Negotiating the End of Transition: A Network Approach to Local Action in Political Discourse Dynamics, Hungary 1997[1]

Balázs Vedres
Columbia University

Péter Csigó
Ecole des Hautes Etudes en Sciences Sociales

The initial question of this paper is how the large scale social process of postsocialist transition ends. We argue that transition is closed by discursive innovations in the political field, rather than just spontaneous crystallization. The political field is depicted as a dynamic symbolic structure that is an arena of local action. First the possible discourse positions are extracted from the two mode network of speech acts and statements. Then using these typical positions the dynamics of responses and responses to responses is explored. We give an account of an emergent univocal government position that represents a successful role claim (an exit from the loops of local action) on the government's side to coherently frame the end of transition.

INTRODUCTION

There is a bias in dynamic sociology towards focusing on the start of major social processes rather than their end. A revolution breaking out, the birth of the Renaissance or the adoption of a new organizational form seems to be a more exciting and rewarding research area than the end of such processes. It is rare that we see sociological accounts on how a revolution consolidates into order, how new social and cultural arrangements or organizational forms become old. How do large scale and slow social processes end? Can they end at all? Or is it only the blast of some yet newer processes that push the old ones into becoming history? We argue that the consolidation of social forms into order is not a trivial thus negligible area for social research. Crystallization is an often used and misleading metaphor for consolidation suggesting some automatic mechanisms determining how social forms will

take shape once shaken up by major initial events. We take the position instead that in social consolidation much is at stake: the opportunity to define and shape new social reality. The social forms shook up and thrown into the air by major upheavals present a unique opportunity for recombining and reconceptualizing these forms in a new way that serves the interest of the recombining actors against their opponents. Once consolidation is achieved and actors occupy roles in the new order, the cost of shaping social reality increases drastically: then the price to pay is a new upheaval rather than local discursive actions (Leifer 1988).

Our case concerns one of the major challenges for dynamic sociology: the transitions after socialism. The starting points of transition processes (the collapse of the Berlin wall or the Soviet Union, the velvet smooth revolutions in Eastern Europe) are well analyzed and documented. However, the question of how this transition ends is a question practically left unasked. Beyond some articles Eastern European social science journals little work is done to describe possible terminal events or endplays of transition. In Hungary the events that ignited transition were to the most part the roundtable debates (Stark and Laszlo Bruszt 1998). We argue that the ending events of the transition from socialism are also debates, discourse events. The end of transition is not an inevitable and predictable final stage, but a result of discursive processes that we conceptualize as local action. In this paper we analyze a discursive attempt to end economic transition. However, we do not argue that the transition is over (or was over with the discursive innovations that we observed), we only document one of the first attempts to draw an end to it.

The aim of this paper is to analyze a case of political discourse dynamics to show how speech acts and concepts constitute frames and discourse positions and how these discourse positions are taken over time. First we use network analysis to reveal frames and positions in the discourse. To identify frames and positions we attend to the patterns of speech acts rather than use some interpretative framework to qualitatively delineate them. We employ qualitative coding at the most elementary level: on the level of concepts, classifying seven thousand statements made in the discourse into two hundred ideal typical statements – the elements of the discourse. After charting the overall structure of the discourse network we attend to the dynamics of this network. We suggest to think about the political field as a constantly morphing and oscillating relational system rather than frozen and pre-determined. The political field is a social arena of constantly claiming and questioning roles and acting on opportunities rather than constantly reinforcing or acting on set roles and social positions. By constructing a

narrative of the four months of discourse events we distill the regularities of discourse dynamics, the main contours of a field constantly in motion.

Our case is the economic policy discourse of consolidation in Hungary, spring of 1997. During this period government participants of the discourse went from defensive to offensive using the discursive innovation of a multivocal framing of the social and economic setting, economic policy and the dynamics of economic transformation organized around the concept of economic growth. We use methodologies from social network analysis that we fit to the peculiarities of discourse dynamics to analyze the two mode network of discursive acts and discursive elements (political statements). To uncover dynamics, structural changes due to discursive action we employ a decay function approach. A key idea of our dynamic analytic strategy is the trade-off between punctuality and indeterminacy: the closer we "zoom" on actions and small time periods the less we see of momentum, structural change. As a result of the relational mapping of discourse dynamics we construct a narrative of discursive innovation as strategic shifting and using of the rules of the field.

A relational view of political discourse

One central aim of this paper is to find and establish bridges between the symbolic regularities of discourse and the dynamic regularities of the social. In this chapter we attend to approaches of discourse structure, while in the next we explore ways of bringing together discourse structures, regularities and social roles and positions.

Michel Foucault's theory of discourse (Foucault 1972) – that he terms as "historical" discourse analysis – is a network conceptualization of discourse. Although the discourses analyzed by Foucault are not about politics, his approach is a well suited starting point in formulating our analytical strategy. Foucault proposes to think of various discourses as "monuments", "in their own right". A discourse is depicted as a field composed by statements. He asserts that the aim of discourse analysis is to describe the *principles of the dispersion* of statements in the field of the discourse. The definition of a statement equals the identification of its position in the space formed by the other statements of discourse. We can define a statement only by describing "how it is isolated in the general dispersion of statements". The meaning of a statement derives from the "associated field" formed in the discourse, and not from formal, a priori principles (references to page numbers to be added). "The associated field that turns a sentence into a statement, and which provides it with a particular context, a specific representative content, forms a complex web….There is no statement that does not presuppose others; there is no statement that is not surrounded by a field of coexistences… If one can

speak of a statement, it is because a sentence (a proposition) figures at a definite point, with a specific position, in an enunciative network, that extends beyond it." (references to page numbers to be added)

Following Foucault's program our first analytical step should be entering the enunciative network, mapping the relations of the field of the discourse. How could we accomplish this mapping? A recent development in the sociology of culture is the network view of symbolic fields. Conceptual network mapping as an alternative to content analysis was proposed by Kathleen Carley (Carley and Michael Palmquist 1992; Hill and Cathleen Carley 1999). Here a conceptual network is a one mode graph indicating which concept is connected to others. Other approaches aim at transposing narratives into narrative networks where narrated events are linked in a directed one mode graph, with directionality indicating narrative order (Bearman, Robert Faris, and James Moody 1999; Bearman and Katherine Stovel 2000).

In their programmatic paper, Emirbayer and Goodwin calls for the integration of the symbolic dimension and the social network dimension while retaining their analytic separation (Emirbayer and Jeff Goodwin 1994). While they agree that "culture and social relations empirically interpenetrate with and mutually condition one another so thoroughly that it is well-nigh impossible to conceive of one without the other" they also point out that "cultural discourses, narratives, and idioms are also *analytically autonomous* with respect to network patterns of social relationships. These symbolic formations have emergent properties – an internal logic and organization of their own – that require that they be conceptualized as «cultural structures»". (italics in original, pp. 1438) However, Emirbayer and Goodwin do not give a clear program on how to achieve both the integrity and the analytic separation of the social and the symbolic dimension.

A two mode network approach to symbols seems to be one especially relevant approach for representing the duality of the social and cultural dimensions. The duality idea is formulated in various ways in the network approaches to discourse. Ronald Breiger, a proponent of network duality in social networks (Breiger 1974) proposes to think in terms of duality of actors and actions or actors and their opinions (Breiger 2000). The duality idea is central to the works of John Mohr in mapping symbolic positions in social policy (Mohr 1994; Mohr and Duquenne V. 1997) and university discourse (Mohr and Helene K. Lee 2000).

One-mode network approaches to discourse are of a lesser value to us than two mode network approaches that incorporate duality. It is only because statements are linked together in instances of speaking (speech acts) that we can identify the enunciative network. Because symbols themselves

are not capable of establishing ties to one another, a one mode network of symbols is only a projection of an underlying two mode network, a network that captures connectivity and the acts of connecting as well. This framework enables us to reconcile focus on symbolic structures and social roles into a single analytic strategy. In our network model one mode is discursive elements, while the other is speech acts.

We see the two mode nature of symbolic networks as a key distinction from social networks. There are some additional features of symbolic networks in discursive fields that are important for charting discourse dynamics. Ties in symbolic networks are cheaper to establish than ties in social networks, and probably symbolic ties have shorter life span too. On the one hand establishing a tie is as easy as uttering sentences, on the other hand these ties are not as easy to dissolve consciously as to dissolve a friendship tie. It is only some decay mechanism through which symbolic network ties disappear. These ties are stored in the discourse, the public consciousness that has a finite storage capacity. New ties overwrite the vanishing old ones. Ties in discourse networks (especially in political discourse) have higher visibility than ties in human networks. In political discourse there is always a public that "consumes" the symbolic links created by actors in the field. A friendship tie between A and B is probably not visible beyond the friends of A and B. A symbolic tie established between concept A and B is probably visible to all of the actors in the discourse. Though actor might not conceptualize the discourse in network terms, they see the entire network before them. To some extent it knowing the conceptual web is a precondition for talking.

Bringing social structure into discourse

We have chosen a two mode network representation of the discourse to chart dynamics. How can we link this symbolic network approach to the social dimension? What does the social dimension mean in political discourse?

The concept of the political or discursive field was first formulated by Pierre Bourdieu (Bourdieu 1991) who depicts it as "the site in which, through the competition of agents who are involved in it, political products, issues, programmes, analyses, commentaries, comments and events are created - products between which ordinary citizens ... have to choose". In political discourse, the structure of competing political products means the structure of competing "symbolic positions", "forms of knowledge" offered for the society about social-economic standing. "Symbolic positions" embody coherent, strongly simplified, and mutually excluding images of the whole problematic, thus they represent opposed "social worlds". What is at stake is the definition of the limit between "thinkable" and "non-thinkable". (Pages of

reference to be specified.) Knowledge production in the political field – based on Bourdieu's theory – is not a unison transmission of signals but rather a polyphone discursive battle with mutually exclusive positions taken by various political groups. The political field is densely populated – both in terms of the number of actors speaking and in terms of the degree of freedom to maneuver along discursive positions. The mutually exclusive nature of these positions leaves little room for innovation, new forms of knowledge about the social and economic world. The social dimension is incorporated here as rather deterministic social positions, social backgrounds that determine discourse participation.

The determinism of the social background in Bourdieu's political field is in sharp contrast with the dominant American approach to discourse. The framing approach is a mirror image to the Bourdieuian one: discursive positions are not mutually exclusive and deterministic, but rather products of experimentation. Actors, as framing entrepreneurs are free to combine discursive elements into any new frame. Successful frames are accepted and spread and used until they lose persuasive power, while unsuccessful frames are not spread and fade out quickly. The dominant metaphors in the framing model for political discourse are entrepreneurial: discourse is a market of competing frames produced by framing entrepreneurs (Snow, Burke Rochford, Steven K. Worden, and Robert D. Benford 1986). Charles Tilly used a similar approach to analyze contentious gatherings in Britain from the late eighteenth and early nineteenth century to map the claim-repertoires of various social groups (Tilly 1997a). The fine grained classification scheme with 64 social groups enables us to see that the pattern of these groups making claim on each other does not show deeply entrenched fronts of a discursive battle. This pattern differs considerably by kinds of claims and over time, while one discursive position – making claims on the parliament – becomes highly central over the years, as a successful discursive innovation.

The approaches of sociology to the study of language give us powerful tools to incorporate a relational view on discourse positions. However they assume that the social structure is constant and set a-priori to discourse. We argue that in the case of the political field discourse roles are not pre-set but they are acquired through maneuvering across discourse strategies. The concept of local action can help illuminate these positionings in political discourse.

The imagery of local action lends itself readily suitable for theorizing about discourse dynamics: "The analysis centers on the dyad (actors A and B), with a »public« in the background." (Leifer 1988)(pp. 866). However, our empirical case readily demonstrates the difficulties in applying the imagery of local action. Let us imagine the ideal scenario of local action as a boxing

match. There is a dyad in the spotlight jumping around quickly alternating between the roles of attack and defense. In the background there is the silent public and maybe a jury that evaluates the moves of the boxers and acknowledges successful role claims. What we find in our case is a much more tumultuous match. There are not only two but many boxers in the ring. Moreover it is not always clear who is a member of the audience, the jury or a boxing team. Beyond this confusion about the boundaries between a public and the actors the public is unable to gain immediate understanding about the events in the ring. What the public gets about the events is all through a commentators who themselves can be very much involved in fights.

A local action model to political discourse

We use a dynamic two mode network approach to chart the local action dynamics of political discourse. We use a blockmodel approach to map positions and frames in the discourse. Our model of discourse dynamics is that political actors use positions from disconnected frames as local action. When an opportunity arises they formulate a position where previously unconnected frames are connected. Our approach is different from a framing approach. A framing approach would suggest that political actors formulate their unified, master frame-position without hesitation. We argue that formulating a unified master frame involves risk: a successful critique of that frame leaves political actors in an inferior role. In our case political actors seek to occupy the role of the "one who defines the new rules". This role claim can fail. Government political actors can be successfully put into a role of a failed government by the opposition, if the new rules they define can be framed by the opposition as a crisis. In this case the government can be depicted as leading the economy to the wrong path. By successfully framing a crisis, the opposition can claim the role of the potential new government that will cure the crisis and realize the end of transition. The opposition can also fail in framing a crisis. It can be depicted as destructive and merely power-hungry by the government side.

Discourse actors can not afford to remain silent if they judge it is too soon to successfully claim a role. Remaining silent is in itself equal to being defeated. Remaining silent also deprives the actor of provoking responses thus probing the strategy of the other side. This means that political actors need to say something even if they are not claiming a role. Changing frames too frequently can also be dangerous: it can be perceived and stigmatized as lack of cohesion. Our proposition is that political actors use disconnected frames until they see the opportunity to connect them into a unified frame. Even if a disconnected frame is successfully attacked by the other side, political actors can switch to other frames.

DATA

The choice of units of analysis is a key step in any analytical strategy, in our case of mapping discourse dynamics the careful definition of particles is crucial. On one hand methodological anthropocentrism might hide parts of discourse processes by suppressing errors and multivocality on the level of human actors (Tilly 1997b). On the other hand a too close focus on discursive elements (symbols, statements, utterances) as units of analysis might lead us away from action, hiding discourse processes again. We have chosen both discursive acts and symbols as our particles, units of analysis.

Casing is a crucial step in answering our questions. There are two nested tasks concerning casing: the general outline or location of the discourse we study, and the demarcation of the boundaries of our case. The general location of our case is Hungary, early 1997. This period can first of all be characterized by deep uncertainties regarding the shapes, rules and solidity of the economic and social system. Eight years after the political collapse of socialism it was still far from certain what shape a new (probably capitalist) economy will take, and when it will be consolidated. With the initial enthusiasm and self confidence of hundred-day programs far behind, the everyday experience of the economy was shaped by repeated measures of restrictions paired by a deep transitory recession. The discourse on economic policy was characterized by deep entrenchment of government and opposition, with the government defending restriction measures and the opposition habitually rejecting them, but none of them were in a position to offer visions of the system emerging. It was only in the spring of 1997 when a new opportunity first opened up for outlining such visions, an opportunity to discursively end the period of transition. One of the key moments of this change was when the signs of economic growth first became evident. This happened at the end of the first quarter on 1997, at the end of March.

So the specific boundaries of our case in time contain this first shift of the discourse towards defining the new economy. We analyze the economic policy discourse from the 1st of March to the 30th of June 1997. Beyond setting the longitudinal boundaries of our case horizontal boundaries needed to be defined as well. We analyze at the economic policy discourse that centers on consolidation, stabilization of a new economic-societal order.
We have collected all articles from the three major Hungarian newspapers that mentioned economic policy, its social consequences or the results of stabilization etc. in our period: from March 1, 19997 to June 30, 1997. In the first round we separated the discourse centered on stabilization from similar discourses, such as the discourse of privatization, globalization or public finances reform. In many cases we find statements from several discourses in one article, so we set two basic principles in the selection. First we selected

articles according to the most represented discourse in them. Second, in the case of articles or interviews where the actors tried to touch as many issues as they could, we selected the statements concerned with economic policy. We narrowed our population of articles in two rounds, finally gaining 620 articles.

In the second round we coded the statements. We distinguished statements and utterances. We defined "utterance" the "empirically observable" parts of texts. An utterance as we defined it is something similar to the "lexias" of Barthes (reference to be added). On the other hand we called "statements" the common content of similar utterances. We considered statements the essential part of the individually different utterances. In an iterative process the material was read first to define the main aspects of defining statements, second to define statements. The texts were re-coded again and again until the system of statements was sensitive enough to reproduce large part of the utterances. At this point the material was coded by these, now crystallized system of statements.

On the onset we had a database of 8632 utterances from the 620 articles. In this database 1400 statements (that is types of utterances) were identified with the initial qualitative coding process. To be able to identify the patterns in the discursive field we further reduced this statement set. In the final set of codes (after excluding statements with a frequency of utterances less than 5 and merging similar statements) we created 180 statements that covered 79% of the whole discourse (we are able to classify 6822 utterances out of the 8632).

We have also identified speech acts, which are occasions when one actor speaks in a newspaper. A speech act is usually equal to an article. However, there were some occasions when there were two actors talking in an article – we have separated these to become two speech acts. As a result we had data about 759 speech acts.

MAPPING THE DISCURSIVE FIELD

The first step in our analytic strategy is to explore the relational data that represent the four months of discourse that we study. Our goal is to drastically reduce the dimensions of this dataset with minimal loss of information. We aim at mapping typical frames and positions that can reproduce the discourse. Our approach is relational: we don't pre-sort positions and frames based on attributes. We cluster statements into frames and speech acts into positions based solely on the patterns of language use. By this approach we enable ourselves to recognize the absence of pattern as well.

The first hypothesis that we test is that there are regularities in the discourse. By regularities we mean a robust pattern in the use of statements. Discourse regularities mean that statements are not used or omitted together randomly: there are statements that never appear together, or there are statements with a tendency to appear together. To operationalize this idea we use the notion of structural equivalence. If two statements are always used together or omitted together then they are structurally equivalent. Each statement of the 180 has a profile across the 759 instances.

A typical network blockmodel builds from a one-mode network (that is from a square matrix). In our case there are two modes to consider. The structural equivalence blockmodel of one mode (statements) does not determine the structuring of the other mode (speech acts). Statements can be used (or avoided) together in many ways in various positions of the discourse. It is only the deterministic extreme model where the blocking of positions maps one-to-one onto the blocking of statements. This means that profiles of statements along positions and profiles of positions along statements needs separate attention. The first highlights how statements are used or avoided together, while the second shows the actual ways in which these uses or avoidances take place. Speech acts can fit into frames in many ways. Positions as structurally equivalent clusters of speech acts represent typical ways of actual co-usage or co-omission of statements. Mapping structurally equivalent statements (frames) reveals the rules of the game, while mapping structurally equivalent speech acts (positions) shows the actual playing field.

We have chosen correlation as a measure of structural similarity of statement and position profiles to keep our focus on the patterns of co-appearance minimizing the effects of differences in statement or position centrality[2]. After computing the correlations among the 180 statements and among the 759 positions we have used three clustering algorithms (CONCOR, complete link hierarchical clustering and average link hierarchical clustering) to find blocks of statements and blocks of speech acts with typical patterns. The eight cluster solution of CONCOR for statements and the nine cluster solution of CONCOR for speech acts were the best interpretable. We compared the eight and nine cluster solutions of the other two methods to the CONCOR blockings (see appendix *A* for fit statistics).

---

[2] The other common alternative measure of structural equivalence is euclidean distance that distinguishes between more and less central nodes in the network even if they are otherwise equivalent. This effect is even stronger with valued data that we have. Correlation normalizes these centrality effects in the sense that is normalizes two profiles to have an equal centrality. Correlation equals to euclidean distance computed on Z scores of the original profile data.

Based on fit and interpretation CONCOR seemed to be the best choice for both the statement and speech act partitioning.

There are two consequences of our fit statistics. One is that the hypothesis that there are rules in the discourse is probably true. The R squared for the statements and the speech acts blockmodel are 39% and 29% respectively, that indicates a strong fit. The other consequence is that CONCOR provides the best fitting partition, which is probably due to the fact that the image of data inherent in the CONCOR algorithm maps well to our actual data. One basic feature of CONCOR is that it proceeds by binary splits: it divides the initial correlation matrix into two sub-matrices, and then subdivides these into two (if requested). The fact that CONCOR provides the best fitting solution probably corresponds to the fact that our data is characterized by binary divisions. The first division on both sides is between the government and the opposition side. If we had stopped at this two by two blockmodel, our image matrix would show government statements used in government speech acts and opposition statements used in opposition speech acts, while both sides omit the statements of the other side. Figure 2 shows the division trees on both modes of the network.

Statements

		A	B	C	D	E	F	G	H
		18	23	27	18	30	19	24	21
IX		32 / 1.68	16 / 0.80	6 / 0.19	0 / 0.00	230 / 8.77	169 / 11.63	123 / 5.26	43 / 3.07
VIII		25 / 2.08	25 / 1.36	5 / 0.37	4 / 0.21	455 / 19.46	330 / 22.37	158 / 9.74	61 / 3.63
VII		39 / 2.12	8 / 0.24	4 / 0.17	9 / 0.44	118 / 3.82	57 / 2.96	316 / 15.40	202 / 11.24
VI		17 / 1.65	2 / 0.32	6 / 0.34	17 / 1.65	89 / 4.81	61 / 5.85	175 / 11.50	232 / 20.02
V		15 / 1.39	26 / 1.83	122 / 7.35	494 / 41.32	35 / 0.26	2 / 0.08	24 / 0.65	13 / 0.82
IV		63 / 3.51	159 / 6.97	278 / 11.43	349 / 20.87	75 / 1.84	2 / 0.10	25 / 1.66	20 / 1.20
III		44 / 2.74	43 / 2.30	347 / 16.47	128 / 8.57	32 / 0.80	0 / 0.00	5 / 0.25	7 / 0.40
II		197 / 7.36	454 / 16.14	158 / 5.17	28 / 1.25	19 / 0.31	1 / 0.04	1 / 0.06	4 / 0.15
I		358 / 23.46	66 / 4.03	123 / 6.49	47 / 3.22	15 / 0.29	5 / 0.32	6 / 0.15	4 / 0.24

Tree nodes (Statements): 184 → 86, 94; 86 → 41, 45; 94 → 49, 45.

Speech acts tree nodes: 759 → 299, 460; 299 → 156, 143; 156 → 76, 80; 143 → 89, 54; 460 → 250, 210; 250 → 167, 83; 167 → 64, 103; 210 → 129, 81.

Figure 1: The CONCOR division trees for the statements and speech acts in the discourse. First rows of cells indicate the number of statements; the second rows indicate block densities in percentages.

Patterning in the data of interest to us goes beyond the two block level. We begin by introducing the blocking on the statements' side. Blocks of statements indicate tendencies in co-mentioning and co-omitting. We think of these statement groupings as frames of the discourse. After this with our knowledge about the frames we will describe the blocking of speech acts into positions.

Blocks of statements: the frames of the discourse

We start by the introduction of discourse frames labeled from *A* through *H*. First let us introduce the four blocks (*A*, *B*, *C* and *D*) which are on the government side.

Frame *A* groups together statements on the inevitability and necessity of restrictive economic policy measures. There are 18 statements in this block mentioned altogether 738 times. The two outstandingly central statements

are: 1. "Restrictions are necessary, the economic policy is unpopular but inevitable." with 124 mentions and 2. "There was also a Klaus-package in the Czech Republic." with 102 mentions. The reference to the restrictions in the Czech Republic serves as a justification of the similar restrictive package two years earlier in Hungary. The other statements describe the new economy as the end of state provisions and care. In capitalism one can not expect and demand the same level of benefits and free services as in socialism. There is no alternative to the economic policy; inevitability stems from the historical dynamics of transition. Denouncing this inevitable line of policy is mere demagogy from the part of the opposition.

Frame *B* contains 23 statements on the society as actor and social suffering, altogether mentioned 838 times. The most central statements are 1. "The living standards are deteriorating (have deteriorated), society suffers – we will (we need to) do something about it." with 103 mentions, and 2. "The essential policy steps are (were) right, there were only minor mistakes, errors" with 75 mentions. The other statements are about describing society as understanding and patient towards economic policy, while the unpopularity of the policy is understandable. Society lost trust in the economic policy, even though the government is not looking on its own interest. The government is working on "putting into shape" the institutions of social security. The government succeeded in "tiding up" the economy, and the processes that start (in the new healthy economy) will end suffering. Those are the guilty (the opposition), who create, suggest or feed exaggerated demands for a living standard that we can not afford.

Frame *C* with 27 statements is centered on the success of economic policy, with a total number of 1157 mentions. The two most central statements are: 1. "The inflation is decreasing" with 159 mentions, and 2. "The stabilization of the economy is completed." with 99 mentions. The other statements are about how the economic policy stabilized the economy by being consequential. The policy was successful in creating the preconditions for growth which the "west" recognizes. The macro-economic indicators were "put back into shape". Though there are results, the policy should go on, we have to avoid spending just to improve the mood of the society.

Frame *D* contains 18 statements in the abstract, macro-economic genre, which are mentioned 1093 times in the discourse. The most central statements are: 1. "The economic growth has started." with 260 mentions (this is the most central statement of the whole discourse), and 2. "The real income is increasing, the standing of society is improving." with 141 mentions. The other statements describe investment growth, improving foreign trade balances, increasing industrial production and export growth. There is also a

considerable number of mentions (79) we grouped together as unclassified abstract-scientific economics statements.

Now let us turn to the statement blocks of the opposition side (blocks *E*, *F*, *G* and *H*).

Frame *E* contains 30 statements that appear 948 times altogether. This frame is about explicitly addressing the government, saying something directly about it and its policies. The most central statements are 1. "The government has dictatoric aspirations." with 100 mentions and 2. "The government is lying and it is manipulative." with 85 mentions. The other statements denounce the government as being communist, lacking skills, morally inapt for the positions it's holding. The government is also accused of serving the interests of a narrow group versus the whole of society, not taking the interests of the society into account. The inevitability of the economic policy is denied, the government is depicted lacking social sensitivity.

The 19 statements of Frame *F* appeared 627 times. This frame is about social disintegration, the derailment of the transition. The most central statements are: 1. "Transition was hijacked, derailed, this is not real democracy." with 74 mentions, and 2. "Transition is heading into a wrong direction, social groups disintegrate." with 73 mentions. The other statements denounce the capitalism of the "wild east", growing inequalities and moral decay. Opposition parties can be an alternative, creating a "human-faced" market economy and social solidarity.

Frame *G* represents the opposition's view on social welfare and social security with 24 statements that were used 822 times. The most central statements are 1. "The real wages are decreasing, there is a profound insecurity in the society." that was mentioned 69 times and "Economic growth is too slow, the backhandedness of Hungary is conserved." that was mentioned 66 times. The other statements denounce the restrictions as unnecessary, and depict the crisis in the social welfare system. The crisis of healthcare and education is also mentioned, as well as the demographic crisis. The main message is that the reproduction of society is endangered by shortsighted economic policies.

Frame *H* represents a crisis-message regarding the economy with 21 statements that were mentioned 599 times. The most central statements are: 1. "The government does not support the Hungarian small and medium enterprises." that was mentioned 62 times, and 2. "The government is decreasing state involvement having an end in itself." that was mentioned 57 times. The other statements denounce the expansion of foreign capital that crowds out domestic enterprises and takes the profits out of the country. The domestic small and middle enterprises do not have access to loans. The

economic policy is unpredictable, too strict. The monetary, exchange rate and wages policy is wrong.

Blocks of speech acts: positions in the discourse

So far we have introduced the blocks of columns in our two mode network, we have labeled these blocks of statements as frames. Frames represent tendencies of co-mentioning and co-omitting statements. Now we turn our attention to the rows of our discourse matrix. The rows represent speech acts that can be mostly equated to an article in a newspaper. (Sometimes a portion of an article is coded as a speech act if there were more than one actors speaking in an article.) Each speech act can be modeled as a selection of statements. We are looking for typical ways in which actors make such selections. In the following we introduce the blocks of speech-acts, the positions of the discourse.

The positions are labeled by roman numbers from *I* to *IX*. Positions *I* to *V* are on the government side, positions from *VI* to *IX* are on the opposition side. Let us start with introducing the government side positions.

Position *I* thematizes external constraint and inevitability. It contains 81 speech acts that contain 625 statement-mentionings altogether. This position builds primarily from frame *A*, 55% of statements made in this position are from that frame. According to this the main message of this position is inevitability, objective constraints of the economic policy. 23% of this position's statements come from frame *C* (which is about the success of economic policy). What this position picks from frame *C* is that "the West" recognizes the economic policy, which is manifested in the improved ability of Hungary to access loans. 12% of the statements made in this position are from frame *B*, mostly referring to the fact that the major lines of economic policy are correct with smaller mistakes or errors.

Position *II* is about the social sensitivity of the economic policy. 55% of the statements In this position are from frame B. What this position picks from that frame are the most central statements we have already described at the discussion on frames. Other 20-20% of the statements made in this position come from frames *A* and *C*. From frame A the statement "we are experts taking care of economic problems" and the statement "the opposition is demagogic" are borrowed. The most used statements from frame C in this position are "the economy is already stabilized" and "we have to go on and be consequential" and "the economic policy is successful".

Position *III* is about economic policy, mostly centered on inflation. 60% of the statements made in this position belong to frame *C*. The two most central statements in this position from that frame are "the inflation is decreasing" and "we must decrease inflation". Another 20% of the statements come from

frame D. The statements borrowed from the abstract macro-economic frame concern improving balances and the arrival of GDP growth.

Position *IV* is centered on GDP growth. This position is the most spread across frames among the government side positions. 36% of its statements come from frame *D*, 30% comes from frame C, 16% comes from frame B. The most central statement comes from frame *D*: "the economic growth has started" which is mentioned 178 times in this position (and only 82 times in all other positions). The other statements from frame *D* are far from being used this frequently (the second most used statement from frame *D* in this position is used 24 times). There are several statements used from frame *C* in this position. These statements are about the success of the economic policy and the need for further measures following the line set by the previous and successful measures. Similarly to frame *C*, there are many statements from frame B used in this position.

Position *V* is an abstract macro-economic position. It is centered on frame *D*: 71% of the statements made in this position are from frame *D*. The most used statement here is that "the real income is increasing, the standing of society is improving" with 103 mentions, "the volume of investments is increasing" with 64 mentions and "the economic growth has started" with 52 mentions. Although this position is the most centered on a single frame, the structure of this position within frame *D* is the least centralized. This probably indicates the difference between chiefly political and professional positions. Taking a purely macro-economic position requires the discussion of the key diagnostics of an economy usually establishing causal links between them. Political ways of taking a position probably requires more slogans, key statements and not a codified group of statements that results in higher centralization of these positions within frames.

The five positions outlined above were from the government side. The following four positions are from the opposition side.

Position *VI* is an alternative presentation of the economy centered on the micro side. 41% of the statements come from frame *H*. The most central statements of this position coincide with the most central statements of frame *H*. Another 27% of the statements made in this position are from frame *G*. These are the most central statements of that frame about the decrease of wages and the absence of economic growth. There are further 14% from frame *E* and 10% from frame *F*. The are various statements from frame *E* without any one being highly central. From frame *F* the most central statements is that social inequalities are increasing.

Position *VII* is about directly engaging the economic policy of the government. This position builds mostly from frame *G* with 44% of the statements coming from that frame. The main message of this frame is that

restrictions are meaningless, society suffers and experiences a profound insecurity. Economic policy is shortsighted, it aims only at achieving financial goals while it misses the crisis of the healthcare and education systems. The slow speed of growth is also a central statement. 28% of the statements in this position come from frame *H*. These statements deliver a message about macro-economic crisis caused by false economic policy principles. There are also 13% of the statements from frame *E*. These are about denying the inevitability of the economic policy and denouncing the government as manipulative.

Position *VIII* is about radically stigmatizing the government side. Most statements (42%) come from frame *E*, which is about explicitly addressing or frontally attacking the government side. The most central statement here accuses the government of aiming at establishing dictatorship. The other accusations are about moral ineptness, corruption (through acquiring business positions) and being communists. Other 30% of statements in this position come from frame *F*. The most central ones are about rejecting the entire transition process, claiming that it goes in the opposite direction it should have gone.

Position *IX* represents a milder attack on the government. It's proportions of frames are almost identical to the previous position. Most of the statements (36%) come from frame *E*. The most central statement from that frame is that the government is manipulating information (it is lying). The expertise of the government is also questioned. 30% of the statements are from frame *F*, the most central one is "society is dissatisfied" and that the solution is in the hands of the opposition parties who will win and form the next government (in 1998).

Blockmodel robustness

How robust are the regularities that we have found? On the onset we have coded the original utterances into 180 statements. Of course the number of 180 is quite arbitrary, so we produced a new set of 120 statements by another round of recoding (*we need to produce at least one more recoding*). We expect the statement (column) and the position (row) blockmodel structure computed by this statement set to closely resemble the blockmodel solution we have obtained with 180 statements. Using Cohen's kappa (Cohen 1960) we can judge the blockmodels to be robust in this sense. For frames kappa equals 0.68, for positions it equals 0.65. (See more details on robustness in appendix *B*.)

Another robustness question concerns the effect of individual actors on the rules of the discourse. If discourse rules are external to actors, they should not change when one actor is excluded. We excluded the most central actors

one by one and run our block-modeling method on these truncated datasets. (Note that excluding actors mean the exclusion of rows from our network matrix.) We expect the statement blockmodel structure to closely resemble the original blockmodel partition. Using Cohen's kappa again we see that the blockmodel is very robust to leaving out actors. The statement blockmodel without the prime minister results in a kappa of 0.97, the blockmodel without the leader of the opposition results in a kappa of 0.92.

CHARTING DISCOURSE DYNAMICS

In the previous section our structural description of the discourse lacked any temporal dimension. Now we focus on temporality, the dynamics of discourse. In this chapter we attempt to trace local action in discourse dynamics.

The first question here is that whether there is any connection between the amount an actor speaks and the amount other actors speak. If there is local action, then we expect that actors speak immediately after actors on the other side speak. Since there are groups of actors and not just individuals on the playing field, we expect that actors speak more if other actors on the same side speak more. To test these hypotheses we have computed a linear regression model with speech acts as cases. For each speech act we measure the number of speech acts in the 4-day temporal neighborhood before and after the speech act. We also measure the aggregate number of speech acts seven days before this temporal window from the government, opposition and other actors. We use the number of speech acts from the given actor in the vicinity of its focal speech act as a dependent variable and the aggregate numbers of same side or different side actors seven days before this focal speech act as independent variables.

Although only a fraction is explained by the model of the variance in the amount actors speak (3%) both the same side and the other side variables are significant. This means that if actors from either the same side or the other side speak more in the near past, our focal actor will speak more.

We have found some evidence that the moves of one side are related to moves of the other side. Now we will explore what these moves are in more detail. We have categorized each speech act into positions based on the statements these speech acts contain. Now we will consider the temporal neighborhood of speech acts from various positions. If we find that after a speech act fro a certain position the appearance of speech acts from all other blocks is equally likely, then the presence of local action can be questioned.

For each speech act we have created a seven days temporal neighborhood, containing the speech acts at least one and at most seven days

after the given speech act. (See more on this in appendix *C.*) From the cross-tabulation of statement positions on a given day and statement positions at most seven days after it we can judge over- and under-representation in these temporal neighborhoods. The first question is that whether there are significant differences between positions regarding what position came at most seven days after them. For this we have used a chi-square test. This test showed a strong significance (p<0.001), so we can reject the null hypothesis that there is no difference between positions in what comes after them. It seems that using positions and not just the amount of speech acts we find a much stronger pattern that suggests the existence of local action dynamics.

What are the differences between the temporal neighborhoods of positions? To explore this we have used adjusted standardized residuals. (See further details in the appendix.) The following figure shows significant over- and under-representations in temporal neighborhoods as relations in a network graph.

Figure 2: Over- and under-representation of positions at most seven days after other positions. Solid arrows indicate over-representation. The position where the arrow points is over-represented after the position from where the arrow originates. Curved lighter arrows indicate significant under-representation in the same manner.

The peculiar feature of the figure is the loop of positions. There is almost a perfect circle of over-representation relations. Let us traverse along these relations starting from position *I*. After position *I* (the government's position about the inevitability of it's economic policy) position *IX* is likely to occur.

This suggests an opposition response with a moderate tone. After this the stigmatizing opposition position (*VIII*) is more likely to follow, that is there is a tendency for the opposition to become more radical. An immediate radical response to the government's position on inevitability is not likely. After a radical opposition attack a government position on the success of the economic policy through emphasizing the decrease in inflation (position *III*) is likely to follow. To the radical frontal attack of the opposition a success message about a macro economic fact (inflation) is the likely answer. After this there are two "responses", two positions that are over-represented after this: an opposition response with alternative economics focused on the micro side (position *VI*) and a pure macro-economic discussion (position *V*). The opposition response to the macro-economic success message on inflation is a crisis message about micro-economic relations. If the government brings up a success message about decreasing inflation, the opposition brings up a crisis message about decreasing wages and depressed Hungarian entrepreneurs. After this crisis message (and already after the inflation success message) professional economist-like discussion (position V) follows. As a tendency, to the direct attacks and micro-actor oriented crisis messages the government replies with abstract macro-economic messages. After position *V* there is a branching: on one branch position *II*, the social sensitivity message of the government follows macro-economic discussion. This is probably a strategy of the government side to make sense of macro economic discussions for the wider public or to avoid being seen as someone primarily concerned with improving macro economic indicators when the society is in crisis. There is an other branch after position *V*, which is probably the most interesting and important for our analysis. Position *VI*, the most univocal and coherent government success message centered on GDP growth is likely to follow the abstract macro-economic position. The interesting feature of our temporal over-representation network here is that there is nothing that is overrepresented after position *VI*. This suggests that this position is the only exit from the vicious circle of local action: this is the position for which there is no answer on the opposition side, and for which there is no need to append another government position. Position *VII*, the direct macro critique of the opposition is also "hanging in the air", there is nothing overrepresented after it. There is no position that the government would reply with specifically to this one. It is also true that there are no significant precursors to taking this position from the opposition side.

The temporal over- and under-representation relations between blocks proved to be fairly robust when we re-did the analysis for two halves of the data (see the appendix for details).

Temporal structure of the discourse

In the previous sections of our analysis we have gradually progressed from an a-temporal blockmodel analysis towards models that encompass more temporality through incorporating the local sequencing in the discourse. Now we open up the time dimension and place temporality in the focus of our scrutiny. For exploring the structure of time we start from speech acts as building blocks. Previously we have clustered each speech act into positions. Since speech acts are time-stamped (we know the day), we can construct the position profile of each day. (See more on this in appendix *E*.) Charting the position composition each day however provides little insight into the structure of time. This discouraging discovery made us think about the temporal nature of discourses. Our expectation that position proportions charted each day will reveal pattern lies on the assumption that positions are expressed in speech acts every day. This represents a model of discourse where everybody suffers from amnesia: positions taken on a day are completely forgotten on the next. Probably this is not a realistic model of a discourse. Once an actor has made a position she will not have to make the same position the next day. Speech acts will be in the memory of the discourse for a while probably somewhere between one and ten days. Ten days means almost two discourse weeks, it is likely that a speech act decays from the discourse within two weeks. This memory of the discourse is probably a key element for local action dynamics. Once a position is taken, a speech act is made, it cannot be easily undone. Immediate forgetting of speech acts would grant infinite flexibility for politicians to experiment with an endless number of positions and stick to the one for which there is no dominant answer from the opposite side.

To adopt a new model of discourse temporality we have sought to incorporate memory into the discourse. We use decay functions to represent discourse memory. One difficulty here is that we have no external evidence regarding what shape and length discourse memory is. So we have starred from an assumption that our discourse is temporally patterned and formulated our analytic strategy in a way that enables us to reject this assumption. We have used four decay functions with decay lengths ranging from one to ten days (see more on this in the appendix). As a measure of structured-ness we have used the product of the kurtosis and standard deviation of the day pattern correlation time series (see details in appendix *F*). Contrasted to 500 random discourses as a baseline the seven day long moving average seemed to be the best estimator of discourse memory. The pattern produced by the seven days moving average was significantly more than what we would expect in a random discourse. This means that we can accept

our hypothesis that the discourse is patterned; it is not just random noise without change.

Based on this transformation (smoothing) of our discourse we charted our timeline again. This is presented on figure 5. Beyond recharting the discourse timeline in a more patterned way we are also able to determine phases in the discourse separated by relatively pronounced structural turning points (see more on this in appendix *G*). We have identified seven phases in the discourse which are represented on the figure as solid vertical lines. These seven phases explain 10% of the variance in the original (raw) discourse data and 50% of the variance in the smoothed discourse data (with the seven days moving average).
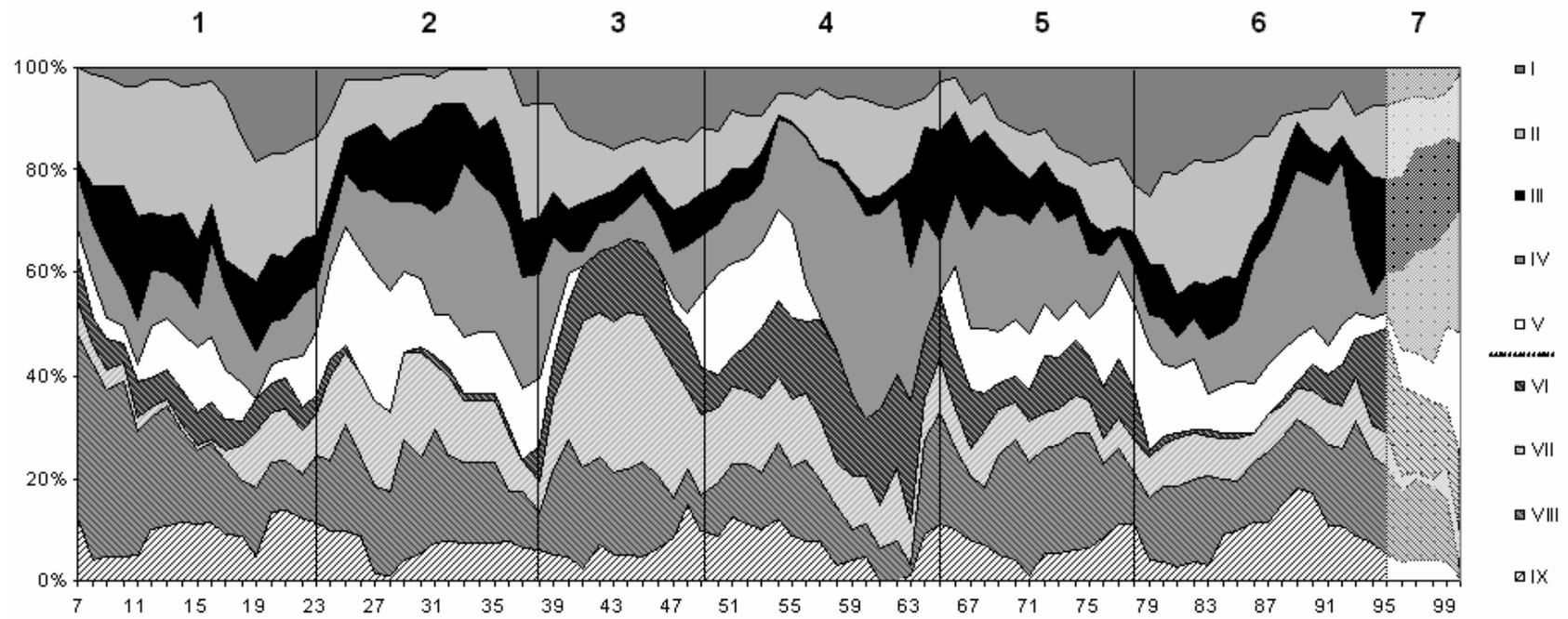
Figure 3: The discourse timeline after applying a seven day long moving average. The proportions of the speech acts in each of the nine positions each day is charted. Phases are indicated as vertical lines.

Narrating discourse dynamics

Local action in political discourse follows a more complex choreography than a wrestling dyad in front of a silent public. To report on the complex local action dynamics in our discourse we construct a narrative following the various paths actors took around each others' discourse positions. For accomplishing this we follow the overall temporality from figure 3 and the paths of political actors, journalists and professional-economics actors (in appendix *H)*.

First phase: government in defense
In the first phase the major government party (the socialists) is in a definitely inferior role in the discourse compared to the opposition. The socialists mostly take position *II*, that is, they talk about social suffering and the fact that the government sees these sufferings. The opposition is engaged in directly attacking the government side. The major opposition party, the Young Democrats (FIDESZ) and most of the other opposition parties take position *IX*, a moderate but direct critique of the government. It is mostly the journalists at MN who take position *VIII*, radically stigmatizing the government. One sign of a crisis within the government side is that there are politicians within the socialist party who take opposition positions towards the government. The liberal party (SZDSZ) is pushing position *I* and *II*, the inevitability of the economic policy and the social sensitivity of the government. By stressing position *I* the liberals seem to be even more on the defense than Socialists.

An interesting distortion effect is that the right wing newspaper (MN) grabs the opportunity and exploits the internal division of the Socialist Party. In MN the social sensitivity position of the Socialists is underreported, so the division is made to seem more profound. On the other side of the newspaper camp the left wing paper NSZ gives practically zero coverage for the attack of the opposition. The third, - mostly liberal - newspaper (MH) almost completely suppresses the internal division of the socialist party.

The two professional-economics related government actors – the Department of Finance (PM) and the Central Bank (MNB) – takes position III, they talk about the successes of the government in decreasing inflation. The two most important research institutes – the Central Statistical Office (KSH) and the Economics Research Institute (GKI) mostly present the macroeconomic indicators of the first quarter (that is they take position *V)*.

The positions of the journalists at NSZ (the left sided paper) mirrors the positions of the Socialists in that they take position *II* and *VIII*. One important

difference is that these left journalists also take position *IV* – the most unified government position centered on growth. This newspaper also gives voice to experts who report on growth. This probably indicates the grater degree of freedom of journalists. They can experiment with position with less risk than politicians. As a contrast to the diversified position portfolio of the NSZ journalists, the journalists at the right wing paper (MN) are much more univocal in that they engage in a radical direct attack on the government (by position *VIII*). Journalists are probably freer to be more radical than politicians. For an opposition politician being too radical can lead to stigmatization and ignorance from the government side.

Second phase: GDP-growth enters the discourse

The second phase brings a major restructuring to the discourse. Macro-economic reports are presented about the first signs of GDP growth. This is the first occasion since the beginning of the economic transition that the economy started to grow definitely. The Economic Research Institute (GKI) and the Central Statistical Office (KSH) present their reports on growth – this marks the first significant appearance of position *IV* in the discourse. A peculiar effect of this on the discourse of the government parties is that they entirely stop position *I,* they stop talking about the inevitability of the economic policy. Another effect is the decrease in position *II,* the position on social sensitivity. It seems that position *I* and *II* are specifically defensive positions. The growth message is only partly taken up by the government parties in this phase. It seems that there is already an emerging response to this position from the smaller opposition parties: position *VII,* the direct macro-economic engagement with the growth-message, an anti-growth critique. It is interesting that the Young Democrats (FIDESZ) and the other opposition parties seem to take different paths in formulating an alternative economics response. The Young Democrats are pushing position *VI* more, which provides a completely different focus on the economy, while the other opposition parties take position *VII,* the direct engagement on the macro-economic front.

The left wing journalists of NSZ move quickly to discuss the new macro-economic situation (position *V*) though there are still some of the opposition position *VIII.* The right wing journalists of MN are mostly still taking a radical opposition position (*VIII*). The new turn in the discourse seem to make MN journalists also take the government position on the inevitability of the economic policy (*I*). The experts that they bring on stage present an anti-growth macro economic critique (*VII*). The liberal journalists of MH are also divided: they take a moderate opposition position (*IX*) and talk about inevitability (*I*) at the same time.

Third phase: opposition denial of growth

The opposition takes its turn and starts a counter-offensive on the economics front. The dominant position in this phase is *VII*: the direct macro-level critique of the economic policy. The main opposition party, the Young Democrats take position *VI*, the alternative micro-focused economic critique and position *VII*, the direct macro critique. The other opposition parties bet on position *VII*, the macro focus. The research institute on the opposition side (Privatization Research Institute) also comes on stage with articles taking position *VII*. The Young Democrats pair their economic critique with a radical stigmatizing attack on the government (*VIII*), while the other opposition parties pair their macro-economic critique with a milder direct critique of the government side (*IX*). In this phase the opposition conquers more than 50% of the floor. The government political parties get back to talking about inevitability of their policies and social sensitivity (*I* and *II*). There is an internal division again in the Socialist Party: there are some politicians taking an alternative micro-economic critical position (*VI*). There is an internal division within the liberal party as well (some politicians criticize the government with position *VIII*).

   The left NSZ journalists join the government side in defense with taking position *I* on inevitability. However, NSZ features experts who are in line with the opposition offensive of alternative economics (*VI* and *VII*). The right side MN journalists keep on attacking the government (with positions *VIII* and *IX*) while still writing on inevitability (*I*). At the same time MN gives the floor to experts with the macro economic critique (*VII*). The liberal MH journalists remain silent. They voice experts from both sides: with positions on inevitability and alternative macro-economic critique.

Fourth phase: innovation adoption on the government side

The fourth phase is a turning point in the discourse of government side political actors. This is the phase when they adopt the innovation of organizing a coherent account on the social-economic situation centered on growth (position *IV*). This position represents an account about the end of transition as new growth that brings an end to social tensions, justifies economic policy and the new rules of capitalism as the end of state provided care taken for granted. In this phase position *IV* becomes the central message of the socialist party. The liberal party stays with stressing social sensitivity (*II*). In local action terms, the research institutions bought the opportunity for the government side actors to observe opposition response to the macro economic growth message. It seems that they judged this response to be weak and adopted this growth message (*IV*).

The strategy of the opposition in responding to the growth message changes. They no longer engage in a direct macro critique, which seems to be defeated by the "facts", the macro-economic indicators the government side relies on. Their strategy instead is to bring in alternative "facts", a micro view on the economy that represents a denial of the macro economic genre. The major position of the opposition in this phase is *VI*, the crisis message about the Hungarian entrepreneurs, the failure of privatization and the perils of the foreign domination of the economy. Now the other opposition parties seem to follow the Young Democrats in shifting towards this position. The Privatization Research Institute (the supplier of "facts" for the opposition) switches to this micro-economic position from the direct macro-economic critique. The other research institutions (Economics Research Institute and the Central Statistical Office) also switch to a micro critique.

The left journalists of NSZ push the government's growth message. The right wing journalists at MN also take this position. The right wing paper MN systematically under-reports socialists taking position IV. The liberal journalists are more on the opposition side in this phase with position *VI* and *VIII.*

Fifth phase: opposition defeated

The growth message of the government side seems to be successful. This discourse position was not silenced by the direct macro-economic critiques of the opposition, nor by the alternative micro-economic critique. In this phase the opposition political parties remain practically silent. The government side returns to talk about inevitability and social sensitivity (*I* and *II*). These positions are now in a new light of the growth-centered success message. Social suffering will be over soon, and the inevitability of the policies is justified. The growth centered success message remains a central position as well.

In this phase new macro-economic reports, new conformation of the growth comes into the discourse from the research institutes (GKI and KSH speaks in position *V*). The left side NSZ journalists are also discussing the macro-economic reports (V) and they talk about policy inevitability. The opposition positions are taken mostly by right wing journalists at MN and experts talking in the three newspapers.

Sixth phase: new opposition counter-attack

In the sixth phase the opposition returns with a new strategy. The Young Democrats launch a counter attack with moderate opposition speech acts (position *IX*). It seems that they are relying on the power of being moderate

as opposition. Overused radicality can easily lead to ignorance and marginalization. The other opposition parties choose to take a radical stigmatizing position (*VIII*) again.

The right wing paper MN distorts the opposition counter attack towards making it more radical. They over-report radical speech-acts from the Young Democrats, and the MN journalists push the radical stigmatizing position themselves. Outside this right wing paper the opposition counter attack is only reported as the Young Democrats taking the moderate opposition position. This is probably the success of the strategy of the Young Democrats: they were able to launch an offensive that comes through in the left and liberal papers as well.

Socialists react with returning to social sensitivity (*II*) and keep pushing the growth success message (*IV*). The liberals take their usual social sensitivity position (*II*) and come back to inevitability (*I*).

DISCUSSION

We have observed the regularities in discourse dynamics in multiple layers of our analysis. First, there are pronounced frames and positions in the discourse. Positions are usually centered on a frame with some positions spanning (connecting) multiple frames. On the government side frame-unifying position is the one organized around the concept of growth. We have observed these positions in use. The dynamics of these positions follow a circular or oscillating path which also has some directionality. We argue that oscillations are due to local action through using and re-using disconnected frames. Directionality in the discourse is due to a large part to a successful unified framing of the new economic reality by the government and the opposition's answer seeking through repeated attacks.

Political actors are not rational strategists in political discourse. The government side recognized the opportunity in the macro economic reports coming in to the discourse. We don't argue that it rationally pursued the strategy to organize its new framing around it. First of all there are many errors in the behavior of the government side. The Socialist Party is plagued by internal divisions that surface when there are stronger opposition attacks (and they are magnified by the right wing newspaper). The Liberal Party is too slow to move away from the defensive position: they almost univocally keep talking about social sensitivity and social sufferings instead of recognizing the opportunity to talk about success. The opposition gets radicalized too easily , and even if they don't intend to, the right wing newspaper presents them to be more radical.

Political actors rather hedge discourse uncertainty than to push one position that seems to be successful. The external macro economic reports can be proven false later, or the opposition might come up with a new innovation that fail the government's success message.

The discourse that we have observed took place one year before the elections. In the spring of 1998 the Young Democrats won the elections. It seems that they have mastered a new innovation: the power in being moderate as opposed to being radical. Their government period marked a new era of political discourse without major debates about the end of transition and economic policy. It seems that the Socialists managed to end the economic transition (the growth of the economy and real wages accelerated after 1997), but they were unable to turn their success into success in the discursive field.

Without aiming at drawing far reaching conclusions we should also note that there were three highly central persons in the discourse that we observed. The first, Gyula Horn, the prime minister from the Socialist Party mostly took the position of social sensitivity. The second, Viktor Orban, the president of the Youg Democrats, the key figure in the opposition mostly took a moderate critical position. He became the next prime minister in 1998. The third person was Peter Medgyessy, the minister of finance. He was the one who adopted the growth success message first from the economic research institutes. The 2002 elections are just being held now, and it seems that he will be the next prime minister of Hungary.

APPENDIX

A.: Blockmodel goodness of fit

As a goodness of fit measure we have used R squared (the square of the correlation between the predicted and observed data) and the number of standard deviations the observed correlation was from the average correlation under the condition of random assignment. We have used the QAP correlation module available in UCINET to obtain an average and a standard deviation for the correlation between the original and predicted structural equivalence matrices. This procedure enables us to see how much the actual clustering solution is better fitting than a random cluster assignment. We have calculated the fit for the statement and instance profile correlation matrices. The following tables show the results.

Statements, 180 by 180 correlation matrix	CONCOR	complete link	average link
correlation of observed and predicted data (R):	0.626	0.568	0.559
R squared:	0.392	0.323	0.312
Statistics based on 1000 random permutations:			
mean correlation:	0.000	0.000	0.000
standard deviation:	0.009	0.009	0.009
proportion of correlations as large as original:	0.000	0.000	0.000
number of standard deviations original is away:	69.556	63.111	62.111

Figure 4: The fit of the eight-cluster solutions for statement structural equivalence of three clustering methods.

Speech acts, 759 by 759 correlation matrix	CONCOR	complete link	average link
correlation of observed and predicted data (R):	0.538	0.405	0.390
R squared:	0.289	0.164	0.152
Statistics based on 1000 random permutations:			
mean correlation:	0.000	0.000	0.000
standard deviation:	0.005	0.005	0.005
proportion of correlations as large as original:	0.000	0.000	0.000
number of standard deviations original is away:	107.600	81.000	78.000

Figure 5: The fit of the nine-cluster solutions for instances structural equivalence of three clustering methods.

In each of the two modes of data CONCOR is the best performing algorithm. In case of statements it's R squared is 21%higher than complete

link and 26% higher than average link clustering. In case of instances CONCOR's R squared is 76% higher than complete link clustering and 90% higher than average link clustering.

B.: Blockmodel robustness

To measure blockmodel robustness we used classification agreement indices. There are two major approaches to measure classification agreement: one focuses on the extent to which elements stay in the same clusters (Cohen 1960), while the other considers the extent to which dyads of elements stay together (Moery and Alan Agresti 1984; Rand 1971). The first approach considers problems when there are two clusterings with the same number of clusters that have the same meaning. The question here is that whether the original clusters stay intact, or wheter they "explode" with the new clustering. The second approach is for cases when the two clusterings have different number of clusters, or the assumption is relaxed that the meaning of the clusters in the two partition-sets is the same. Since our theoretical questions consider the intactness of regularities, the robustness of our blocks and not the cohesion of dyads of elements we took the first approach. We have used Jacob Cohen's kappa, that measures the extent to which the agreement between two clusterings is greater than chance agreement. Think of the contingency table of the original and new clustering partitions. The formula for kappa is the following:

$$\boldsymbol{k} = \frac{f_o - f_c}{N - f_c} \qquad \text{(Equation 1)}$$

In this formula f_o equals observed agreement, the number of elements in the diagonal of our contingency table that stay in their clusters. Coefficient f_c equals chance agreement, the number of elements expected to be in the diagonal just by chance; and N is the total number of elements, the grand total of the table.

C.: Block temporal neighborhoods

The raw number of speech acts in the temporal vicinity of another speech act is calculated by enumerating dyads in a 759 by 759 matrix where an entry of one indicated that a speech act on the given row was at least one and at most seven days after a speech act on a given column. Aggregating this matrix by the nine blocks speech acts can belong to gives the temporal proximity matrix of blocks. The length of the temporal neighborhood can be adjusted. To judge whether the observed frequencies can only be attributed to chance Fischer's

exact chi-square test is used. We have computed the temporal proximity matrices for neighborhood lengths ranging from one to ten days. The examination of the chi-square statistics (that were highly significant in all of the cases) indicated an exceptionally strong pattern at the seven day long temporal neighborhood. Since a seven days moving average proved to be best showing the pattern in the overall discourse (see more details later) we have chosen a seven day long temporal neighborhood.

	I	II	III	IV	V	VI	VII	VIII	IX	Total
I	414	638	418	537	369	267	497	442	380	3962
II	459	740	492	545	351	288	485	405	440	4205
III	467	769	484	653	358	317	604	457	500	4609
IV	315	435	292	375	263	198	301	248	258	2685
V	344	576	317	479	259	183	373	334	267	3132
VI	518	790	531	708	428	316	590	486	446	4813
VII	452	710	437	595	408	313	461	445	450	4271
VIII	864	1075	739	968	607	427	743	674	721	6818
IX	597	795	447	615	385	286	564	415	547	4651
Total	4430	6528	4157	5475	3428	2595	4618	3906	4009	39146

Figure 6: The number of speech acts from a given block at most seven days after another speech act from a given block. Cell entry x_{ij} indicates number of speech acts from position j following speech acts from position i.

To judge the over-, and under-representation of certain blocks in the temporal neighborhood of other blocks the adjusted standardized residuals are computed using the following formula:

$$r_{a.s.} = \frac{o - e}{\sqrt{o_{i\bullet} o_{\bullet j} (1 - o_{i\bullet} / N)(1 - o_{\bullet j} / N) / N}}$$ (Equation 2)

The following table shows the standardized residuals:

	I	II	III	IV	V	VI	VII	VIII	IX
I	3.48	0.81	-2.38	-1.60	-1.23	-1.40	0.74	-2.56	3.64
II	3.89	-2.22	0.65	0.55	0.47	-1.34	-2.53	-0.28	1.00
III	-1.60	-0.10	-0.87	-0.11	1.95	1.95	-2.15	1.02	0.67
IV	-1.30	-0.52	0.99	1.55	0.36	-0.19	1.06	0.30	-2.38
V	-0.61	2.68	-0.94	2.20	-1.01	-1.84	0.20	1.34	-3.30
VI	0.70	-0.68	0.45	-0.03	1.97	1.61	-0.98	-1.33	-1.12
VII	-2.70	0.02	-0.28	0.38	-2.53	0.72	2.93	-0.15	1.45
VIII	-0.87	1.70	2.41	-2.03	-0.99	0.61	-0.56	-0.79	0.50
IX	-1.82	-1.02	-0.15	-0.83	1.31	0.29	1.54	2.61	-1.42

Figure 7: The adjusted standardized residuals from the previous table.

Residuals greater than 1.96 indicate significant over-representation on a p=.05 significance level. Residuals less than -1.96 indicate significant under-representation at the same significance level. We have used these exceptionally over- and under-represented block-dyads as the network in figure X.

The robustness of the residuals (the temporal relations between blocks) is measured by re-doing the same analysis for the first and the second half of the data (for the first and the second fifty days of the discourse). One measure of robustness is the correlation of these contingency tables with the original table for the whole period. In case of small correlations the relations between blocks observed over the whole period probably come from two periods with different structures. The correlation of the table of the first half is 0.72, the correlation of the table from the second half is 0.90, which means that the over- and under-representation relations are fairly constant over time. The second way of measuring robustness is to enumerate sign reversals in the residuals. If there are many adjusted standardized residuals (relations between blocks) that change sign in the matrices for the partial time periods then robustness is low. We have enumerated the sign reversals of those residuals that are greater than one in absolute value. In the comparison of the first half to the whole period there are 3 reversals out of 25 occasions when both residuals are greater than one in absolute value. In the case of the second half there are 3 reversals out of 27. This again shows the robustness of the observed relations between blocks.

D.: List of actors

	Code	Name	Number of speech acts
1	MSZP	Hungarian Socialist Party	75
2	Horn	Gyula Horn, prime minister (MSZP)	44
3	Medgyessy	Peter Medgyessy, minister of finance (MSZP)	48
4	MSZPbal	Left fraction of the Socialist party	12
5	SZDSZ	Free Democrats' Alliance	38
6	FIDESZ	Young Democrats' Alliance	24
7	Orban	Viktor Orban, president of FIDESZ	23
8	FKGP	Hungarian Smallholders' Party	15
9	MDF	Hungarian Democratic Forum	18
10	MDNP	Hungarian Democratic People's Party	11
11	KDNP	Christian Democratic People's Party	21
12	PM	Department of Finance	23
13	MNB	Hungarian National Bank	23
14	KSH	Central Statistical Office	14
15	GKI	Economic Research Institute	27
16	MSZOSZ	National Alliance of Hungarian Trade Unions	12
17	egyebsz	Other trade unions	18
18	NSZujs	Nepszabadsag journalist	32
19	MHujs	Magyar Hirlap journalist	14
20	MNujs	Magyar Nemzet journalist	22
21	NSZszak	Nepszabadsag expert	20
22	MHszak	Magyar Hirlap expert	30
23	MNszak	Magyar Nemzet expert	26
24	kulfoldi	Foreigner	35
25	egyeb	Other	134

Figure 8: The main actors in the discourse.

E.: Measuring the structure of time

There are one hundred days of discourse that we analyze, where each day can be characterized by the positions taken on that day. Positions are the row blocks of our data, the typical speech acts. There are nine positions identified, so for each day we can tell the amount of utterances made in each position. This means that we can think of the profile of a day, and that we can compare the profiles of two days. We have compared days by correlating their position profiles. A high positive correlation means that similar positions are taken or not taken in those two days. (We use correlation in order to focus on the proportions of positions and control for the difference in the overall number of positions taken in certain days.) A negative correlation between two days indicates a shift in the positions taken.

To characterize the shape of time we use a time series of correlations of the profiles of consecutive days. In case of no change over time this time series would consist of only plus ones. For random data the series of correlations would be a random oscillation between minus one and plus one. For a patterned process with phases and shifts the series of correlations would be close to plus one with occasional drops, smaller values indicating shifts in the proportion of positions. The correlation can be calculated between consecutive days and for days that are two or three days apart. Since shifts might occur over longer periods than one day, correlations two or three days apart should also be used.

To measure the extent to which our data is a patterned process we use the kurtosis and the standard deviation of the distribution of correlations. A high positive kurtosis indicates that the distribution has a high peak. For data with no change standard deviation is zero while kurtosis equals infinity. For a random walk standard deviation is high while kurtosis is low. For patterned process with phases and sudden shifts standard deviation is lower than for a random walk, while kurtosis is much higher. The product of kurtosis and standard deviation is our measure for pattern that is high when a process is patterned.

F.: The choice of decay function

We employed four decay functions to the one hundred days of data, where each day is characterized by the number of utterances made in each of the nine position blocks. The four functions differ in their shape, that corresponds with the timing of faster and slower decay. The functions range from a fast initial decay and a slow final decay to a slow initial decay and a fast final decay. An extreme case of an early fast decay is raw data, where there is a maximal drop after the first day. The other extreme case for a late decay is moving average, where the weight stays equal for all days. The functions express a weight for the number of utterances of a given day as a function of how many days they are before the day in question. The formulas for the four functions are the following, ranging from fast initial decay (A) to the slowest initial decay(D), where d is the given day before the day in focus and D is the length of the decay in days:

$$\text{Function A: } f_A = \sqrt{\frac{1}{d}} \qquad \text{(Equation 3)}$$

$$\text{Function B: } f_B = 1 - \frac{d}{D} \qquad \text{(Equation 4)}$$

Function C: $f_C = \log_{D+1}(D+1-d)$ (Equation 5)

Function D: $f_D = 1$ (Equation 6)

We have calculated all four functions for two to ten days lengths. The following figure shows the shapes of the decay functions for a ten day decay.
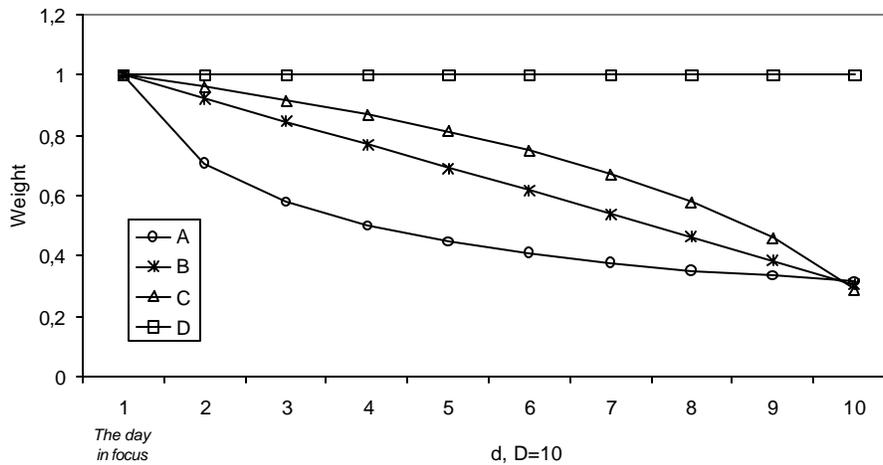
Figure 9: The shapes of the three decay functions used for the ten day long version. Day one is the day in question, day two is the day before etc., day ten is nine days before, the last day considered in the ten day weighted sum. (THE ACTUAL FUNCTIONS SHOW A LITTLE DIFFERENT SHAPE – WE NEED TO ELABORATE A UNIFIED FUNCTION THAT CAN BE PARAMETRIZED TO YIELD VARIOUS DECAYS.)

We have calculated the amount of utterances in each of the nine blocks for each of the days with a set of decay functions. With each four function shapes a range of decay lengths from two to ten days is calculated. We based our choice out of these forty functions on the amount of patterning they produced. To judge patterning we have used the product of standard deviation and kurtosis.

One straightforward solution to choose the best decay function would be to pick the one with a maximal product of kurtosis and standard deviation. However, a strong caveat against using decay functions or moving averages is that they induce patterning in random data as well. To avoid artefactual solutions first we need to show that our decay functions perform better that they would for random data. Then we need to narrow our set of decay functions to those that induce significantly more pattern than do for random data. To accomplish this we have computed our patterns statistics for 500 random tables that
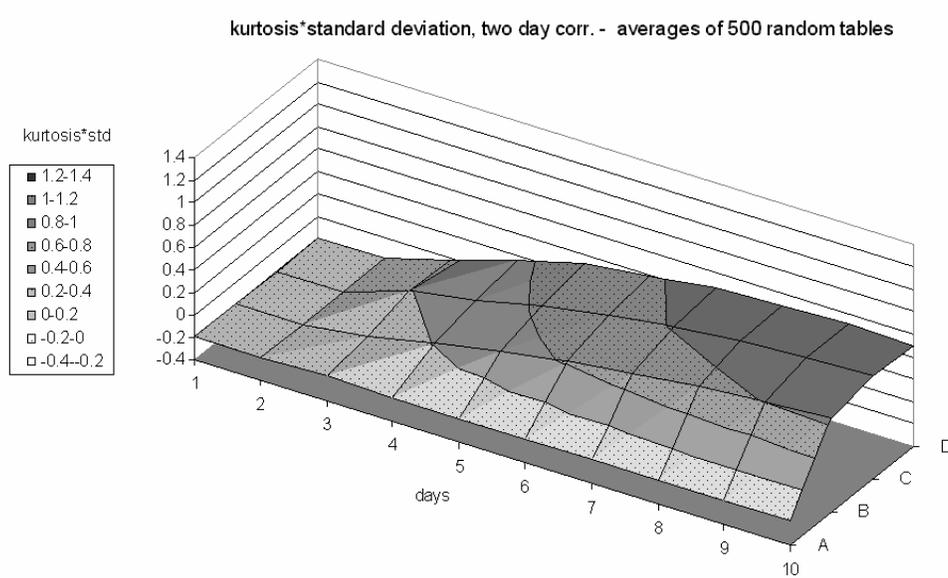
Figure 10: Patterning induced in random data. The product of kurtosis and standard deviation of two-day pattern correlations for the four decay functions (from A to D) with lengths from one to ten days. Averages from 500 random discourse data tables.
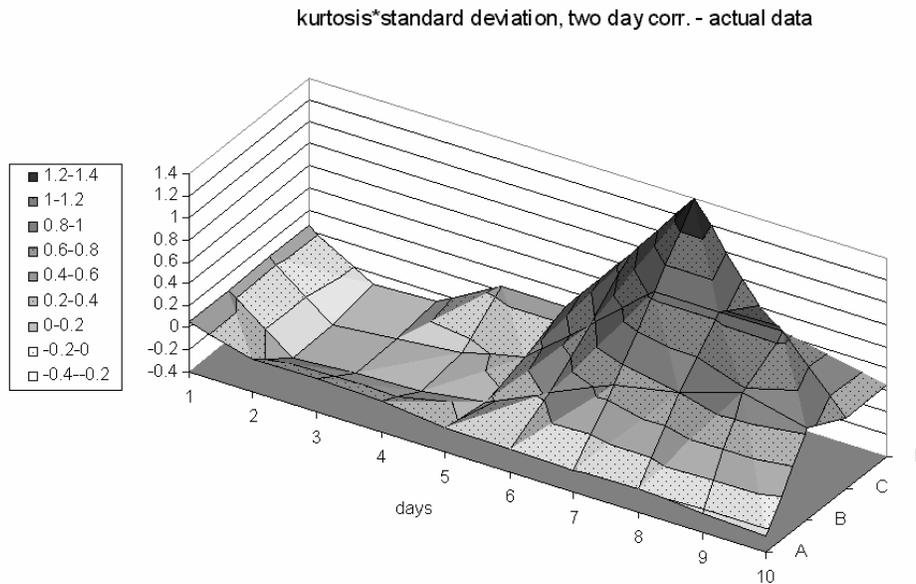
Figure 11: Patterning in the actual data. The product of kurtosis and standard deviation of two-day pattern correlations for the four decay functions (from A to D) with lengths from one to ten days.

We have calculated the index of patterning (the product of kurtosis and standard deviation) for 500 random tables. Figure 7 shows that longer decay functions (6-10 days) and decay functions with a late drop (like function C and D) induce patterning indeed in the random data. For each of the forty decay functions we can calculate the percentage out of the 500 random cases when that given function performed at least as good. A small percentage (5-10%) means that the given function performed significantly better for our actual data than it had for random data. We calculated these significance indices for the one, two and three day correlations. In case of the one day correlation none of the functions reached the 10% significance levels. For the two day correlations (the correlations between a given day and the day two days before) there one significant function: the seven days moving average, with a 4,5% significance. Figure 8 shows this as a high peak in the data at function D, seven day length. So we choose this function to identify phases in the data.

G.: Defining phases in time

We have defined the phases in our one hundred days data according to the patterning that the seven day moving average shows and our interpretation and understanding of the discourse. We used the chart of the day-pattern correlations as our guidance in defining the boundaries between phases. The following figure shows the chart with our boundaries drawn as solid vertical lines.
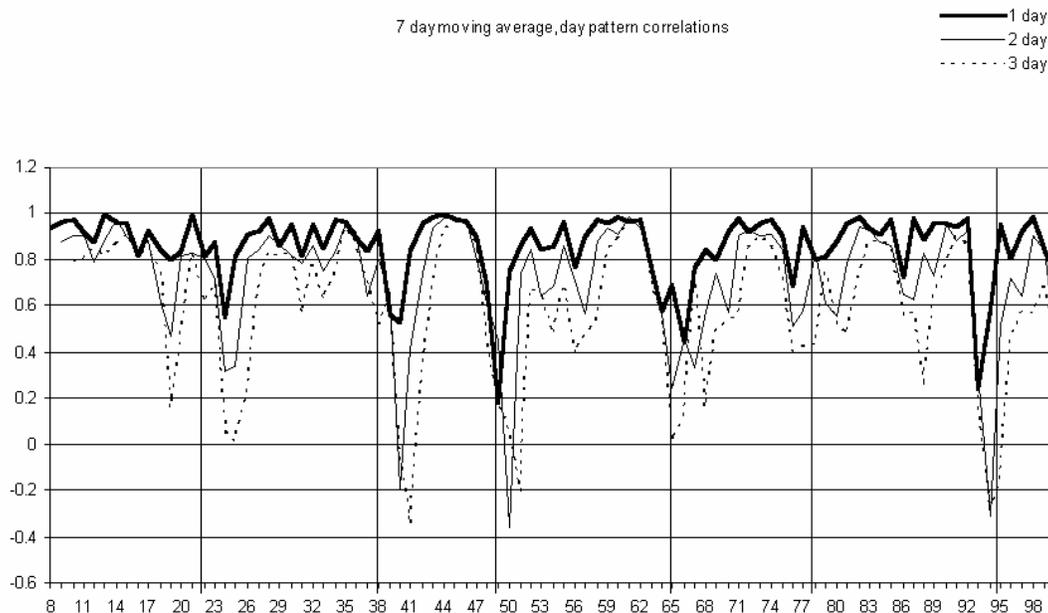
Figure 12: The defined time phases (solid vertical lines) and the one and two day correlations based on the seven day moving average.

H.: The positions of the main actors over time

The following tables present the positions taken by actors across six phases. The last seventh phase is not presented. In case of the main political actors that are in the focus of our analysis the filtering effect of the three newspapers is also presented. For these actors the number of statements in each of the nine positions is presented by the three newspapers. Some actors are aggregated from smaller groups. The other "opposition parties" category contains the following parties: FKGP, MDF, KDNP and MDNP. The Department of Finance (PM) and the Central Bank (MNB) are also aggregated, just as the Economics Research Institute (GKI) and the Central Statistical Office (KSH). These aggregations were done one the basis of the similarity of the paths across positions through time.

		Positions								
		I	II	III	IV	V	VI	VII	VIII	IX
MSZP	1	12	175	41	10	7	18	7	65	5
total	2	0	63	48	25	18	0	0	13	2
	3	26	47	33	6	0	28	0	0	0
	4	31	38	24	139	5	0	0	2	17
	5	76	57	7	49	36	0	6	39	0
	6	18	117	74	101	32	0	9	0	8
MSZP	1	6	100	19	10	0	15	4	33	0
In NSZ	2	0	56	12	0	11	0	0	13	2
	3	26	0	0	2	0	0	0	0	0
	4	0	17	13	100	0	0	0	0	17
	5	21	21	0	10	27	0	0	0	0
	6	9	37	5	66	20	0	4	0	3
MSZP	1	0	30	7	0	7	3	0	30	0
In MN	2	0	2	20	4	0	0	0	0	0
	3	0	4	23	0	0	28	0	0	0
	4	0	7	0	11	2	0	0	0	0
	5	10	19	3	14	0	0	6	0	0
	6	2	45	66	28	5	0	5	0	3
MSZP	1	6	45	15	0	0	0	3	2	5
In MH	2	0	5	16	21	7	0	0	0	0
	3	0	43	10	4	0	0	0	0	0
	4	26	14	11	28	3	0	0	2	0
	5	45	17	4	25	9	0	0	39	0
	6	7	35	3	7	7	0	0	0	2

Figure 13: The positions of the Socialist Party over time in the three newspapers. Cells contain numbers of statements.

		Positions								
		I	II	III	IV	V	VI	VII	VIII	IX
SZDSZ	1	50	72	0	0	0	0	0	0	2
total	2	0	40	0	14	0	0	0	0	0
	3	10	56	4	20	0	0	2	18	0
	4	0	53	0	0	0	0	0	0	0
	5	0	15	0	22	0	0	0	0	0
	6	25	63	0	0	0	0	3	0	0
SZDSZ	1	0	72	0	0	0	0	0	0	0
In NSZ	2	0	23	0	0	0	0	0	0	0
	3	0	12	0	20	0	0	0	18	0
	4	0	33	0	0	0	0	0	0	0
	5	0	15	0	0	0	0	0	0	0
	6	0	11	0	0	0	0	3	0	0
SZDSZ	1	0	0	0	0	0	0	0	0	0
In MN	2	0	3	0	14	0	0	0	0	0
	3	4	14	4	0	0	0	0	0	0
	4	0	3	0	0	0	0	0	0	0
	5	0	0	0	13	0	0	0	0	0
	6	0	7	0	0	0	0	0	0	0
SZDSZ	1	50	0	0	0	0	0	0	0	2
In MH	2	0	14	0	0	0	0	0	0	0
	3	6	30	0	0	0	0	2	0	0
	4	0	17	0	0	0	0	0	0	0
	5	0	0	0	9	0	0	0	0	0
	6	25	45	0	0	0	0	0	0	0

Figure 14: The positions of the Liberal Party over time in the three newspapers. Cells contain numbers of statements.

		Positions								
		I	II	III	IV	V	VI	VII	VIII	IX
FIDESZ	1	0	0	0	0	0	0	0	8	51
Total	2	0	0	0	0	0	25	8	38	7
	3	0	0	0	0	0	32	35	73	16
	4	0	0	0	0	0	25	0	0	23
	5	0	0	0	0	0	0	0	0	0
	6	17	0	0	0	0	7	2	31	95
FIDESZ	1	0	0	0	0	0	0	0	0	0
In NSZ	2	0	0	0	0	0	25	0	0	5
	3	0	0	0	0	0	21	6	0	2
	4	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0
	6	0	0	0	0	0	0	2	0	42
FIDESZ	1	0	0	0	0	0	0	0	0	51
In MN	2	0	0	0	0	0	0	8	38	0
	3	0	0	0	0	0	11	0	48	8
	4	0	0	0	0	0	21	0	0	0
	5	0	0	0	0	0	0	0	0	0
	6	0	0	0	0	0	7	0	24	14
FIDESZ	1	0	0	0	0	0	0	0	8	0
In MH	2	0	0	0	0	0	0	0	0	2
	3	0	0	0	0	0	0	29	25	6
	4	0	0	0	0	0	4	0	0	23
	5	0	0	0	0	0	0	0	0	0
	6	17	0	0	0	0	0	0	7	39

Figure 15: The positions of the Youg Democrats. Cells contain number of statements.

		Positions								
		I	II	III	IV	V	VI	VII	VIII	IX
Other	1	5	0	0	0	0	0	21	21	70
opp.	2	0	0	0	7	0	7	71	27	24
total	3	0	0	11	0	0	4	52	8	28
	4	0	0	0	0	0	30	37	47	19
	5	0	0	0	0	0	0	29	8	9
	6	0	0	0	0	0	33	20	58	23
Other	1	0	0	0	0	0	0	0	0	3
opp.	2	0	0	0	0	0	0	10	27	0
in NSZ	3	0	0	0	0	0	0	0	0	0
	4	0	0	0	0	0	30	0	0	19
	5	0	0	0	0	0	0	0	0	9
	6	0	0	0	0	0	0	16	10	0
Other	1	0	0	0	0	0	0	0	9	54
opp.	2	0	0	0	7	0	7	55	0	11
in MN	3	0	0	11	0	0	0	47	0	21
	4	0	0	0	0	0	0	9	41	0
	5	0	0	0	0	0	0	0	0	0
	6	0	0	0	0	0	33	4	45	21
Other	1	5	0	0	0	0	0	21	12	13
opp.	2	0	0	0	0	0	0	6	0	13
in MH	3	0	0	0	0	0	4	5	8	7
	4	0	0	0	0	0	0	28	6	0
	5	0	0	0	0	0	0	29	8	0
	6	0	0	0	0	0	0	0	3	2

Figure 16: The positions of other opposition parties. Cells contain number of statements.

		Positions								
		I	II	III	IV	V	VI	VII	VIII	IX
PM and	1	0	0	31	0	0	0	0	0	0
MNB	2	2	15	62	35	0	0	0	0	0
total	3	0	0	10	13	27	0	0	0	0
	4	0	0	15	2	0	0	0	0	0
	5	0	0	7	2	0	0	0	0	0
	6	40	0	16	11	0	0	0	0	0
GKI and	1	0	0	6	0	18	0	3	0	0
KSH	2	0	0	24	47	4	0	0	0	0
total	3	0	0	0	0	0	4	0	0	0
	4	0	0	6	0	0	10	0	0	0
	5	0	0	4	0	16	0	0	0	0
	6	0	0	0	0	0	0	12	0	0
Privatiz.	1	0	0	0	0	0	13	0	0	0
Research	2	0	0	0	0	0	0	0	0	0
total	3	0	0	0	0	0	0	74	0	0
	4	0	0	0	0	0	61	0	0	0
	5	0	0	0	0	0	0	0	0	0
	6	0	0	0	0	0	0	0	0	0

Figure 17: The positions of professional-economics actors. Cells contain number of speech acts.

		Positions								
		I	II	III	IV	V	VI	VII	VIII	IX
NSZ	1	0	11	6	38	0	0	0	29	0
journalist	2	3	15	0	10	42	0	0	27	0
total	3	43	0	0	0	0	0	0	0	0
	4	0	0	0	9	0	0	0	0	0
	5	29	5	0	0	19	0	0	0	0
	6	30	6	15	36	0	0	0	6	4
MN	1	0	0	0	0	0	6	0	90	19
journalist	2	19	0	0	0	0	0	4	52	5
total	3	16	0	0	0	0	0	0	31	22
	4	0	4	0	34	0	0	9	0	0
	5	0	0	20	0	0	9	20	33	6
	6	0	0	0	0	0	0	0	22	4
MH	1	0	0	13	0	0	8	0	0	0
journalist	2	11	5	0	0	0	0	0	0	11
total	3	2	0	0	0	0	0	0	0	0
	4	0	0	0	9	0	20	0	25	0
	5	6	0	0	28	0	0	0	0	0
	6	14	0	0	0	0	0	0	20	0

Figure 18: The positions of journalists. Cells contain number of statements.

		Positions								
		I	II	III	IV	V	VI	VII	VIII	IX
NSZ	1	5	0	5	27	9	0	3	6	0
experts	2	0	0	0	0	0	0	0	0	0
total	3	0	0	0	0	0	27	16	0	0
	4	0	0	0	0	0	0	0	6	0
	5	0	0	0	32	0	0	0	41	0
	6	0	8	6	3	0	41	0	64	0
MN	1	0	0	0	12	0	31	45	51	0
experts	2	0	0	0	0	0	0	52	9	6
total	3	0	3	0	0	0	3	67	0	9
	4	0	0	0	8	0	0	9	11	0
	5	0	0	0	0	0	0	24	0	37
	6	0	0	0	0	0	0	25	0	0
MH	1	17	42	3	25	38	0	0	44	29
experts	2	0	0	0	0	0	0	0	0	0
total	3	25	0	2	0	0	8	23	24	0
	4	0	0	0	0	0	0	0	50	0
	5	21	0	0	25	0	46	0	67	0
	6	0	0	0	8	0	0	0	12	0

Figure 19: The positions of experts voiced by newspapers. Cells contain number of statements.

REFERENCES

Bearman, Peter, Robert Faris, and James Moody. 1999. "Blocking the Future: New Solutions for Old Problems in Historical Social Science." *Social Science History* 23(4):501-33.

Bearman, Peter S. and Katherine Stovel. 2000. "Becoming a Nazi: A Model for Narrative Networks." *Poetics* 27:69-90.

Bourdieu, Pierre. 1991. *Language and Symbolic Power.* Cambridge, Massachusetts: Harvard University Press.

Breiger, Ronald. 1974. "The Duality of Persons and Groups." *Social Forces* 53(2):181-90.

———. 2000. "A Tool Kit for Practice Theory." *Poetics* 27:91-115.

Carley, Kathleen and Michael Palmquist. 1992. "Extracting, Representing, and Analyzing Mental Models." *Social Forces* 70(3):601-36.

Cohen, Jacob. 1960. "A Coefficient of Agreement for Nominal Scales." *Educational and Psychological Measurement* 20(1):37-46.

Emirbayer, Mustafa and Jeff Goodwin. 1994. "Network Analysis, Culture and the Problem of Agency." *American Journal of Sociology* 99(6):1411-54.

Foucault, Michel. 1972. *The Archeology of Knowledge.* London: Tavistock.

Hill, Vanessa and Cathleen Carley. 1999. "An Approach to Identifying Consensus in a Subfield: The Case of Organizational Culture ." *Poetics* 27:1-30.

Leifer, Eric M. 1988. "Interaction Preludes to Role Setting: Exploratory Local Action." *American Sociological Review* 53(6):865-78.

Moery, Leslie C. and Alan Agresti. 1984. "The Measurement of Classification Agreement: An Adjustment to the Rand Statistic for Chance Agreement." *Educational and Psychological Measurement* 44:33-37.

Mohr, John W. 1994. "Soldiers, Mothers, Tramps and Others: Discourse Roles in the 1907 New York City Charity Directory." *Poetics* 22(327-57).

Mohr, John W. and Duquenne V. 1997. "The Duality of Culture and Practice: Poverty Relief in New York City." *Theory and Society* 26(2-3):305-56.

Mohr, John W. and Helene K. Lee. 2000. "From Affirmative Action to Outreach: Discourse Shifts at the University of California." *Poetics* 28:47-71.

Rand, William. 1971. "Objective Criteria for the Evaluation of Clustering Methods." *Journal of the American Statistical Association* 66(336):846-50.

Snow, David A., Jr. Burke Rochford, Steven K. Worden, and Robert D. Benford. 1986. "Frame Alignment Processes, Micromobilization, and Movement Participation." *American Sociological Review* 51(4):464-81.

Stark, David and Laszlo Bruszt. 1998. *Postsocialist Pathways. Transforming Politics and Property in East Central Europe.* Cambridge: Cambridge University Press.

Tilly, Charles. 1997a. "Parliamentarization of Popular Contention in Great Britain, 1758-1834." *Theory and Society* 26:245-73.

———. 1997b. *Roads From Past to Future*Rowman and Littlefield Publishers.