Turn-taking is one of the most basic processes taking place in social interaction. Without turn-taking, group interaction could not be called 'dynamic', since there would be no flux of information going on between speakers. Thus, it might be a bit surprising how little was written about turn-taking in the area of small group psychology. In the popular textbook on group dynamics by Forsyth (2009) the 'turn-taking' phrase does not appear even once.

The existing literature on turn-taking in group interaction is dominated by work on the structure of participation, i.e. how much group members speak during interaction and why they differ in their propensity to speak. Much less is known about the structure of turn taking sequences, i.e. why and when group members speak in a particular order.

In the project I assume that the order in which group members take turns can say a lot about the manner in which group members coordinate to achieve a common goal. For example, a conversation can be about inventing new solutions, distributing tasks, getting to know each other, or just having a quarrel. I expect that one can try to guess the conversation goal solely on the basis of coordination patterns that can be found in the sequence of turn-taking. Moreover, based on a coordination pattern one can predict the content of messages exchanged at a given time.

In my PhD dissertation I was able to demonstrate that the discussion groups whose task was to reach a consensus can vary in patterning of turn-taking process. The discussions, in which patterns involving two speakers (ABA) were more frequent, had more controversial subject. The people taking part in the ABA exchanges together tended to engage in a battle of arguments, which, when prolonged, led to escalation of the conflict between them. In the current project I expect to find similar relationships in other kinds of discussions. For example, I think that in brainstorming groups the speaking pattern will remind a circle (ABC) - each new speaker in the turn-taking sequence will add new piece of information to previous ones.

The main objective of the project is to identify turn-taking patterns characteristic for discussions on different topics and for groups pursuing various goals. I plan to conduct three empirical studies. In Study 1 I will try to extract characteristic patterns of turn-taking in group interactions having different goals - solving a logical problem, getting to know each other, generating ideas, deliberating on a controversial topic. In Study 2 I want to verify if changing a pattern of turn-taking can evoke changes in the content of speech as well as in participants' attitudes and behaviors. In Study 3 I will analyze the discussions taking place on Internet forums, trying to predict what people are talking about based on a characteristic turn-taking pattern. The data obtained from these studies will be analyzed using sophisticated methods, such as sequence analysis, hierarchical models, recurrence quantification analysis and network motifs analysis. The results of the project will help to describe ways in which people coordinate in group interaction based on the order of speech and the content of messages.

In the metaphor proposed by Hackman and Morris (1975) group interaction can be compared to a chess game, which cannot be understood solely on the basis of the frequency of movements of each individual chess piece. Only the knowledge about the sequential order of moves allows for understanding the full complexity of the game. Similarly, to grasp the meaning of group interaction, one must understand how the group changes from state to state by moving from one turn to another. We can supplement Hackman and Moris' metaphor with a realization that the game of chess is not only about the sequence of movements of players, but also about the whole context of the game: motivation and skills of the players, available game strategies that include undertaking offensive and defensive actions, making threats and planning counter-play, gaining material or positional advantage. The gameplay consists not only of individual moves and ripostes, but also multi-turn sequences of moves or "maneuvers" of players.

The adoption of such a perspective on group interaction compels to study not individual events but connections between them. In the proposed research, the basic unit of analysis is not a single group member or an interaction turn, but an emergent pattern of interaction that organizes both the form and content of information exchange. The level of interaction patterns is incorporated in a multi-level hierarchical model of a group that includes variables describing both individual group members and the group as a whole. Implementation of the project will therefore contribute to the progress of social science discipline by the empirical study of emergent phenomena occurring in group interaction.

Forsyth, D. R. (2009). *Group dynamics (5th ed.)*. Belmont, CA: Wadsworth, Cengage Learning.

Hackman, J. R., Morris, C. G. (1975). Group tasks, group interaction process, and group performance effectiveness: A review and proposed integration. W: L. Berkowitz (red.), *Advances in Experimental Social Psychology* (t. 8, s. 47–100). San Diego, CA: Academic Press.