *Ibidem*, p. 25.

As it can be easily guessed, in the Economic Model the basic goal of negotiations is economic efficiency.¹² In the Topic-Rhetorical Model, the economic objective is one of many other objectives. Yet, in the Economic Model, the goal of negotiations is determined very precisely, it is the maximization of our own utility function. Successful negotiations are those which bring the greatest economic advantages. The economic model is based on Rational Choice Theory,¹³ which is a paradigm for microeconomics. This theory determines the rules of rational procedure. The economic model is a hybrid of the ‘top-down’ and the ‘bottom-up’ approaches. The clearly determined procedure brings it closer to the Argumentation Model, but its respecting of the particular interests of the negotiation sides, brings it closer to the Topic-Rhetorical Model. The economic model emphasizes both the particular case, which is the subject of negotiations and the general economical directives. But if it comes to background knowledge, economic knowledge – especially knowledge about opponents preferences – plays a crucial role.

Even such a superficial description of negotiation models allows us to form an opinion about the suitability of knowledge about cognitive processes and mechanisms of mind within the above models. In this context, the key aspect of each of the above-mentioned models is the assumed background knowledge. The Argumentation Model does not assume any kind of background knowledge, the detailed scientific knowledge on cognitive processes is not suitable for it.

In turn, the Topic-Rhetorical Model assumes psychological background knowledge, so the knowledge about the nature of human cognitive processes is most welcome. It is an important issue, because the image of man formulated by cognitive science is significantly different from the common sense view of the mind, somewhat unkindly termed folk psychology.¹⁴

¹² Cf. *ibidem*, pp. 25–27; 100–136.

¹³ See various essays in: *Rational Choice Theory: Advocacy and Critique*, eds. J.S. Coleman, T.J. Farraro, Sage Publications, Newbury Park–London–New Delhi 1992.

¹⁴ Cf. P.M. Churchland, “Eliminative Materialism and the Propositional Attitudes”, *Jo-*

A more complicated and yet more interesting situation is that of the Economic Model. As we may remember, within this model the aim of negotiations is the maximization of our own utility function. The extent of measures which lead to achieving this goal is dictated by rational choice theory. The problem lies in the fact that the results of studies conducted in recent decades by cognitive psychologists and behavioral economists show that man is rarely an aware decision maker. In other words, *Homo sapiens* is not *Homo oeconomicus*. In the following section I will describe this problem with the famous example of the framing effect. Obviously, I do not claim that cognitive science undermines the reasonableness of the application of the Economic Model. Therefore, I think that users of the economic model should be aware of the limits of human rationality and of the fact that the preferences of opponents are rarely dictated by the calculation of profits and losses.¹⁵

2. The Framing Effect

Applying idealization is one of the basic features of both modern and contemporary scientific method. A suggestive example of idealization is the omission of air resistance in Newton's mechanics. Contrary to natural sciences, both the humanities and the behavioral sciences usually have a considerable problem with the accuracy of the conducted idealizations. One examples of such a failure can be observed in several variants of Classical Decision Theory.¹⁶ Usually they as-

Journal of Philosophy, 78, 1981, pp. 67–90; *idem*, "Folk Psychology and the Explanation of Human Behavior", *Philosophical Perspectives*, no. 3 'Philosophy of Mind and Action Theory', 1989, pp. 225–241; P.S. Churchland, *Neurophilosophy: Toward a Unified Science of the Mind and Brain*, The MIT Press, Cambridge, MA 1986.

¹⁵ For a general discussion see A. Caputo, "A Literature Review of Cognitive Biases in Negotiation Processes", *International Journal of Conflict Management*, no. 24, 4, 2013, pp. 374–398.

¹⁶ For a brief introduction see J.L. Pollock, *Thinking about Acting. Logical Foundations for Rational Decision Making*, Oxford University Press, Oxford–New York 2006, pp. 3–19.

sume that the way of formulating decision problems – both in risky and riskless conditions – does not change the preferences in problem solving. It transpires thusly because preferences are ruled by ‘the principle of invariance.’ Speaking freely, according to the principle of invariance a rational decision-maker makes a decision independent of which words/terms the problematic situation is formulated.

In papers published in the 1980’s, Daniel Kahneman and Amos Tversky showed that the above-mentioned assumption is false.¹⁷ They claimed in particular that:

Invariance requires that the preference order between prospects should not depend on the manner in which they are described. In particular, two versions of a choice problem that are recognized to be equivalent when shown together should elicit the same preference even when shown separately. We now show that the requirement of invariance, however elementary and innocuous it may seem, cannot generally be satisfied.¹⁸

In their opinion, choosing one of the options is influenced by the fact that this option can be framed in several ways. Since the making of a decision is dependent in a fundamental way on the manner of the description of the decision problem, people are not rational decision-makers in the meaning of Classical Decision Theory (because they do not follow the principle of invariance). This discovery had a great impact not only on research concerning decision making and economic preferences (e.g. the ecological accuracy of the Rational Choice Theory), but also on theoretical deliberations connected with negotiations (including legal negotiations). Here is one of the decision problems examined by Kahneman and Tversky:

¹⁷ Cf. D. Kahneman, A. Tversky, “The Framing of Decisions and the Psychology of Choice”, *Science, New Series*, vol. 211, no. 4481, 1981, pp. 453–458; *idem*, “Choices, Values and Frames”, *American Psychologist*, vol. 39, no. 4, 1984, pp. 341–350.

¹⁸ D. Kahneman, A. Tversky, “Choices, Values and Frames”, *op. cit.*, p. 343.

Problem:

Imagine that the U.S. is preparing for the outbreak of an unusual Asian disease, which is expected to kill 600 people. Two alternative programs to combat the disease have been proposed. Assume that the exact scientific estimates of the consequences of the programs are as follows:

Condition 1 ($N = 152$)

If Program A is adopted, 200 people will be saved. (72%)

If Program B is adopted, there is a one-third probability that 600 people will be saved and a two-thirds probability that no people will be saved. (28%)

Which of the two programs would you favor?¹⁹

In the situation described above, the respondents showed a strong tendency to omit the risk. Up to 72% of examined rather preferred to chose the strategy, which allowed them to certainly save 200 people. In turn, only 28% of the examined chose a risky strategy allowing them to save all of the people with the probability of 1/3. As a reason of such choice we can imagine that most people would claim that we should not gamble, when a human life is a stake. Let us now consider the same situation which was described in the problem, but (condition 2) with two other, yet economically equivalent, descriptions of possible choices:

Condition 2 ($N = 155$):

If Program C is adopted, 400 people will die. (22%)

If Program D is adopted, there is a one-third probability that nobody will die and a two-thirds probability that 600 people will die. (78%)

¹⁹ *Ibidem*; The total number of subjects is marked by N ; the proportion of subjects who chose each option is mentioned in parentheses.

What is interesting in problem 2 is that the vast majority of those examined chose the risky program D instead of C, in which there are no probabilities. It can be imagined that rejecting the C program by the majority of the examined may be motivated by the fact that they would feel guilty about sentencing to death 400 people whilst choosing program D gives hope for saving everyone. Hence, “there is more risk seeking in the second version of the problem than there is risk aversion in the first.”²⁰

Let us now compare problem 1 and 2: in terms of mathematics and economics, the results of choosing programs A and C are identical. Identical are also the results of choosing programs B and D. This experiment clearly shows that the way of formulating of the choice options affects decisions in a fundamental way. In programs A and B, a discreet reference point is that the disease is allowed to take its toll of 600 lives, while in programs C and D in the reference point, no one dies. Both of those reference points connect with completely different mental frames. Hence those examined in the first experiment acted more carefully, yet those examined from the second experiment were willing to take a higher risk. What is interesting, even after revealing what those experiments were about, the examined were willing to maintain their original choices.²¹ The last fact shows us how strong an influence frames have on our actions.

3. What is the Frame?

Framing Theory has been adopted in cognitive sciences (especially in the psychology and cognitive linguistics). Kahneman and Tversky relate mental frames directly to decision-making. They claim that the decision-maker frame is a “conception of the acts, outcomes, and con-

²⁰ *Ibidem.*

²¹ *Cf. Ibidem.*

tingencies associated with a particular choice.”²² Its structure is a result of the measure of how the situation of choice is presented (we became familiar with it in the previous part of this paper) and a result of the “norms, habits and personal characteristics.”²³ Decisions are dependent on the judgments issued, and the judgments are dependent on the representation of knowledge. According to that, in order to describe what are the frames, we need to look at the conceptual mechanisms. Most of all, the frames are a crucial ingredient of our cognitive structure. This structure is constructed by the embodied experience and generally has an unconscious nature (researchers use the term of the ‘cognitive unconscious’²⁴). The outcomes of the workings of this machinery – at least to some extent – are reflected in the structure of our language. Lakoff and Núñez pinpoint it in the following way:

We all have systems of concepts that we use in thinking, but we cannot consciously inspect our conceptual inventory. We all draw conclusions instantly in conversation, but we cannot consciously look at each inference and our own inference-drawing mechanisms while we are in the act of inferring on a massive scale second by second. We all speak in a language that has a grammar, but we do not consciously put sentences together word by word, checking consciously that we are following the grammatical rules of our language. To us, it seems easy: We just talk, and listen, and draw inferences without effort. But what goes on in our minds behind the scenes is enormously complex and largely unavailable to us.²⁵

²² D. Kahneman, A. Tversky, “Choices, Values and Frames”, *op. cit.*, s. 453.

²³ *Ibidem.*

²⁴ Cf. G. Lakoff, M. Johnson, *Philosophy in the Flesh*, Basic Books, New York 1999, pp. 9–16.

²⁵ G. Lakoff, R.E. Núñez, *Where Mathematics Comes From. How the Embodied Mind Brings Mathematics into Being*, Basic Books, New York 2000, p. 27; cf. also B. Brożek, “Normativity of Meaning”, [in:] *The Many Faces of Normativity*, eds. J. Stelmach, B. Brożek, M. Hohol, Copernicus Center Press, Kraków 2013, pp. 147–176.

Negotiations (legal negotiations) are substantially held in a linguistic way. As a result, it is worth looking at what cognitive linguistics tells us about mental frames.

Mental frames are usually described in the context of the discussion of problems such as the ‘structure of knowledge’ or ‘meaning’. The discussion about frames is based on the issue of linguistic categorization. The traditional approach to categories is the Necessary and Sufficient Conditions Model, reaching back to Aristotle. Within this approach, the membership of a particular category is determined with an “everything or nothing rule” through the necessary and sufficient conditions, whose rules refers to the essence of the categorized object (a bird, chair, man etc.). In the second part of the 20th century, this model was superseded by different approaches based on the idea of *the prototype*.²⁶ Within this approach, the attachment to a category has a fuzzy nature and it is characterized due to the prototype. A prototype can be understood as a specimen which poses the highest sum of similarity to every other category member.²⁷ For example, the prototype of a bird is an eagle, not an ostrich, which cannot fly. It still takes a lot of discussion about the dependence of prototypes on the cultural context and about the nature of prototypes.²⁸ Both the classical Necessary and Sufficient Conditions Model, and the Prototype Model complies that a category may be presented as a list of features. In the first model, those are the obvious essential features, and in the second they are prototype features.

The term ‘frame’ is broader than the term of ‘category’. Zoltán Kövecses describes this in the following way: “Frames are representations of this large amount of underlying knowledge. As matter of

²⁶ Cf. J.R. Taylor, *Linguistic Categorization. Prototypes in Linguistic Theory*, Oxford University Press, Oxford–New York 2003; E.H. Rosch, “Human Categorization”, [in:] *Advances in Cross-Cultural Psychology*, vol. 1, eds. N. Warren, Academic Press, New York 1977, pp. 1–72.

²⁷ A. Tversky, “Features of Similarity”, *Psychological Review*, no. 84, 1977, pp. 327–352.

²⁸ Cf. L. Barsalou, “Ad hoc categories”, *Memory and Cognition*, no. 11, 1983, pp. 211–227.

fact, we can think of frames including feature lists as well – feature lists that serve the representation of just the ‘tip’ of a conceptual ‘iceberg’ associated with a particular domain of experience.”²⁹ Subsequently, he explains that:

While feature lists are possible candidates for the representation of concepts for some purposes, they are insufficient as a general strategy to represent what we know about the world. In particular, their insufficiency derives from at least three factors: first, their failure to represent all the information we have in connection with concepts; second, their failure to represent the structure of conceptual information we possess in connection with concepts; and third, the failure to represent attribute-value relationships between elements and concepts.³⁰

In Kövecses’ notion, “A frame is a structured mental representation of a conceptual category.”³¹ This definition is quite abstract and it is easier to understand it by referring to examples.³² The famous example delivered by Ronald Langacker is an ‘knuckle’. It is hard to say what is an ‘knuckle’ by pinpointing the necessary and sufficient conditions. One who understands what an knuckle is, understands that it is a part of a finger, which is a part of a hand; and the hand is a part of an arm etc.

The conceptual frame allows us to understand what an ankle is to the body. A somewhat more complicated example (coming from George Lakoff) is ‘Friday’. It is impossible to list all of the features which would completely describe what Friday is. But if we try, on such a list there would surely be the statement “the fifth day of the week”. This statement itself does not mean anything. Our understanding of Friday as a day of the week is dependent on background knowl-

²⁹ Z. Kövecses, *Language, Mind, and Culture: A Practical Introduction*, Oxford University Press, Oxford 2006, p. 63.

³⁰ *Ibidem*, pp. 63–64.

³¹ *Ibidem*, p. 64.

³² Cf. *Ibidem*, pp. 63–80.

edge which consists of at least two cognitive frames: the first of them is “the natural cycle of the sun” and the second is “a seven days in a week calendar”. Thanks to the first frame, we understand what is a day in general, and thanks to the second frame, we understand what is the fifth day of the week. Obviously, those frames are dependent on the cultural context – not all cultures recognize the week as consisting of seven days. Moreover, even within our western culture, we can understand ‘Friday’ by referring to different frames. If in our mind the “superstitions frame” would be activated, Friday would cease to be a day of the week and become an unlucky day. We can understand Friday also in the context of the “weekend frame”, then we understand Friday as the first day.

4. Framing and Negotiations

George Lakoff – one of the “founding fathers” of cognitive linguistics – devoted a lot of space to the position of mental frames in discourse.³³ He explains the power of frames by the example of command: “don’t think of an elephant!” He adds that he does not know anyone who could meet this seemingly easy task. This transpires because the verbal order, despite including negation, triggers the “elephant mental frame” in mind. It is impossible not to think about an elephant, without having thought of it first. A similar situation is in social discourse. Here is another example given by Lakoff. After Watergate, Richard Nixon stated in front of the cameras “I am not a crook.” Willingly or not, the president of the USA triggered in the minds of his recipients the “crook frame”, thus placing him in a strongly unfavorable position. Thus, Lakoff formulates the following warning: “for when you are arguing against the other side: Do not use their lan-

³³ G. Lakoff, *Moral Politics. How Liberals and Conservatives Think*, The University of Chicago Press, Chicago–London 2002; *idem*, *Don’t Think of an Elephant!*, Chelsea Green Publishing, Vermont 2004, pp. 3–88.

guage. Their language picks out a frame – and it won't be the frame you want."³⁴ In the situation of conflict of interest, the worst option is to adopt the frame of the opponent and to formulate arguments within it. Being placed in the wrong position just once may result in the lasting worsening of the negotiation position. On the other hand, the imposition of one's own frame is not always possible.

Although the examples given by Kahneman and Tversky allow the reader to imagine how the framing effect imposes an influence on the negotiation process, I have not given any experiments referring to influence of frames on the negotiation situation so far. In the literature, many examples of that can be found.³⁵ Let us look at two such experiments.

The result of the studies of Bazerman and Neale shows that the sides of negotiations are more willing to compromise when the outcome of negotiations is framed as a gain, than when a mathematically and economically identical outcome is framed as gain-loss. This is because the frames which emphasizes gain are associated with the greater probability of profits for both sides, while frames which emphasizes losses are associated with less chance of mutual agreement.³⁶ Another example are the results of an experiment conducted by de

³⁴ *Idem*, *Don't Think of an Elephant!*, *op. cit.*, p. 3.

³⁵ Cf. e.g. K.L. McGinn, M. Nöth, *Communicating Frames in Negotiations*, in: *The Oxford Handbook of Economic Conflict Resolution*, eds. G.E. Bolton, R.T.A. Croson, Oxford University Press, Oxford–New York 2012, pp. 61–75 (also available on-line: "Harvard Business School" 2012, 12-109, <http://www.hbs.edu/research/pdf/12-109.pdf>); A.F. Ünal, G.O. Emel, *The Effect of Framing and Power Imbalance on Negotiation Behaviors and Outcomes*, in: *Operations Research Proceedings*, eds. B. Fleischmann *et al.*, Springer-Verlag, Berlin–Heidelberg 2009, pp. 407–412; P.L. Curşeu, S. Schruijer, "The Effects of Framing on Inter-group Negotiation", *Group Decision and Negotiation*, no. 17, 4, 2008, pp. 347–362; M.A. Neale, M.H. Bazerman, "Negotiating Rationally: The Power and Impact of the Negotiator's Frame", *The Executive*, no. 6, 3, 1992, pp. 42–51; W.M. Roth, "Framing and Solving Problems", in: *idem*, *Authentic School Science*, Springer, Dordrecht 1995, pp. 100–172.

³⁶ Cf. M.H. Bazerman, "The Relevance of Kahneman and Tversky's Concept of Framing to Organizational Behavior", *Journal of Management*, no. 10, 3, 1984, pp. 333–343; M.H. Bazerman, M.A. Neale, "The Effects of Framing and Negotiator Overconfidence on Bargaining Behaviors and Outcomes", *Academy of Management Journal*, no. 28, 1, 1985, pp. 34–49.

Dreu and his coworkers.³⁷ McGinn and Nöth describe it in the following way:

In an experimental study of a two-party bargaining game with three issues and private information, parties offered larger concessions and more conciliatory counteroffers when the other party's communication stimulated a gain frame (e.g., "I really have to make a profit.") than when it stimulated a loss frame (e.g., "I really have to cut expenses."). Responses outside of formal concessions and counteroffers also reflected the other party's frame. Communication following gain-framed messages was more likely to be phrased in terms of gains than that following loss-framed messages. Though gain-loss frames are cognitive representations of the bargaining situation, they appear to be malleable through communication.³⁸

Does the framing in the categories of profits always lead to successful negotiations? Lakoff, referring to the works of Kahneman and Tversky on the example of political choices, is convinced that it is not. It is sometimes better to reframe and adapt the frames which are appropriate to really held values, which have a noneconomic nature.³⁹ Such an approach allows us to remain authentic and this in turn may lead to gaining the advantage in negotiations.

5. Instead of a Summary: Nine Practical Rules

This paper has a theoretical (or even metatheoretical) nature. I have described some of the discoveries of psychology and cognitive lin-

³⁷ C.K.W. de Dreu, P.J.D. Carnevale, B.J.M. Emans, E. van de Vliert, "Effects of Gain-Loss Frames in Negotiation: Loss Aversion, Mismatching, and Frame Adoption". *Organizational Behavior and Human Decision Processes*, no. 60, 1, 1994, pp. 90–107.

³⁸ K.L. McGinn, M. Nöth, *Communicating Frames in Negotiations*, *op. cit.*

³⁹ On values and negotiations cf. M. Soniewicka, "Bargaining Values: From a Market Economy to a Market Society", in this volume.

guistics which affect our understanding of the negotiation process. Referring to the three negotiation models which were distinguished by Stelmach and Brożek, I have tried to show that cognitive neuroscience knowledge is useful mostly for the users of the Topic Rhetorical Model. The discovery that mental frames have an influence on decision-making impacts upon the concept of *Homo oeconomicus*, and thus the users of the Economic model should be aware of its limitations.

But negotiations cannot be fully described by scientific theory. Negotiations are, above all, a practical art. Therefore, I feel obliged to formulate several practical tips based on the psychological discoveries described:

1. Remember that both sides care not only about their economic interest – it may be important, but people are guided by different values.
2. Remember that each side cares about their own values. Those values gain meaning thanks to appropriate mental frames.
3. Remember that mental frames fundamentally affect the meaning of the concepts used by the sides. Those concepts find their application in the argumentation process.
4. Try to identify mental frames – both your opponent's and your own. Knowing an opponent's mental frames will allow you to 'enter his skin'.
5. Search for similarities and differences between the frames used by you and those used by your opponent.
6. If it is at all possible, try to conduct negotiations according to your mental frames.
7. If the opponent is aware of his mental frames and it is impossible to convince him of yours, do mutual reframing.
8. This reframing may be slight – sometimes an approach to the problem in different words can allow one to see new ways negotiating.

9. If you decide upon a complete reframing, try to search for a neutral frame within which you will conduct further negotiations.