

Concept Mapping of Ideological Positioning in Cultural and Political Periodicals in the Interbellum Cluj

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Abstract. The number of periodicals increased dramatically between 1919 and 1945 in Romania. New periodicals were published in either Romanian or Hungarian languages. In the context of the Great Union and following the 1923 constitution, we investigate the political positioning of both Hungarian and Romanian periodicals published in Cluj-Napoca in the Interbellum period. For our research, we have selected the introductory article of each new publication and extracted key terms relating to main themes to represent the political positioning of each of the publications. We used formal concept analysis to determine and analyze the different conceptual hierarchies that were constructed in the Interbellum period by publications belonging to the two cultures and we conclude that the Romanian periodicals suggest a conservative political positioning while Hungarian publications refer mostly to a search for adaptation to the new political context rather than expressing a clear political positioning. In addition, we have identified several research ideas and encourage further investigations based on our findings.

1. Context

The Interbellum in Romania from 1919 to 1940 is of significant historical importance for our study on intercultural contact for two main reasons. First, after the Great War and with the end of the Austro-Hungarian Empire, the political environment was favorable for the province of Transylvania to join Romania in what was to become Greater Romania. A consequence for our interest is that the percentage of

ethnic minority now living in Romania has increased by about 18% which would eventually generate conflict or peaceful cohabitation between a Romanian majority and different ethnic minorities, especially Hungarians. Second, in 1923 a new constitution was adopted which would guarantee freedom of speech. Consequently, the number of periodicals, including political periodicals, cultural journals and newspapers, has increased, as figures suggest. In Romania, in 1919 there have been published only 16 periodicals, yet in no more than a decade this number would rise to 1645 and culminating in 1935 with 2351 titles. However, a dramatic fall in the number of periodicals can be found in 1940 with Romania's territorial losses. Between 1919 and 1940, Cluj (Kolozsvár in Hungarian) was in the top three by the number of titles published [10] (pp. 96–97). As one historian notes [6] (p. 187), following the Great Union of 1918, Cluj-Napoca becomes one of the main centers for press activity in the entire country. "It is here the start was given for the literary movement of "Gândirea" or "the creative localism" represented by "Gând românesc", one of the most important journal publish in the Interbellum Cluj, and knows a sustained cultural and literary activity, a movement which can be followed step by step in a series of literary journal of great diversity, as literary forms and artistic creative paths." However, political periodicals were also available as new titles were edited. These periodicals have hosted the writings of contemporary key political and cultural figures of the time including Cezar Petrescu, Lucian Blaga, Emil Isac, Ion Agârbiceanu and others [6] (pp. 189–191).

Hungarian journalism in Transylvania had to recreate itself, or rather adjust, to the new political circumstances following the Great Union. While before 1918, it was part of the overall press of Hungary, it had now to "create its own identity." According to Gabor Gyorffy, political and literary periodicals have tried to "channel the conflict of ideas of the Hungarian community." An important topic found in these periodicals is the "Transylvanian idea" or "Transylvanism" based on "a unified minority from a cultural and social perspective."

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2. Formal Concept Analysis

The philosophical tradition considers concepts to be units of thought generated in dynamic processes within cultural contexts. A concept has several main properties

as it is “constituted by its *extension*, comprising all objects which belong to the concept, and its *intension*, including all attributes (properties, meanings) which apply to all objects of the extension” [11] (p. 2); [4] (p. 25). Due to their formation in different cultural contexts, we can, of course, discover a variety of concepts which build relationships between them, most importantly the subconcept-superconcept-relation. A subconcept of a superconcept is that concept related to the properties and meanings of the superconcept, consequently, it can be found in the extension of the superconcept and the attributes and meanings of the subconcept can be found in the superconcept. A mathematical theory of concepts requires mathematical discussion on objects, attributes and their relationships which may allow us to discover an object’s attributes. Such a model was introduced by the notion of “formal context” which turned out to be the basic for a new area of applied mathematics: *Formal Concept Analysis* [11] (p. 2).

Formal Concept Analysis (FCA) allows for data analysis, knowledge representation and information management. Priss also underlines three essential reasons why FCA has tremendous potential in linguistic research. First, FCA allows the identification of phonemes or syntactical or grammatical markers, second “modeling and storage of lexical information is becoming increasingly important for natural language processing tasks” and, third, “lexical databases usually contain hierarchical components” [9] (pp. 149–160). Furthermore, it enables to investigate the patterns of relationships between various interconnected concepts.

FCA was introduced in 1981 by Rudolf Wille and remained in the 80s known only to a small group of researchers in Germany and Wille’s students. However, since then, FCA has grown into an international research community and it was applied to a variety of fields of study including software engineering, psychology, it has known applications in AI and information retrieval, linguistics and different social sciences [9] (p. 1). FCA also allows of a mathematical way to analyze objects and their attributes detached from their cultural and social context [5] (p. 103). Our aim is to apply formal concept analysis to the field of intercultural studies in the Interbellum Transylvania, with focus on periodicals published between 1919 and 1940 in Cluj-Napoca. One key aspect of FCA is its support for “user-centered navigation of large amounts of data and the exploration of implications that are implicit in the data” [8] (p. 18).

According to Jurkevicius and Vasilecas, FCA has three main characteristics. FCA is a (1) mathematical approach to the philosophical understanding of concept and allows (2) a human-centered to understand data by means of structuring and analysis and (3) is a remarkable method to visualize data and present its structures, dependencies and consider its implications [4] (p. 24). In other words, FCA allows for the discovery of clusters, the formal concepts, in data and their dependencies, or attribute implications, while also enabling “visualization of formal concepts and attribute implications by a single hierarchical diagram (so-called concept lattice) [2] (p. 399); [1] (p. 4).

The elements of FCA are “formal objects” and “formal attributes” where “the adjective “formal” is used to emphasize that these are formal notions” meaning that there may be relationship between an “object” as it is commonly understood, but

reference to “object” and “attribute” may help to clarify data and its characteristics and consequently identify their relationships [7] (pp. 4–5).

The literature presents the following definition of a formal context: $K := (G, M, I)$ where G and M are sets while I is a binary relation between G and M , i.e. $I \subseteq G \times M$; the elements of G and M are called (formal) objects (Gegenstaende, the German word for objects) and (formal) attributes (Merkmale in German), and gIm , i.e. $(g, m) \in I$, read as object g has the attribute m . A formal concept of a formal context is a pair (A, B) with $A \subseteq G$, $B \subseteq M$, $A = BI$, and $B = AI$; where A is the intent and B the extent the formal concept (A, B) [11] (pp. 2–3).

Wille notes that “the aim and meaning of Formal Concept Analysis as mathematical theory of concepts and concept hierarchies is to support the rational communication of humans by mathematically developing appropriate conceptual structures which can be logically activated” [11] (p. 2).

Formal contexts are generally constructed as cross-tables. On the basis of such a formal context one may partially order concepts (sets of none, one or more objects or attributes), with respect to inclusion.

This allows for the generation of a concept lattice for some formal context and for the construction of a Hasse diagram or line diagram of that lattice, where subconcept-superconcept relations are emphasized in a tree-like visual hierarchy based on the partial order relation defined on the power sets of the two interrelated sets forming the formal context.

For the purpose of this research, we selected the introductory articles from periodicals published in the Romanian and Hungarian languages in Cluj-Napoca, in the Interbellum period. A list of key terms relating to main themes in each of the articles was selected to represent the political positioning of each of the publications. Based on these lists we constructed formal contexts with the periodicals as objects and the key terms as attributes in order to identify and analyze the different conceptual hierarchies that were constructed in the Interwar period by publications belonging to two different, yet profoundly inter-related cultures in the context of socio-political change in Cluj-Napoca, the heart of mid-twentieth century Transylvania.

3. The Selected Periodicals

Tables 1 and 2 include the periodicals selected for our study. In the first column of the tables we have introduced their titles following English translations and publication dates. Additional Romanian translation for Hungarian paper titles was also introduced. The reasons for including translations for both Romanian and Hungarian titles in English are (1) because titles may suggest some details about the periodicals. For example, “Învățătorul” translated as “The Teacher” suggests that the periodical’s interest is in education and “Korunk : világnézeti, társadalmi, tudományos és művelődési szemle” translated as “Our Times: journal of society, ideology, science and culture” is self-explanatory. However, even what seem to be neutral titles may suggest an appeal to political or historical heritage. For example, “Dacoromania” which cannot be translated differently into English may be an appeal to the Dacian

and Roman historical heritage of the Romanians. It is, however, a title published by the Romanian Language Museum, Romanian University Cluj and in this case suggests scientific inquiries of linguistic nature. Nevertheless, a title such as “Dacia” may be seen as a reference to the Dacian heritage, as the periodical does not public scientific papers. “Acțiunea românească” translated as “The Romanian Action” clearly suggests a political periodical. And (2) because it enables a better understanding of our research to the wider academia.

Table 1.

Title (Romanian)	English translation	Publication
Învățătorul	The Teacher	1919 – 1936
Dacoromania	Dacoromania	1920 – 1940
Clujul	(The) Cluj	1923 – 1937
Cultura poporului	People’s Culture	1921 – 1930
Societatea de mâine	Tomorrows Society	1924 – 1945
Gând românesc	Romanian Thought	1933 – 1940
Cultura creștină	Christian Culture	1911 – 1944
Cosânzeana	Cosânzeana	1911 – 1918; 1922 – 1928
Gândirea	Thought	1921 – 1944
Chemarea tinerimii române	Romanian Youth Calling	1926 – 1932
Dacia	Dacia	1941 – 1942
Acțiunea românească	The Romanian Action	1924 – 1931
Evoluția	The Evolution	1921 – 1923

The Romanian titles seem to be generally self-explaining and some focus on a well-defined niche such as “Cultura creștină” translated as “Christian Culture” while the Hungarian titles seem to be more general with appeal to wider readership with only one entirely niched periodical appearing in our list, “Erdélyi orvosi lap”. Also, as we can observe, most Romanian titles were published or, in some cases reissued, in the 1920s while a greater part of the Hungarian periodicals seem to have been first issued in the 1930s. These initial observations before applying FCA are quite interesting and could be further investigated.

From the titles listed in Tables 1 and 2, we have selected for our analysis the introductory articles which usually suggest the political positioning of the paper while also may offer references to different moral values and the contemporary socio-political and economic context. The following tables show exactly which articles have been selected for our study. In Table 3 we have identified the introductory articles for the Romanian periodicals while Table 4 is for the Hungarian publications.

The Romanian titles investigated generally present the introductory articles in the first issue of the newly released periodicals. However, this may not be the case for Hungarian titles where we have had to extract the introductory article from different issues. For example, for Új Világ we have selected two articles. The first, “A mi régi... (Ours old...)” did note some information on the paper, yet the second article “Mit várhat az erdélyi magyarság a mi programunktól? (What can the Hungarians from Ardeal expect from our program?)” as the title suggests, offers information about the general editorial view of the paper.

Table 2.

Title (Hungarian)	Romanian translation	English translation	Publication
Barátság: politikai, irodalmi és társadalmi lap	Prietenia: revistă de politică, literatură și societate	Friendship: the journal of politics, literature and society	1939 – 1940
Déli hirlap: pártoktól és érdekcsoportoktól független politikai napilap	Jurnalul de Sud: ziar independent de orice grup de interes sau partid	South Paper: independent newspaper of any interest group or political party	1930
Erdélyi színpad és mozi: színházi, mozi és kritikai hetilap	Scena și Cinematograful Ardelean; săptămânal de teatru, cinema și critică	Ardelean Scene and Cinematography: weekly paper on cinema and theater review	1932 – 1934
Erdélyi iskola: Katholikus nevelésügyi folyóirat	Scoala Ardeleană: revista de pedagogie romano-catolică	Ardelean School: journal of Roman-Catholic pedagogy	1933 – 1944
Erdélyi orvosi lap	Revista de medicin ardeleană	Ardelean Journal of Medicine	1920 – 1925
Erdélyi futár	Curierul ardelean	Ardelean Currier	1927 – 1940
Friss Hírek: Magyar politikai napilap	Știri Proaspete: Cotidian maghiar de politică	Fresh News: Hungarian newspaper of politics	1931 – 1933
Független újság	Ziarul independent	The Independent Newspaper	
Kolozsvári friss újság: független politikai napilap	Ziarul Proaspăt de Cluj: cotidian independent de politică	Fresh Newspaper of Cluj: independent political paper	1929 – 1935
Igazság: politikai és irodalmi hetilap	Adevărul: săptămânal de politică și literatură	The Truth: weekly paper of politics and literature	1923
Keleti újság	Ziarul de Est	East Paper	1919 – 1944
Keresztény Magvető	Semănătorul Creștin	The Christian Sower	1922
Kolozsvári estilap	Ziarul de seară Clujean	Cluj Evening Paper	1933 – 1944
Korunk: világnézeti, társadalmi, tudományos és művelődési szemle	Timpurile noastre: Jurnal de societate, ideologie, știință și cultură	Our Times: journal of society, ideology, science and culture	1926 – 1940
Magyar nép: politikai, gazdasági, szépirodalmi képes hetilap	Poporul maghiar: săptămânal ilustrat de politică, economie și literatură.	The Hungarian People: illustrated weekly of politics, economy and literature	1921 – 1944
Magyar Újság	Ziarul Maghiar	Hungarian Newspaper	1933 – 1944
Népújság: független politikai néplap	Ziarul Popular: jurnal popular politic independent	Popular Newspaper: independent journal of politics	1924 – 1925
Pásztortűz naptár	Agenda Flacăra păstorului	Shepherd's Flame	1930
Sorai Ujsag	Ziarul de Sora	Sora Newspaper	
Új Világ	Lumea nouă	The New World	1919
Vasarnap: képes hetilap	Duminica: săptămânal ilustrat	Sunday: illustrated weekly	1923

The titles of the Romanian introductory articles seem neutral and focus toward the readers. In this case, we cannot find any political references, direct or indirect, to their socio-political and/or economic context. Concepts are rather absent, except “the evolution”, the introductory article of the publication with the same name. In the case of the Hungarian introductory articles, however, their titles frequently offer

concepts and refer directly or indirectly to their contemporary socio-political and/or economic context. For example, “friendship” appearing in the title of *Barátság*, a political paper, may suggest political change and adaptation to the new political context. Another example is *Sórai Újság* with an introductory article title “For liberty”. Furthermore, we have titles in political periodicals which refer to certain emotional reactions. For example *Friss Hirek*, a political journal, notes the title “Brothers in suffering and misery” and so does *Független újság* with the title “Sorrow and persistence” while *Vasarnap* introduces the term “hate” in its introductory article titled “We do not hate each other anymore.”

It is not our intent to further analyze these titles in the wider political context of the Interbellum in Cluj-Napoca. However, these may be interesting preliminary findings to be used for further research. For example, based on these initial findings one could formulate the research hypothesis that due to seemingly neutral article titles of the Romanian periodicals and the more complex formulating of Hungarian introductory article titles, investigations could be made into the development of the journalistic traditions in both cases. Another research example, also by using our initial findings, would be based on political writing styles of Hungarian and Romanian periodicals.

It is also imperative to note that for some of the Hungarian titles we did not have access to the first issue of a periodical as they were missing from the archive. As a result, we replaced the potential program article from the first issue, where we assumed it would have been published, with another article which detailed the political positioning of the paper.

Table 3.

Title	Original title	Translated title
Învățătorul	Programul nostru	Our programme
Dacoromania	Muzeul limbii române	Romania Language Museum
Clujul	Pornim la drum	We begin our journey
Cultura poporului	Dragii nostri cetitori	Our dear readers
Societatea de mâine	Chemarea noastră	Our call
Gând românesc	Cuvânt înainte	Foreward
Cultura creștină	Cătră cetitori	To the readers
Cosânzeana	Un cuvânt către cetitori	A word for the readers
Gândirea	Cuvinte pentru drum	Words for the road ahead
Chemarea tinerimii române	Chemare către tinerimea română	A call to the Romanian youth
Dacia	Cuvinte pentru început	Words at the beginning
Acțiunea românească	Cuvântul Acțiunii Românești către cetitori	A word from the Romanian Action to the readers
Evoluția	Evoluția	The Evolution

Table 4.

Title	Original title	Romanian translation	English translation
Barátság: politikai, irodalmi és társadalmi lap	Barátság	Prietenia	The Friendship
Déli hirlap: pártoktól és érdekcsoportoktól független politikai napilap	Érezzük és tudjuk	Simțim și știm	We know and we feel
Erdélyi színpad és mozi: színházi, mozi és kritikai hetilap	Megnyílnak a kolozsvári magyar színház kapui	Se deschid porțile Teatrului Maghiar la Cluj	The gates are opening for the Hungarian Theater in Cluj
Erdélyi iskola: Katolikus nevelésügyi folyóirat	Erdelyi Iskola A hitvallásos iskolák és a nemzeti érzés	Școala ardeleană Școlile bisericești și sentimentul național	Ardelean School Church schools and national feeling
Erdélyi orvosi lap	-	-	-
Erdélyi futár	Beköszöntő	Salut introductiv	Introductory salute
Friss Hírek: Magyar politikai napilap	Köszöntjük az olvasót Testvérek a szenvedésben és nyomorúságban	Îl salutăm pe cititor Frați în suferință și în mizerie	We salute the reader Brothers in suffering and misery
Független újság	Csüggedni vagy feszülni Nem akarunk képviselők lenni	Întristare sau stăruință Nu vrem să fim reprezentanți	Sorrow or persistence We do not want to be represented
Kolozsvári friss újság: független politikai napilap	Utunkban	În calea noastră	In our path
Igazság: politikai és irodalmi hetilap	Keresztény sajtót!	Presa creștină!	The Christian press!
Keleti újság	Alkotni	A crea	To create
Keresztény Magvető	Istenországa tibennetek van	Țara lui Dumnezeu se găsește în voi	The land of God is in you
Kolozsvári estilap	Nincs megállás	Fără oprire	Without stopping
Korunk: világnézeti, társadalmi, tudományos és művelődési szemle	Beköszöntő	Salut introductiv	Introductory salute
Magyar nép: politikai, gazdasági, szépirodalmi képes hetilap	Üzenet	Mesaj	Message
Magyar Újság	Új Lap	Foaie nouă	New sheet
Népújság: független politikai néplap	Beszélgessünk	Să vorbim	Let us talk
Pásztortűz naptár	Mélyen tisztelt olvasó	Stimate cititorule	Esteemed reader
Sórai Újság	A szabadságért	Pentru libertate	For liberty
Új Világ	A mi régi... Mit várhat az erdélyi magyarság a mi programunktól ?	Vechiul nostru... Ce pot să aștepte maghiarii din Ardeal de la programul nostru?	Ours old... What can the Hungarians from Ardeal expect from our program?
Vasarnap: képes hetilap	Nem gyűlöljük többé egymást	Nu ne mai urâm unii pe ceilalți	We do not hate each other anymore

4. Applying FCA

In the first stage of the research our focus was especially on Romanian periodicals published between 1919 and 1940, for reasons already mentioned. Our intent was to identify co-occurrences in concepts and observe eventual patterns and similarities in political positioning due to the general increase in the number of titles after the Great Union and the 1923 constitution. This is further discussed below following Fig. 1. Second, after initial results, we have continued our research on Hungarian papers. We have selected a number of keywords referring to the main theme of the introductory article in each of the selected Romanian and Hungarian publications. Terms such as “nation”, “people”, “Romanian”, “progress”, “ours”, “language”, “Dacia”, “enemies”, “tradition”, “culture”, “morality”, “future”, “Christian”, “nationalism”, “conscience”, “Ardeal” occurred frequently in a considerable number of articles in Romanian publications.

The Hungarian language publications featured common terms and themes “nation”, “people”, “language”, “ours”, “conscience”, “culture”, “future”, “Ardeal”, but also set of different terms such as “work”, “European”, “fate”, “honor”, “unity”, “hatred”, “peace” or “Church”.

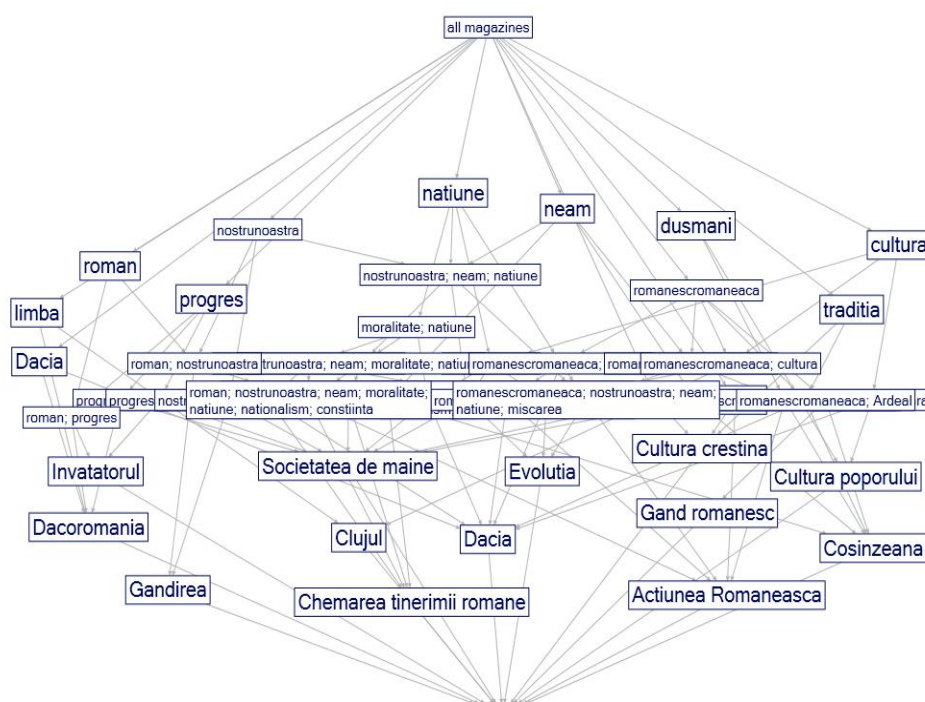


Fig. 1. Line diagram of concept lattice including Romanian language magazines.

We constructed three formal contexts on the basis of the occurrence of such terms

The conceptual hierarchy in Fig. 2 represents the formal context constructed using key terms identified in introductory articles selected from Hungarian language periodicals.

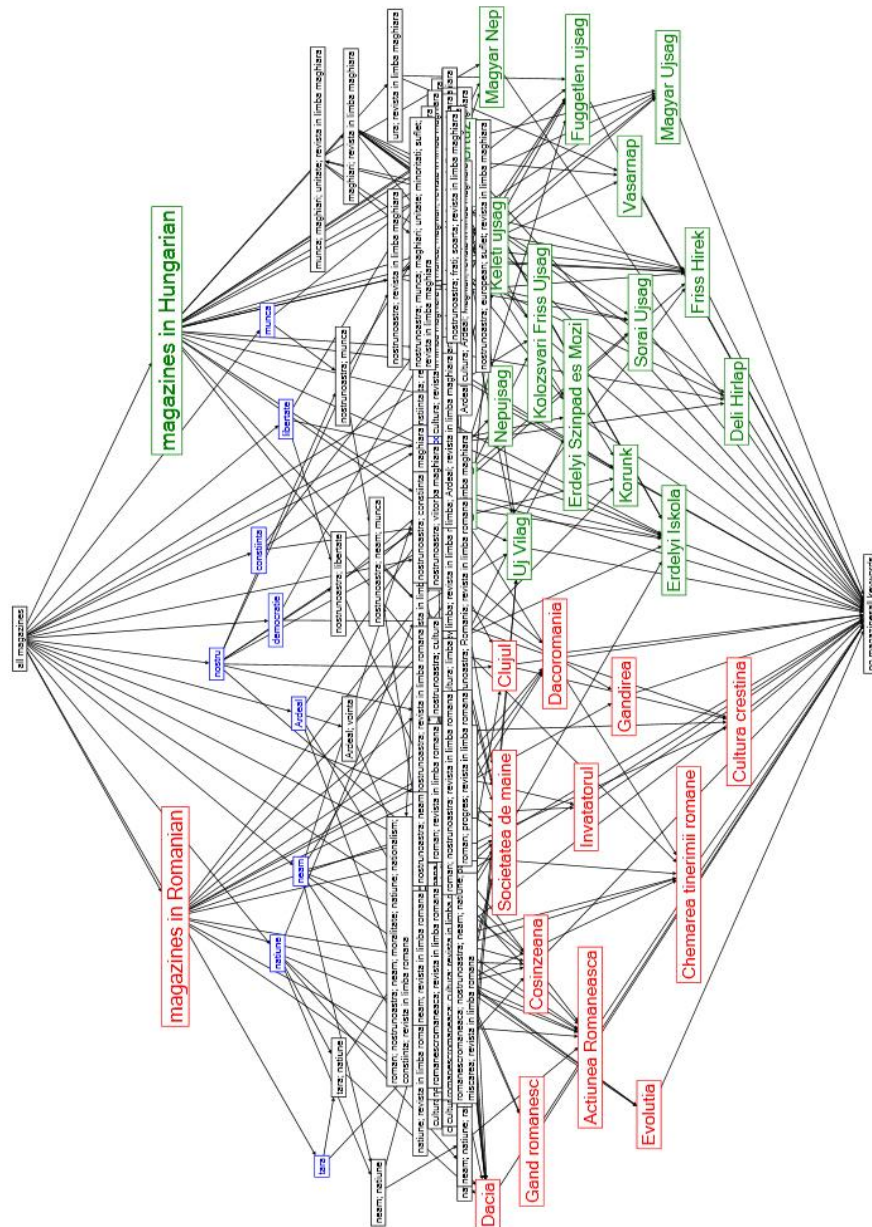


Fig. 3. Line diagram of concept lattice including Romanian and Hungarian language magazines.

The term “Hungarians” is very frequently used in relation to the term “work”. Although some other terms such as “nation”, “conscience”, “future”, “Ardeal”, “nationalism”, “kin” are common to both sets of periodicals, the term “work” seems to occur more prominently only in the set of Hungarian language periodicals. “Unity” is also a central theme in these articles and we can clearly see in the conceptual hierarchy that one of the more clearly defined and frequent subconcepts of the superconcepts “Hungarians” and “work” is a subconcept defined by the triple (“Hungarians”, “work”, “unity”).

While Romanian language periodicals made mention of “enemies”, Hungarian language periodicals mention “friends”, but also with a significant rate of occurrence “hatred”. There are frequent mentions of the “Ardeal” region in subconcepts that also contain the terms discussed above.

While Romanian language periodicals invoked “morality” and “conscience” in the context of a “Christian” “nation” or “kin”, Hungarian language periodicals also make mention of the “Church”, “peace”, “honor” and “fate” – often forming formal concepts with deictic formulas (“our/s”).

It is interesting to notice how in Hungarian language periodicals there are references to the “European” context.

The third figure is based on formal context constructed by combining the two sets of periodicals and excluding the attributes with low occurrence. The deictic formula “our/s” seems to be widely used as a way of framing themes and concepts with respect to the readers.

While “nation”, “kin”, “Ardeal”, “conscience”, “freedom” and “Romanian”/ “Hungarian” are frequent terms in both sets, Romanian language periodicals also contain the terms “country” and “morality”, while “Hungarian” periodicals make more use of terms like “work” and “unity”. The concept defined by the pair (“Ardeal”, “will”) seems to appear in both sets.

The more specific subconcepts that are determined by these broader concepts are sometimes hard to inter-relate. Using FCA, one may name pairs or triples, associate them with a certain area of ideological discourse and then try to analyze the position of publications in such a conceptual hierarchy.

Given the historical context, one might expect a large number of terms and concepts that relate to nationalist ideology. However, it is interesting to notice what formal concepts are defined by the co-occurrences of such indicators, what concepts relating to cultural values are specific to the two sets of periodicals published in Romanian and Hungarian respectively in the Interbellum period.

5. Conclusions

As noted in the introductory chapter, FCA allows for knowledge representation and reveals patterns of relationships between concepts. Initially, by using FCA we have identified a series of key terms which appear both in Romanian and Hungarian publications. In the case of Romanian periodicals, we have identified such frequently employed concepts such as “nation”, “people”, “Romanian”, “progress”,

“ours”, “language”, “Dacia”, “enemies”, “tradition”, “culture”, “morality”, “future”, “Christian”, “nationalism”, “conscience”, “Ardeal”, which have also been found in Hungarian publications while, for the later, additional concept have been identified as frequently used: “European”, “fate”, “hatred”, “peace” or “Church”, “work. What we have found in the case of Romanian periodicals is a constant reference to the concept of “nation” / “kin” while a repeated use of diectics such as “ours” has also been identified. Furthermore, Romanian publications refer to the Romanian language and mention the historical borders of Dacia while also mentioning progress. As previously noted, publications address issues such as Romanian “culture” and “tradition” which are under the threat of “enemies” who, consequently, may endanger “our traditional Romanian culture.” This probably suggests a conservative political positioning.

In Hungarian titles, one of the most frequently term used was “Hungarians” used in relation to “work”. Other terms such as “nation”, “conscience”, “future”, “Ardeal” can also be found. However, one important theme with strong re-occurrence is “unity”. Furthermore, Hungarian language periodicals refer to “Church”, “honor” and “fate”. While in the Romanian case, we have discovered a conservative political positioning, the Hungarian case presents more a search for adaptation rather than a political positioning.

More research into the causes determining the conservative positioning of Romanian periodicals and the search for adaptation to the new political consequences are, of course, necessary but are beyond the intent of this paper. However, FCA has shown to be useful in intercultural studies and our research has also identified several additional research ideas worth pursuing based on our initial findings.

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