

# Linguistic Analysis of Fighters' Epistemic Predictions

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## Abstract

Predicting is an effort that positions the speaker's perception under question where the forthcoming event is something that cannot be readily seen and is therefore immeasurable in terms of daily ordinary interactions. That is the kind of assertive predictions made by the Ultimate Fighting Championship (UFC) fighters when asked about who the winner of the upcoming lightweight title bout between Conor McGregor and Khabib Normagomedov. Applying epistemic method and drawing the theory of the four sources of knowledge by Dudovskiy (2019) this present study was intended to analyze the assertive statements—as the answers to the interviewer's question—in predicting the winner of the fight which led to disclose the predictors' knowledge and beliefs about who the forthcoming winner of the bout was. Measured in terms of epistemic prediction involving the theory of conditional sentences it was proven that most of the fighters' assertive statements invoked either deductive or inductive reasoning based on their evaluation on the two contenders which also implied the predictors' levels of convincement. It was also found that among twelve fighters, four fighters made deductive predictions convincingly; one fighter made deductive prediction unconvincingly; three fighters made inductive predictions convincingly; and four fighters made inductive predictions unconvincingly.

**Keywords:** *convincing; fighter; if-clause; protasis*

## INTRODUCTION

Good predictions about the winner of the upcoming fight or match are made by combining at least two bases; (a) clues from the track records left for the predictor—such as the results of the previous fights or matches and how the fighters or players develop after the previous fights or matches—and (b) what the predictor knows as prior knowledge. When asked to make a prediction, a predictor usually connects the two factors carefully in order to come out with a convincing prediction (Park, 2019, pp. 1-4). In some cases, prediction is often similar to estimation where the predictor will be working to combine the two factors to make his or her prediction sounds scientific and reasonable to the questioner.

Just three days before the lightweight title bout (scheduled October 6, 2018) between Khabib Normagomedov (Russian) the defending champion versus Conor McGregor (Irish) the challenger, UFC fans began speculating and gamblers began betting. The atmosphere became more intense as four other fights in the main card were also fixedly announced. In Vegas, fans and betting odds picked Khabib the favorite and Conor the underdog (in the main event); Tony Ferguson the favorite and Anthony Pettis the underdog (in the co-main event). In addition, the event would also present Dominic Reyes the favorite and Ovince Saint Preux the underdog; Alexander Volkov the favorite and Derrick Lewis the underdog; and Felice Herrig the favorite and Michelle Waterson the underdog (Stumberg, 2018, pp. 1-2). The results differently showed that two of the five favorites lost the fights; Alexander Volkov was defeated by Derrick Lewis by technical knock-out (punches) and Felice Herrig was defeated by Michelle Waterson by unanimous decision (Harris, 2018, pp. 1-5).

There were a lot more predictions and picks that are more or less similar in terms of both the predictions and the results. So far in UFC—as the most popular fight sport among other Mixed Martial Arts (MMA)—there have also been many types of scientific predictions. More scientifically, there have also been proposals to apply a certain academic method and combined power and accuracy with other variables to make the predictions more accurate (see for example: Johnson, 2012, p. 32). Some even propose that predictions of the future winners of UFC and other MMA championship fights can be predicted by computer or machine-based programs and statistics and this can be made available for predictors or fans (Pierce, 2020, pp. 1-5; Tian, 2018, pp. 1-3). Those methods of prediction claim that they predict the future winners with the accuracy ranging from 60 up to 70 percent.

Apart from the above various claims about how to predict the result of the upcoming fight, one thing is sure; prediction is by all means fundamentally doubtful and therefore cannot be intellectually granted as being true. In predicting the up-coming winner of UFC bouts, it might be more reasonable to have predictions from UFC fighters themselves. That is because they are not only the ones who have the clues from the previous fights, but also because they are the ones who know better—deductively or inductively—the chance that a fighter has. Besides, fighters are epistemically the ones who live the way the other fighters as the contenders do. This is not to include one thing that other people do not know well, the facial clues or expressions related to the strength during the fight (see: Little, Trebicky, Havlicek, Roberts, Kleisnerb, 2015, pp. 1470-5).



## REVIEW OF THE LITERATURE: PREDICTION AND EPISTEMOLOGY

In term of linguistics, a prediction is a statement made about the way something will happen in the future (before the actual event) and is usually based on what a predictor has already known, which in this present study is the predictor's experience or knowledge (Jupp, 2006, p. 235). There is much overlap between prediction and forecast, a prediction may be a statement that some outcome is expected, while a forecast is more specific, and may cover a range of possible outcomes (Burch, 2016, pp. 1-2). Although guaranteed information about the future is in many cases impossible, prediction is necessary to allow plans to be made about possible developments. Whereas prediction is subjective and fatalistic in nature, forecast is scientific and free from intuition and personal bias. One point to note in the above definition of prediction is that, it is statement and subjunctive in nature. Furthermore, prediction can be seen as saying or telling something before the event while forecasting is done on the basis of analysis of the past. As such, prediction—as Goldberg (2015, p. 77) states—is epistemic and assertive in nature.

When asked to predict about the result of a match or championship, the predictor's answer is usually given in the form epistemic justification. That is, the answer is normative and justified based on analogy, rules, to achieve certain goals, and in terms of blame and praise (see: Smith, 2019, p. 64). The main problem of explaining what makes some justifications epistemic is that it is cognitive where the judgments made by the predictors are described in terms of objective features of the world. Being epistemic, then, means that a prediction must have or having to do with knowledge or the act or ways of knowing. Thus, an epistemic prediction refers to the speaker's rational association with what he or she mentions in the if-clause known as 'protasis' (the clause expressing the condition in a conditional sentence). It can be concluded, therefore, that the degrees of the predictor commitment or certainty depend very much on the fulfillment of what the predictor mentions in the protasis (Dancygier and Sweetser, 2005, p. 45).

Since both epistemic and cognitive have something to do with knowledge or ways of knowing, it is theoretically reasonable that the discussion about the predictions is focused on how the predictor's knowledge backgrounds comes into existence which—in the data of this study—assertions that manifest mostly in the form of conditional sentences (see: Wise, 2018, pp. 1-3). Other linguistic forms of predictions are possible because predictors also often make verbal expressions using 'likely', 'very likely', 'possible', and 'certain' to show the degrees of uncertainty in contrast with numerical expressions (Diez and Druzdzel, 2009, pp. 53-4). In Diez and Druzdzel's view, verbal expressions are usually preferred for some reasons. They are, among others, more natural than numbers, reflecting the predictor's limitation, estimated based on the cases stored in memory,

conveying a vague probability, to make the listener pay more attention to the reasons, and very importantly following the direction of the exchanges (2009, pp. 54-5).

In relation to making predictions, epistemology is defined as “the study of human knowledge”. It involves questioning the sources and the nature and accuracy of human knowledge in the hope that human will develop a more informed understanding of what they do not know. That is, enabling human to become more epistemically aware. Deductively and inductively, therefore, human are faced with two epistemological questions: (a) how human can determine which facts are true, double check fact-claims, decide what facts are and what false claims are, and (b) how human can determine which facts are important. To do so, it is not enough to simply determine which facts are true; they must also consider which facts are useful and important (Miessler, 2018, pp. 1-6).

In many discussions about philosophy, it is stated that almost everything that human know originates from four some basic sources. Dudovskiy (2019, pp. 1-3), for example, states that there are four basic sources of knowledge. They are (1) intuition, faith, or belief where human feelings play greater role compared to reliance on facts, (2) authority where information is obtained from authorities such as books, research papers, experts, or supreme powers, (3) logic where a creation of new knowledge is made through the application of logical reasoning, and (4) empiricism where knowledge is obtained based on objective facts that are established and can be demonstrated (see also: Audi in Moser, 2002, p. 72). Almost similarly, Fieser (2008, pp. 8-9) also states that there are basically four sources of knowledge which includes sensory perception, introspection, memory, and testimony. Fieser further states that there are also what he calls (a) ESP (extrasensory perception), (b) religious experiences, and (c) non-experiential (*a priori*) knowledge which some philosophers describe it as knowledge that flows from human reason itself (2008, pp. 9-12). In many cases, these four (others may propose five up to seven) basic sources of knowledge are also the one in making (mostly scientific) predictions about future things or events.

Quoting Searle's view, Rocci (2017, p. 10) states that any statement about the future for which the speaker holds supporting evidence is a prediction and not a report. Rocci further states that the difference between a report and a prediction is that a prediction involves the fact that a prediction must be about the future whereas a report can be about the past or present. Discussing the same points, Pablo (2018, p. 2) holds a belief that all future assertions are naturally predictive. Prediction, however, is not a mere expectation. In Guillan's view (2017, p. 50), it is an assertion about something that is more than reasonable possibility, which means something will happen, on the bases of some certain condition. In other words, prediction is an assumption or presupposition in the form of 'implicit'



assertion within a dialogic exchanges—in this present study between the interviewer and the UFC fighters as the predictors—whose validity is acceptable (see: Fouquere and Quatrini, 2013, p. 7). Based on these views, it can be concluded that to predict is to make an assertion containing the propositional condition about a future event. Analyzing such predictions, therefore, can be defined as making the 'implicit' assertions more 'explicit' in terms of either deductive or inductive inferences (Ibid, 2013, p. 10).

In her discussion about *Conditionals and Prediction: Time, Knowledge, and Causation in Conditional Constructions*, Dancygier (2003, pp. 23-4) states that 'if' (in if-clauses as protasis, hence conditional sentence constructions) has three functions (a) as a space builder for conditional spaces, (b) as a marker of non-assertiveness and an assumption that the speaker has reasons to present it as unassertable, and (c) as the clauses of a conditional construction that presents "p and q" as a construction of meaning. Dancygier also states that verb forms (present and past) play crucial significance in constructing meanings related to the aspects of time, background assumptions, type of distancing, etc. (2003, p. 23). In her view, the forms of the verb can be classified as predictive (2003, p. 30) where the modal verb signifies predictive meaning, and non-predictive ones either as hypothetical or distanced predictive conditionals (2003, pp. 37-8).

Dancygier demonstrates that a construction of "You miss one more meeting, you'll be fired" can be seen as a prediction of dreadful consequences "if an as-yet-unpredicted event of being late occurs" (2012, p. 33). She reasons that—even without conditional predictive construction using 'if', the verb forms are enough to evoke predictions. Dancygier holds that in a basic act of spoken communication, both speaker and hearer—with their epistemic and emotional stances—may intend to express their might, viewpoint, distance, rejection, or (of course) prediction (2012, pp. 61-2). She concludes that in such discoursal setting, the status of the speaker's expression is self-explanatory which therefore it is not necessary to evaluate the speaker's statements in terms of epistemic perspective or matched with a standard or appropriate form of subjectivities (2012, p. 65). Besides, the if-clause in conditional sentences may appear in many forms like: if only, unless, should, once, when, otherwise, but for, if so, if not, and other alternatives (Vince and Sunderland, 2003, pp. 468). Similarly, in the apodosis speaker also uses various (modal) auxiliaries to represent different degrees of certainty like and, will, may, and or (Alexander, 1998, pp. 206-7).

## **METHODOLOGY**

The data of this study were collected from the transcript of the predictions made by the 12 (twelve) UFC best fighters during the interview

for Saturday's (upcoming) main event of UFC 229 between top two lightweight defending champions Khabib Nurmagomedov versus Conor McGregor. The full text of the predictions were downloaded from the online news provided by Brandon Wise from CBS Interactive, dated October 4, 2018 at 8:45 am ET (see: Wise, 2018, pp. 1-3). The data were selected purposively because it was hypothesized that the fighters' predictions contain epistemic assertions in various forms which linguistically suit the four sources of knowledge as proposed by Dudovskiy (2019) in "Research Methodology: Epistemology". Applying the method of epistemology, all of the 12 (twelve) fighters' predictions which are mostly in the form of conditional sentences were analyzed linguistically in terms of deductive and inductive assertiveness to find how they fit each of the four sources of knowledge. For easy discussion, the terms assertion, statement, expression, and sentence are sometimes used interchangeably and the data in words, phrases, clauses, and sentences are typed in italic to make a clear distinction from the text. Also for easier analysis, the first names of both contenders and the predictors are used instead of their middle or surnames.

## **ANALYSIS AND DISCUSSION**

Asked about the winner of the upcoming winner of the UFC 229 championship fight between Khabib and Conor, Justin Gaethje's assertive statements were not convincing at all. While in one way he stated that it was very difficult to beat McGregor' *confidence* because of his *left hand* power, in the other he stated that Khabib's take down skill was hard to defend. Justin finally decided to pick using the phrase *I probably see Khabib*. Not only that his statement was initiated with a phrase expressing doubt but also followed by another doubtful statement that Conor's *left hand is phenomenal*. When measured in terms of Dudovskiy's epistemology, Justin's assertive statements in his unconvincing prediction can be classified into intuition where his feelings play a greater role in predicting the result of the championship bout. Since he started from observation and moved towards unconvincing hypothesis, his intuitive prediction can be seen as being close to inductive.

Almost similarly, asked the same question Nick Diaz also stated that it would be a tough fight and both fighters had much (psychological) pressure. Nevertheless, he predicted and picked Khabib—in a phrase *Khabib's supposed to win*—reasoning that it would be difficult for Conor *to deal with a fighter like George Saint Pierre or Khabib*. In this reason, Nick implicitly put George and Khabib as similarly difficult to defeat because both are specialized in taking down and most of their victories come from this skill. Though not very convincing, it can be seen that Nick predicted the result based on his experience in UFC 158 in Montreal where in the main event he lost to George in unanimous decision (see: Garbasi, 2020, pp. 1-12). In terms of epistemology and sources of knowledge, Nick's



prediction can be classified as 'memory' where he based his prediction on his experience (see: Audi in Moser, 2002, p. 72-4), while in terms of how he predict it can be seen as deductive where he moves from theoretical knowledge towards confirmative prediction.

In more convincing prediction, Anthony Pettis asserted that Conor's victory over Eddy (Alvarez) was a fact that solidified Conor more as champion than Khabib's victory over Al (Iaquinta). He reasoned that what Khabib did in defeating Al would not be enough to defeat Conor. He stated *If he comes like that against Conor, that's the wrong guy to do it against*. This implicitly means that even the condition (the if-) he mentioned was fulfilled by Khabib it would not be enough to defeat Conor. Also implicitly, this can mean that Khabib only defeated Al who—in Anthony's view—is not as good as Conor. These assertions can be classified into inductive prediction where Anthony moved from his observations towards theoretical conclusion. Since his prediction was made based on observational reasoning which was concluded theoretically, it can be seen as epistemologically logic.

Different from other fighters, at the beginning Darren Till predicted Khabib would win the fight by decision in five rounds. He then changed his mind and picked Conor doubtfully with the reason that both fighters were real great ones. The doubt was marked by the use of the phrase *I'm sort of going towards*. Darren, however, had one point that Khabib would not be able to ragdoll Conor; Darren seemed to know how the fight would move. He said that if one came in a reachable distance one had got to be careful. In the part of 'protasis', it is explicit that when the condition fulfilled Conor is predicted to win the fight. In the part of apodosis, however, *you've got to be careful* does not necessarily means that Khabib will lose the fight. Measured in terms of Dudovskiy's epistemology, Darren's statements were leading towards an intuitive prediction where his feelings played a greater role in predicting the result of the bout. At the same time, it was also inductive because—though unconvincingly—he predicted by moving from observation and moved into more tentative conclusion.

Also put in a conditional sentence, Al Iaquinta's prediction was not very convincing either. Iaquinta asserted it was obvious that Conor had the power to put many of his opponents out, but he also doubted if Conor could do the same thing to Khabib reasoning that Khabib had a differently awkward style which was difficult for the opponents to adjust. Iaquinta stated that Khabib could chase and put some pressure like what Diaz did to defeat Conor. This can be seen as an empirical story based on the past facts established by Diaz on Conor. In his statements, Iaquinta concluded that *if it's five rounds of that, I think Conor is finding a way out*. Though not very convincing, Iaquinta had made his prediction rather inductively

based on empiricism where both fighters had established and demonstrated their objective facts in winning the previous fights.

George Saint Pierre's prediction is probably the most convincing and most logical among others. He argued that Khabib had never lost while Conor had lost a few times. George also reminded that Conor's losses were on the ground where, although a slow starter, Khabib was the most competent in ground fight. Detailed in logical observational reasons George's statements can be seen as deductive prediction. On the basis of this logical and deductive observation George was even willing to put his house to bet as can be seen in his assertive conditional sentence containing two protases followed with one apodosis that reads *If I have to bet, if I have to put my house on it, I have to pick Khabib.*

Although made in some logical reasoning, TJ Dillashaw's prediction can be classified as closer to being authoritative where his arguments are very convincing as if they were from an expert. TJ argued that Khabib's *last performance* when defeating Al was—in TJ's view—not very impressive. TJ reasoned that Khabib did not fight on the ground—where he is best at—and won to defend his title by mostly standing. At this point TJ might forget that 'did not' fight on the ground does not necessarily mean that Khabib 'could not' fight on the ground. Instead TJ further explained in more details that *Conor has got (good) left hand, fast, able to use his angles and his crazy kicks.* TJ even foresaw that Conor would chase Khabib and (boom) knock him out. On the whole, TJ's assertive statements in predicting the result of the bout can be seen as 'coming from someone with authority' and it was inductively made where he started from observation into theoretical conclusion.

Very differently, Chael Sonnen's assertions can be seen as the most intuitive among other predictors where his feelings and thoughts played a much greater role in predicting the upcoming event. Although Chael was confronted with the facts showing how Conor defeated his three opponents (Chad Mendes, Jose Aldo, and Eddie Alvarez), all of his eight assertive sentences are initiated with or contain the phrases of guessing as *I think* (twice), *I've always thought* (twice), *I'm also confronted with the evidence/fact that* (three times), and *I'm not sure* (once). While in one way these phrases may—to use Diez and Druzdzel's (2009, pp. 54-6) linguistic term—show the degrees of uncertainty, in the other they can be seen as representing—to use Dudovski's (2019, pp. 1-3) term—intuition, faith, or belief. Though his statements sound doubtful, the assertions are moving from observation towards tentative hypothesis, hence inductive.

Although using verbal expressions of doubt *I think* and *I don't think*, Eddie Alvarez's prediction can be classified as very convincingly logical. In a long conditional sentence, Eddie set up a long protasis *if Khabib does not correct the mistake of sitting back with his chin back to the side.* In this



negative condition, Eddie stated *if Khabib does not correct* which means it is possible that Khabib will correct the mistake (for negative protasis, see: Kupperberg, 2020, p. 1-5), and which therefore it is possible that the result as shown in the apodosis is contrariwise; *Conor's NOT gonna put Khabib's lights out*. Eddie's prediction is more convincing with his assertion that he does not think *Conor has a strong enough spirit to withstand Khabib's ground attack* which—as what Khabib did to his previous opponents—is done continually along the five five-minute rounds. On the whole, Eddie's prediction can be classified as logic which is made by application of logical reasoning. Since he predicted based on theoretical hypotheses and moved towards confirmation, his prediction can be seen as deductively convincing.

Constructed in one complete conditional sentence, Kevin Lee's prediction can also be classified into logic. In Kevin's view, the key to the victory was the fighter's style where Khabib was considered as having *holes* (weaknesses) that—in Kevin's view—Khabib always vulnerably positioned himself in (reachable) distances. Kevin asserted that he *has been seeing this Khabib's weakness years and years and years* (repeated three times). He predicted that *when you* (if you were Khabib's opponent) *see those holes, and they're not getting at least a little closed* (left wide open), *then he's going to get slept* (for the use of 'when' instead of 'if', see: Eastwood, 1994, p. 335). Since Kevin's prediction is made based on theories (style and weakness of a fighter) moving towards confirmation, it can be concluded that it is deductive. In his assertion, Kevin uses the term 'get slept' (or 'put to sleep' is sometimes used in UFC) instead of get knocked out which functions to assure his prediction. In UFC this phrases mean that the loser cannot get up right away for the announcement of the official decision (see: Worthington, 2020, pp. 1-5).

Although convincingly made in one full conditional sentence, Kelvin Gastelum's prediction can be seen as more intuitive than logic. That is because his reasons were based on what himself or others felt about the possibility. He stated that *once he* (Khabib) *gets ahold of Conor, he's never felt that kind of pressure*, which means he would not be able to get away, hence *knocked out* (for the use of 'once' instead of 'if', see: Markham, 2019, pp. 1-5). This apodosis, however, is only based on what himself and other felt. In two final statements, Kelvin also used *I think* to assert that *Khabib will get it done*. He even finalized his statement saying, *I'm team Khabib, baby*, which disclosed his intuitive feelings in answering the interviewer's question. Apart from that, Kelvin's prediction is also inductive because he started from his and others' observations and move towards tentative hypothesis.

In one way, Tyron Woodley's prediction is deductive where he moved from theories stated in three conditional sentences towards confirmation stated in one conditional sentence added with some assertive reasons. In

the other, Tyron's prediction is the most logic of all. He argued that the two fighters are *kryptonite to each other* which means Khabib and Conor can make each other weak under a certain condition (for the word kryptonite, see: Brandon and Brandon, 2017, pp. 300-1). Putting his prediction in conditional sentences, Tyron explained that *if Khabib comes forward with his head wide open*, he might get some *straight lefts and lit up*, which means Khabib would get knocked out. Tyron exemplified that Chad Mendes who was *half the reach* had previously lost to Conor in this way. Tyron continued that *if Khabib starts pressuring him in the first round and have success*, the fight would end there. Most importantly, Tyron argued that Conor's strength was *brainwashing* to stir the emotion of his opponents. Tyron asserted that many of his opponents lost the fight to him in that way. He finalized his statements saying that Khabib was the one who could handle this brainwashing. In terms of Dudovskiy's epistemology, therefore, Tyron's reasons can be classified into logic where his prediction is made based on logical reasoning.

### **(INSTEAD OF) CONCLUSION**

In the above analysis and the discussion, it is found that all of the 12 (twelve) fighters gave their predictions about the up-coming winner of the fight in various types of assertive statements. Stated mostly in conditional sentences the predictions revealed the fighters' (as predictors) knowledge and beliefs about 'who' the forthcoming winner of the title bout and 'how' the winner would win the title. It can also be proven that in terms of the way they predicted the fight most of the predictions were made based on the predictors' evaluation on the two contestants which also lead to the levels of their assurance in predicting. In terms of the way they expressed the reasons for picking the contender to be the winner, four out of the twelve fighters convincingly made deductive predictions; four of them unconvincingly made inductive predictions; three of them convincingly made inductive predictions; and only one fighter unconvincingly made deductive prediction. More importantly, when measured in terms of epistemology (as proposed by Dudovskiy [2019]; Audi [2002]; and Moser [2008]) it is found that 5 (five) of the 12 (twelve) fighters made predictions in different levels of logic; 4 (four) fighters gave predictions in different levels of intuition; one made the prediction authoritively; one empirically, and one based on memory of experiencing a similar fighter.

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