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**LATENT COGNITIVE STRUCTURES IN LITERARY  
DIALOGUES AND PSYCHOLOGICAL CONTENT  
ANALYSIS**

This paper presents the results of a literature-psychological research project. The aim of our research is to examine the cognitive structures of authors through their works and to study the way the psychological content analysis reflects these structures.

**Our main hypotheses are as follows:**

Different authors (dramatists) can be characterized in their way of thinking of human relationships and conflicts by personal structures that distinguish them from each other. These personal structures appear at many levels in the authors' life-work.

From this point of view we can explore differences which distinguish the dialogues of literary works from dialogues of non-literary works such as the dialogues of soap operas.

We can study these characteristics and differences with Ehmann's sequential- transformative content analysis (Ehmann, 2002) in a way that we examine the texts using categories coming from several different sources.

**According to the above, our hypotheses are as follows:**

1. We assume that in the representation of human relations and conflicts we can explore important conflict types, problems which are well defined by every day language and by psychological terms and which are typical of each author and differentiate his/her work from other writers' and from the conflicts in soap operas.
2. We assume we can conceptualize the permanency of the reaction types, wishes and demand both in the interactional episodes and in the character types which are presumably typical of each author. We can explore these types of reactions and wishes which characterize each author in the interactional episodes with the Core Conflictual Relationship Theme Method (CCRTM).

3. We assume that the authors have distinctive interaction patterns which conceptualize the characteristics of each author at the level of the scenes' structures and which distinguish him/her from the other authors. We assume that these interaction patterns can be explored by the Consensus Rorschach Method (CRM).
4. We assume that the text of the soap operas which can reflect the everyday way of thinking of human relations and conflicts are poorer than the texts of literary works. Soap operas are less rich at the level of CCRTM, which conceptualizes the communicational content of texts, than literary works. By the CRM which characterizes the structure of the communication there is no essential difference between soap operas and dramas. It is less likely that any difference appears at the communication's relational determining level, rather at the level of the communication's content.

## Methods

### Sequential- transformative content analysis (Ehmann)

The sequential-transformative content analysis as a third approach can be placed between the quantitative and the qualitative analysis. The main idea of Ehmann's method is that there are latent hypothetic variables behind a text. These hypothetic variables are created by the researcher on the one hand, and, on the other hand, they can be taken from another source. These variables can be counted and analyzed statistically (Ehmann, 2002).

The examined latent psychological variables come from the following sources:

- *Empirical-qualitative analysis*: We searched latent psychological variables which can be explored in the text directly, so we created these variables. Our method was that through rereading the examined texts we tried to conceptualize the cause of the conflicts, the way these conflicts ended and to describe their psychological characteristics with everyday words and simple psychological concepts. After having examined every text we united the categories which were identical in their content. Then we considered whether a category appeared in a certain text or not.
- *Consensus Rorschach Method*: We took categories from a method used in clinical psychology. The Consensus Rorschach Method examines not the individual's intrapsychic structure or constellation as the Rorschach test does, but it focuses on the relations and the interactions of the examined people. Therefore the original, tête-à-

tête situation of the Rorschach test enlarges; the CRM is suitable for examining pairs, families and small groups (up to 8 people). The task of the examinee is to find a common answer to each inkblot. They have to agree on one common meaning. So the inkblots are rather for stimulating interactions than for projecting. Willi et al. worked out first a generally valid code system for the Consensus Rorschach in 1973. Nowadays, there are several code systems. The Hungarian research group, Emőke Bagdy et al. established a code system which emphasizes the decision process. This code system can reflect the characteristics of relations, such as the dominance in a relation or the determination of ascendancy and subordination in a relation. The Hungarian code system established by Bagdy et al. uses codes such as question, clarifying explanation, criticism, commendation, congruent agreement, etc. As this code system emphasizes the communicational process itself and it puts aside the analysis of the projected answers on the Rorschach's inkblots we can assume that it could be suitable for analyzing and interpreting free interactions, so for the analysis and interpretation of the dialogues in literary works. We used the codes of the CRM developed by Bagdy et al. as the sequential-transformative content analysis's variables. We adapted the codes to our aims (for example, we did not use the starting phrases and the quality of the ending, but we introduced new codes such as 'offering theme', 'complimentary gesture', 'determination of the relationship' and 'direct agreement- indirect denial') (Bagdy, Kóta, Safir, 2002, Hatvani, 2006).

- *Core Conflictual Relationship Theme Method*: Luborsky et al. developed this method in 1977. The research group at the University of Ulm (Albani, Eckert, et al.) reconstructed the original method. We used their variety. The method was originally developed to analyze the material of the psychotherapeutic meeting. They examined the narratives; the so-called interactional episodes that the patients told during the meeting and that were about their conflicts with an important person. Through these narratives we can get information about the patients' relations to other people accounted important in their life and we can also learn about the patients' typical conflict-types appearing in their different relations. Luborsky et al. examined three components of the interactional episodes:
  - W-component: the wishes (needs and intentions) which characterize the participants of the interactional episode
  - S-component: the reactions of the narrator, the patient, the Subject

- R-component: the reactions of the other person in the interactional episode, the reactions of the important other

We have two methods to determine the three components of the CCRT: we can use either personal categories or standard categories. By the personal categories the coder works out short formulas that articulate the essence of the wishes and the reactions. By the standard categories we put the wishes and the reactions into already determined standard categories.

We adapted Crits-Cristoph and Demorest's standard categories as our content analysis's latent hypothetical variables. As the result of the adaptation, the most significant change in the original method was that we did not distinguish 'the objective' and 'the subjective' but we created a common list from the standard list of 'objective' and 'subjective' reactions (Albani, Eckert, 1991, Hatvani, 2006).

## **The Sample**

We examined three plays of three different well-known Hungarian dramatists worked in the second half of the 20<sup>th</sup> century. The criteria of the selections were that they were recognized dramatists and they used Hungarian language (so we could exclude translation errors). The three dramatists were Imre Sarkadi, István Örkény and Magda Szabó. The examined plays were these: Imre Sarkadi: *Kőműves Kelemen*, (*Kőműves Kelemen*) *Ház a város mellett* (*House Close to the City*), *Elveszett Paradicsom* (*Lost Paradise*); Magda Szabó: *Kígyómarás* (*Snakebite*), *Az a szép fényes nap* (*That Beautiful Sunny Day*), *Régimódi történet* (*Old-Fashioned Story*); István Örkény: *Tóték* (*The Toth family*), *Macskajáték* (*Catsplay*), *Kulcskeresők* (*Key-hunters*). In these dramas we studied all the scenes in which any kind of conflict appears. The studied soap opera was "Barátok közt" (*Among friends*), a currently successfully running Hungarian series.

## **Results**

In order to test interrater reliability there were two independent code makers in the coding of the Consensus Rorschach Method and the Core Conflictual Relationship Theme Method. We used the Atlas.ti and SPSS.12 in the conversion and analysis of the data.

## Hypothesis 1

The results of the empirical qualitative analysis:

We compared the characteristics which result from the empirical-qualitative analysis of the three authors' dramas. The following table show these representative similarities and differences. In the table we can see the incidence (per cent) of the different categories we found in different examined works by a particular author.

Categories	Sarkadi	Örkény	Szabó
Differences in ideology and in attitude towards life	56.25	15.90	41.80
Reproaching someone for worrying about him/her	9.80	34.00	23.63
Matter of conscience, taking the responsibility	39.21	13.60	10.90
Someone wants someone else to do something	13.75	18.18	27.27
Someone wills someone else to do something	9.80	25.00	32.72
Inflaming conflict because someone is offensive instead of being defensive	9.80	27.27	0.00
Reproaching of someone's behavior because this behavior is unpleasant for the reproachful person	15.60	52.27	40.00
Conflicts because of old grievances	0.00	2.27	25.45
Good contact on the surface, but latent suspension	7.84	4.54	21.81
The cause of the conflict differs from the motivation of the conflict	11.76	6.80	32.72
Someone seems to be unforgiving toward someone else	0.00	0.00	18.18

The following table shows the comparison of the characteristics of the literary works and the soap opera.

Categories	Literary works	Soap opera
Differences in ideology and in attitude towards life	32.66	2.00
Reproaching someone for worrying about him/her	22.00	14.00
Matter of conscience, taking the responsibility	21.30	10.00
Someone wants someone else to do something	20.00	32.00
Conflicts because of old grievances	10.00	0.00
Quarrel for a third person who is absent	4.00	30.00
Someone wills someone else to do something	22.66	34.00

Someone feels moral superiority over someone else	24.00	14.11
The cause of the conflict differs from the motivation of the conflict	18.00	4.00
Inflaming conflict because someone is offensive instead of being defensive	11.33	24.00
aggression	7.33	18.00

On the grounds of these results the empirical-qualitative analysis confirmed the first hypothesis. The authors and the soap opera can be characterized as follows:

- In the works of *Imre Sarkadi* the most frequent reasons of confrontation are cases for conscience. This could explain why a typical problem in his works is that one of the characters feels moral superiority over the others and why his protagonists have to face their ideological failure (and therefore the failure of their life) through confronting their look upon life and their ideological commitments with each other.
- It is typical of the protagonists of *István Örkény* that they defend their illusions which protect them from facing fear of death, aging, and failure. This may generate the characteristic lying and quibbling of Örkény's protagonists, only in order that they deny the fact of the conflict (and facing their illusions).
- The most characteristic conflict of *Magda Szabó* results from the old, yearlong grievances, the implacability toward each other, from the repressed tensions and /or from the tension that comes from the articulation of the grievances. The conflicts between her protagonists are determined by these old grievances toward each other.
- The soap opera *Among Friends* has fewer characteristics than the works of the three dramatists. However, from the examined dramas it can be differentiated well by the quarrels which are generated by a third, absent character and by the high rate of conflicts, open threats and aggression.

## Hypothesis 2

The first part of the hypothesis proves true. The Kruskal-Wallis test shows significant differences ( $p < 0.05$ ) in 18 of the 75 codes among the works of the three dramatists. This is more than 25 percent of the codes. In the case of all the three authors there are less than half of the significant differences in their own dramas than in the texts of the three distinctive authors. The Kruskal-Wallis test shows a significant difference ( $p < 0.05$ ) in 8 codes in Sarkadi's own work, in 8 codes in Örkény's own dramas and in 6

codes in Szabó's own work. We can statistically prove that there is much greater inner coherence in the dramatists' own works than in the texts written by different authors. In the case of all the three dramatists we find codes in which they differ significantly ( $p < 0.05$ ) from the two other authors. In Sarkadi's dramas the codes 'not declaring, but keeping away', 'dominating', 'helping the other' occur less frequently than in the works of the other two authors. In the case of Örkény the code 'being self-confident and strong' is rarer than with the other two dramatists but the codes 'being anxious', 'respecting others' and 'being beloved' are more frequent than with Szabó and Sarkadi. Szabó uses the code 'being happy' less than the other two dramatists and the code 'not adjusting' occurs more frequently in her dramas.

In the second part of the hypothesis we can find only tendencies in the character types which are typical of each author. In Sarkadi's works we can explore the similarities altogether in five pairs, moreover two pairs are in the same play, there are similarities in Szabó's dramas in three pairs, and in Örkény's plays also in three pairs.

### **Hypothesis 3**

This hypothesis also proves true, because we can find significant differences ( $p < 0.05$ ) in 12 codes of 24 with the Kruskal-Wallis Test. In the case of all the three dramatists there is a significant difference only in 5 codes among the texts of different dramas written by the same author. We can prove statistically that there is much greater coherence in the dramatists' own works than among the texts from different authors. In the case of all the three authors we can find codes in which they differ from the two other authors significantly ( $p < 0.05$ ). Sarkadi uses the codes 'uncertainty', 'question about relationship', 'weaving the words' more often than the other two dramatists. In Örkény's plays the codes 'giving details', 'question about theme', 'clarifying explanation', 'complimentary gesture' occur more frequently than in Sarkadi's and Szabó's dramas. Szabó uses the code 'direct agreement, indirect criticism' more often than the other two.

Studying the results of the factor analysis we can discover 9 factors in Sarkadi, 6 factors in Örkény and 8 in Szabó. This difference can imply the existence of an originally distinct latent structure. Examining how much the factors overlap each other we can state that none of the 23 factors overlap each other totally. Among all three authors there are two factors which overlap each other partially and there are two between Örkény and Sarkadi and two between Örkény and Szabó. This supports the hypothesis that there

are distinct latent structures in the background of the way of thinking of human interactions and conflicts in all the three dramatists.

#### **Hypothesis 4**

We can prove this hypothesis partially.

We define poorness and richness according to prevalence of the codes of CRM and CCRTM in the texts; whether there are fewer codes with higher average in a text or whether there are many codes with low or medium average. In CCRTM there are no significant differences from the point of view of richness and poorness.

#### **Conclusion, Further Possibilities**

We can generally declare that we have achieved our main goal, though not all our hypotheses proved true. On the one hand, we managed to explore characteristics in which there is a significant difference between the works of certain dramatists and the soap opera which reflects everyday way of thinking. On the other hand, we found features which are typical of an author's work, therefore we can assume that authors' ways of thinking of human relations and conflicts can be characterized by latent structures which distinguish them from any other authors.

Our research proved right methodologically. From the studies to the main examination we realized an investigation which is inspired by the narrative sequential-transformative content analysis, although it does not belong to narrative research. While the hypothetic variables of the narrative content analysis come from the field of literary history, our hypothetic variables derive from clinical psychology. We do not know of any other research in which methods of clinical psychology serve as hypothetic variables.

This fact distinguishes our study from any other previous art psychological studies. To our knowledge, before us only Erika Oláh and Erika Zolnai had used the code system of the Consensus Rorschach Method developed by Emőke Bagdy et al. for literature psychological purposes. They applied this method only for the analysis of one drama, while with this method we explored characteristics appearing in several works of an author. To our knowledge, the Core Conflictual Relationship Method is applied in Hungary neither for clinical, nor for art psychological purposes.

This methodological innovation raises several further investigational application areas. Thus, we can employ our methods either to the analysis of the life-work of an author, or to the better understanding of certain literary



works. We can also use it for a comparative analysis of different works and different groups of authors.

One way to develop our study could be extending the analysis to non-literary texts. Thus, we can take into the study the examination of the dialogues written by non-professionals and non-amateurs. We can extend our study through examining whether there are differences between the works of everyday people and those of the professionals, and if these differences exist how we can conceptualise them. Furthermore, studying how we can determine the place of these experimental texts between the literary works and the soap operas and to which these experimental texts are similar and from which they differ.

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