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# Structure of Psychic Attitude of a Person to Careless Traffic Violations and Potential Ways of Accident Prevention

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The present article analyses the structure of psychic attitude of a person towards traffic violation that was committed carelessly. The authors conclude that a participant of traffic in fact does not anticipate the outcomes of his or her own conscious infringing activity that threatens the community. On the basis of recent achievements in Philosophy of Consciousness and Psychophysiology of Upper Nervous Activity the authors make hypothesis on potential ways to prevent careless traffic violations due to realization of violation consequences in the mind of traffic participants.

Keywords: traffic safety, careless guilt, prevention of careless crimes.

## Introduction

Specialistliterature dedicated to classification and prevention of traffic violations features a number of standpoints regarding whether or not a person driving a vehicle realizes a threat from his or her behavior when violating the traffic rules as well as whether or not he or she anticipates socially dangerous outcomes of such behavior and to what extent.

Solution of the problem in many ways predetermines the nature of the following investigations including the suggestions to prevent careless crimes in general and traffic violations in particular.

The objective of the present article is to cite our own view on the issue and provide suggestions on potential ways to prevent careless traffic violations on the basis of existing theoretical background.

### Methods

From the theoretical standpoint that we have, in case of careless violation intellectual aspect is characterized as actually negative, whereas volitional aspect as absolutely negative. In other words the driver who acts carelessly does not realize social threat of own behavior, though often realizes traffic violation itself (awareness of administrative offence). An important aspect here is that the driver in this situation does not actually anticipate the parameters of possible outcomes, in particular their social threat. It is exactly the fact that enables a person to treat own behavior as permissible.

In this case anticipation differs from the form of prevision included into the psychic structure of person's conscious behavior. In case of careless behavior a person does not anticipate

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abstract consequences, but only the probability of unfavorable outcome, with the parameters of outcome being unidentified in the mind. Therefore this is mediated anticipation, which is expressed in inverted form: through anticipation of favorable outcome with awareness of factors that stand on the way to such outcome. This makes a person take actions to avoid the factors aspiring to achieve anticipated favorable result. That's the reason why this behavioral model can be described as taking risk to certain degrees – depending on the parameters of anticipated factors that stand on the way to favorable outcome.

Described theoretical approach to the issue under consideration is based on understanding of human consciousness provided in the works by A.N. Arlytchyov, V.V. Luneev and a number of other researchers. In questions of treatment of the purpose, purposefulness, and also expediency we leant against M.G.Makarov and S.E.Vitsin's works which positions are actual till now both in cybernetics, and in social management.

So, V.V. Luneev defined subjective aspect of an action (psychic processes with regard to committing a crime – motivation in general sense) as subjective core of the crime. Here the structure of psychic process consists of the following consecutive components: realization of the need, formation of a particular cause, substantiation of a cause in the target, selection of ways to reach the target, anticipation and forecast of consequences upon reaching the target, making decision to pursue the chosen behavior model, control and adjustment of committed actions on the basis of particular cause and a number of other points (Luneev, 2000: 62).

From this point of view careless crimes differ from the intended ones, because target vectors of actions and non-anticipated consequences significantly disagree, that is lie in different planes. On the other hand, intended crime presupposes that motivation, target and

consequences correlate with each other and form a single vector featuring intended activity of a person to achieve a particular result to satisfy the relevant realized needs (*Criminal law of Russia*, 2006: 220-222).

The structure of subjective aspect of a crime is a particular example of human mind functioning as information activity (Arlytchyov, 2005: 28). The following shall consider certain provisions of the theory.

Activity of a person is purposeful and is manifested in modification of certain material or intangible objects.

Therefore determinative approaches describe human behavior with two determinants: target and cause. The first one was defined by Aristotle as the underlying reason, and Hegel saw it as an image of the result or desired state of the object, a unity of the subjective and objective (in the achieved goal). A cause in the system is a driving reason.

Thus, human activity is viewed as a chain of consecutive moments of target formation, reaching the target (operational stage) and evaluation of results (Vitsyn, 1977: 5). That's the way the principle of appropriateness is expressed. when the reverse impact on the reason has a signaling character and shows negative feedback. Here the evidence of difference between required ultimate state and actually reached one obtained from the feedback turns into the reason that forces correction of the activity so that the results or the parameters of managed process meet the desired state as fully as possible (Makarov, 1962: 140-141). Information on the process of object modification obtained from the feedback might result in selection of a new target; the phenomenon is termed as target variation.

In other words, the above chain of purposeful human activity forms a cycle where each turn testifies to full-time control of consciousness over operational components as well as makes up a certain stage of object modification on the way to bringing it to the desired state.

The key component of the theory is the question about the origin and nature of the target, since its parameters influence the character of person's activity and the overall result. Having determined the target and ways to achieve it, a person maintains own activity in a particular mode by means of volition.

Leading role in target selection is played by the information programs – genetic (inherited) and acquired (developed over person's life). Ultimately animals have purposeful behavior, and a human being has purposeful activity. In the first case the target is connected directly with vital needs, defined by genetic code and considered unconscious, in the second case it may be mediated (for example, in tools manufacturing) and considered to be conscious.

A person determines the target in the form of ideal information model - image of ultimate results of object modifications. Finally, human activity can be characterized as bilateral process (that generally correlates with cycle described above): process of making ideal information model and subsequent process of material object modification based on the model, which is an implementation of ideal model in reality.

The fact that a person creates a target and implements it proves that, unlike with animals, there are no predetermined tasks, which points at conscious behavior of a human.

Thus, the function of consciousness is to formulate a target, which consists in selection of the object to be modified and definition of its desired ultimate state: creation of ideal information model of the desired object state.

This is followed by knowledgeable anticipation of practical activity (information-anticipating function) – object modification in "ideal" theoretical form in the system of images. At this stage the consciousness

simulates successful object modification – on the information level. The stage contains prevision of outcomes.

Then ideal information model becomes substantiated in the course of operational (practical) activity. The later is implemented under the full-time control of consciousness and adjusted on the basis of information updates (through feed-back) on correlation of the object with the parameters of ideal model as well as on the possibility to carry on the modifications (supervising function). Practical activity and inclusion of consciousness control are linked to a cycle chain that was described above.

The nature of informational modifications that take place prior to practical activity as well appropriateness of ideal model and ideal process for implementation depends on the information quality of the object, that is on the awareness and capacity to perform thinking. Therefore the same target shall be reached by different people in different ways both in terms of approach and in terms of implementation proper.

Therefore selection of ways to achieve the goal in our case depends on the level of knowledge and skills of a driver, as well as on his or her intellectual and volitional qualities, physical and psychic state. In many ways it predetermines the nature of decisions made by a driver and his or her behavioral traits as a traffic participant.

#### Results

Now let us get back to the issues of guilt content in traffic violations, and in particular, to the issue of realization of possible outcomes of driver's own infringing behavior.

The above statements on the structure of consciousness and its functions make it possible to conclude that a driver of a vehicle when consciously violating traffic rules very often does not anticipate the negative outcomes of own behavior – a driver anticipates the

reverse: favorable outcome connected to the real motivation of this behavior.

This outcome can be understood as successful arrival home, timely arrival to work, recreational sites, successful detour of the obstacles or overriding other vehicle, etc., which is a target, an ideal information model of reality modification. Selected way to reach the target through traffic violations before the respective maneuver or other actions has already been implemented in the mind of a person and became an informational anticipation of his or her practical activity. Even being aware of the risk of own behavior, a driver therefore is sure of successful outcome — it exists already in the mind, and the person anticipates its parameters (that are abstract, existing prior to the activity).

This type of psychic activity of traffic participants is encouraged by widely spread smooth violations of traffic rules: experienced almost by everyone who drives a vehicle as well as by many pedestrians.

When correlating the number of officially registered administrative offences with respect to traffic rules and operation of vehicles with recorded accidents as well as number of traffic crimes proves that harmful and even more so severe outcomes of infringing activity are treated by human mind as accidental, since they are seldom repeated. Statistics say that one traffic accident with any injuries or fatalities accounts for 250-300 traffic violations with no negative consequences (Luneev, 2005: 336-337). It should be mentioned that since 2004 on average every sixth traffic accident is considered a crime and presupposes penal consequences for the guilty (By results of comparison of data from the form "1-БДД" and the statistical reporting from the form "1-Γ"). By results of our researches in Irkutsk area throughout last 6 years this parity is equaled 1:177 (without the account of latency).

The above theoretical statement was partly proved in the poll of vehicle drivers who had not

experienced traffic accidents with injuries or fatalities. Screening group involved the drivers sentenced for traffic crimes who were asked by other researchers (Kononov, 1991: 47, 48).

All respondents from the first group (who we directly worked with) characterized themselves as obedient citizens who do not harm the community. But they admitted their experience of traffic violations. The question whether or not the respondents think of possible outcomes and danger of such behavior was answered negatively by 77.8 %, 14 % could not give an exact reply, remaining 8.2 % explained that that they are trying to behave safely as much as possible and avoid negative consequences, therefore they obviously think to some extent.

Now let us see the results of poll conducted among sentenced drivers by the researchers: most of them (87 %) recognized social threat of their behavior to some extent and anticipated possible harmful outcomes (Kononov, 1991: 47, 48).

The above shows that qualitative transfer in awareness and anticipation only takes place after the traffic accident: the nature of actual outcomes that originally seem accidental for the guilty are so much different from the nature of causes and targets that were pursued that a person reassesses own actions. In the person's mind own behavior has low appreciation, his or her image of social attitude changes (impact of social estimate scale).

Thus, the respondents from the screening group couldn't exactly say what was on their mind in the moment of traffic violation (prior to the accident or automobile-pedestrian accident), since these facts were subjected to analysis and modifications in the same mind, interpreted through individual and social estimate scale as well as through repentance.

Having obtained the results regarding the contents of intellectual and volitional aspects of psychic activity of people who committed traffic crimes, we put forward the hypothesis on potential ways to make the traffic participants realize the outcomes of traffic offences.

We are convinced that they have significant preventive potential. The essence of the way is to include the parameters of possible unfavorable outcomes of infringing behavior on the road to the phenomenal area of mind (realization). If we say that volitional aspects of psychic activity of traffic participants towards these outcomes are negative and determined by the absence of their realization, then knowledge of parameters of undesirable outcomes and anticipation of high probability of their occurrence should start the mechanism of target variation or encourage selection of other ways to reach the original target.

In both cases it is the rejection of risk-associated behavioral model, conscious violation of traffic rules. Otherwise if a person is aware of parameters of dangerous outcomes and anticipates the probability of their occurrence (being aware of cause-effect relations) – volitional attempts to maintain own behavior within risky frameworks of offence to reach the goal characterize willful infliction.

To our mind, it is the crucial point: many researches show that most drivers have no intention to harm themselves or other traffic participants, and even more so to assume the role of a criminal consciously and willfully, thus acquiring respective negative social stereotype.

#### Discussion

Quite obviously, the state or community are not capable of influencing the mind of our drivers when they are about to violate the traffic rules or commence respective conscious actions (lack of actions) at the current level of technical and scientific development.

Thus, divers' mind should be influenced before they are in the situation to violate the rules.

Drivers' mind should have an image that there are direct relations between traffic violations and highly negative consequences that are not desirable for the driver.

Obviously, the ways of influence can be borrowed from the sciences about social consequences: PR-techniques (PR – Wordcombination abbreviation "Public relations"). Besides we assume that lecturing or neurolinguistic programming shall not be effective, the impact should be brought through visual images, which is based on the achievements of interaction theories and semiotics with the support of multimedia.

Priority role of visual images is based on the fact that vision coupled with hearing are the key channels for the driver to perceive reality: this is the way the person gets almost all useful information necessary to drive a vehicle. The same channels should also be used to communicate information in order to make people recognize negative outcomes of traffic accidents.

Oblique proves of our hypothesis were obtained in the poll: out of driving respondents 4 people reported having seen human deaths in traffic accidents. In one case the driver and the passenger were thrown from the vehicle to the road through the windshield due to head-on collision and both were killed by another vehicle. This one and two more traffic accidents happened due to overrunning, and one more as a result of driving at prohibiting signal of traffic lights. Besides, the respondents who witnessed the accident due to speed violations said that they have never overrun thereafter. The fourth respondent reported full compliance with prohibiting or warning signals of traffic lights.

We may conclude that negative outcomes of infringing behavior were recognized in the mind of respondents and associated with particular traffic violations that became immediate reasons for fatalities (there are links between images and particular behavioral acts with relevant emotions and senses that encourage volitional efforts to reject the violations).

Thus, the priority should be given to bright and imagery propaganda, with no excessive letters, explanations and other signs. It should be highlighted that this social publicity is widely spread abroad. Video films recorded in England and Australia aimed at realization of outcomes of traffic violations and creation of determining relations between them in drivers' mind were found on the Internet<sup>1</sup>.

Currently, Russian publicity is not careful enough about traffic safety. The issue is almost absent from the advertising media, whereas visual propaganda does not meet the requirements of the above hypothesis.

Suffice it to say that Russian media do not advertize automobiles from the safety point of view, but as a symbol of power, speed and prestige. For example, ads feature the speedometers readings that do not correlate with Russian roads and established speed limits – where could an owner of a new vehicle speed up to the values of 200-250 kilometers per hour being obedient and safe or reach 100-150 kilometers per hour in a few seconds?

And on the contrary, the respondents couldn't cite any ad that would promote a vehicle in terms of reliability, minimum injuries to passengers in crash-tests and would be associated with safety.

No less important is another aspect. Since preventive potential of our hypothesis is based on the dilemma: "Reject the violation, if you do not want these outcomes, otherwise you act intentionally", because the outcomes should not be related to the safety of driver himself, but to the safety of other people.

The statement also has cultural background: our community has long-lasting stereotype of risking one's own life, neglecting own safety. They are obviously a part of archetype. A folk proverb is also known: "You can die, but save your friend"; people who often defy danger and risk, those who do not fear death are considered to be brave, valiant, courageous (stunt men, climbers, riders, warriors, etc.). Some of the actions are awarded: Order of Courage, Bravery Medal, star "Hero of Russia", etc. Epic literature is also a good example: legends say about fearlessness and bravery.

Therefore propaganda focusing own safety shall miss the target from the social standpoint. Propaganda will be more effective if based on jeopardizing and causing harm to other people: starting with close relatives who travel in the vehicle as passengers and ending with strangers who would cross the street or drive the oncoming vehicle, etc.

Currently, Russian propaganda is designed according to the first principle. As an example, we can cite a widely spread poster showing a woman and a girl with a phrase: "Dad, we're waiting for you at home". Let's notice, that in this case the poster a priori asserts, that the family of the driver is in safety.

However, you will never see Russian posters or videos that would state that if you drive to a red traffic light or commit double overtaking — you are a murderer, let alone demonstration of the graves of people you would kill, if still willing to pursue with your intentions.

#### **Conclusions**

Therefore, we got evidence of lacking parameters of negative outcomes of traffic violations in minds of people who drive the vehicles when being careless about their own behavior (taking risk), as well as of significant preventive potential of measures aimed at making traffic participants realize possible outcomes.

http://slonenok-dambo.gallery.ru/videos/11076.html (10.02.2008); http://www.adme.ru/australia/2007/05/07/17594/ (10.02.2008)

#### References

- A. Agafonov, *The kognitive psychomechanic of consciousness or as the consciousness meaninglyless makes the decision on comprehension,* The 2<sup>nd</sup> edition, corrected and added (Samara: Bakhrah-M, 2007).
- A.N. Arlytchyov, *Consciousness: it is information-activity the approach,* (Moscow: KomKniga, 2005).
- *Criminal law of Russia*, The general part: the Textbook, Under the editorship of V.N.Kudryavtsev, V.V. Luneev, A.V.Naumov; 2<sup>nd</sup> edition, processed and added (Moscow: Urist, 2006).
- A.L. Kononov, *Value of the subjective party for punishment definition for careless crimes*, Problems of criminally-legal struggle against careless criminality (Tyumen, 1991).
  - V.V. Luneev, Subjective to lay charge (Moscow: Spark, 2000).
- V.V. Luneev, *XX-th century criminality: world, regional and Russian tendencies*, the 2<sup>nd</sup> edition, processed and added (Moscow: Wolters Kluwer, 2005).
- M.G. Makarov, *The purpose*, Some questions of dialectic materialism (Leningrad: The publishing of the Leningrad state university, 1962).
- S.E. Vitsyn, *Definition and substantiation of the purposes in social management* (Moscow, 1977).

Data of motor licensing and inspection department about road and transport breakdown susceptibility (The form "1-БДД").

Data of statistical reporting about the registered crimes (The form "1-Γ" Code 453).