University of Oxford

MMath CD Dissertation

An analysis of changes in mathematical subfields via time-dependent co-authorship network

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Abstract

Network theory is a powerful tool that allows researchers to model and investigate complex relational data. In this dissertation I examined structural changes in a large network of mathematical collaborators. To highlight some important features of the network, I calculated a number of network statistics: publishing rates for different subfields of mathematics, the overlap between these subfields, clustering coefficients, centrality measures, and assortativity coefficients. I also investigated community structure of the network using two different community detection methods and made a comparison between them. These calculations revealed some interesting dynamics behind the evolution of mathematical disciplines. I have quantified the correlation between the researchers' subjects of interest and their communities, which varied a lot depending on a mathematical subfield. Finally, I gave some concluding remarks and outlined possibilities for further investigation.

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Contents

1 Introduction

The processes by which we collectively produce knowledge in science and technology have been the subject of endless fascination throughout history. The last few decades have seen development of new fields in both pure and applied mathematics, such as bioinformatics and data science. Probably, the most recent example is the development of "Inter-universal Teichmller theory" by S. Mochizuki in order to tackle *The ABC conjecture.* An interesting question is how can one track the birth, evolution, and decline of disciplines? It is very difficult to identify the emergence of a new field, as one has to identify a new research theme from a few publications against the background of millions of others. There is no simple solution to this problem but one possible approach is to analyse mathematics as a net of collaborations between different researchers. Mathematics is increasingly done in groups and this means that social dynamics can sometimes highlight quite a lot of changes in a mathematical field.

In order to identify large scale trends between mathematical collaborators, I investigate American Mathematical Society's Mathematical Reviews database using methods developed in network theory. The study of networks is a very useful tool for analysing complex relational data. It has a rich history in mathematics as well as social and natural sciences [33]. Collaboration networks in particular have often provided a good source of reliable data and there is a substantial body of their qualitative studies [3, 6, 18]. The studies of science co-authorship networks focused on comparison of patterns of collaboration in different disciplines [31], various statistical properties of the networks [29], and models of their evolution [46]. There are several papers [7, 17] that deal with identifying the evolution of a scientific field, and some of the insights they obtained include changes in network topology that accompany maturity of a scientific field.

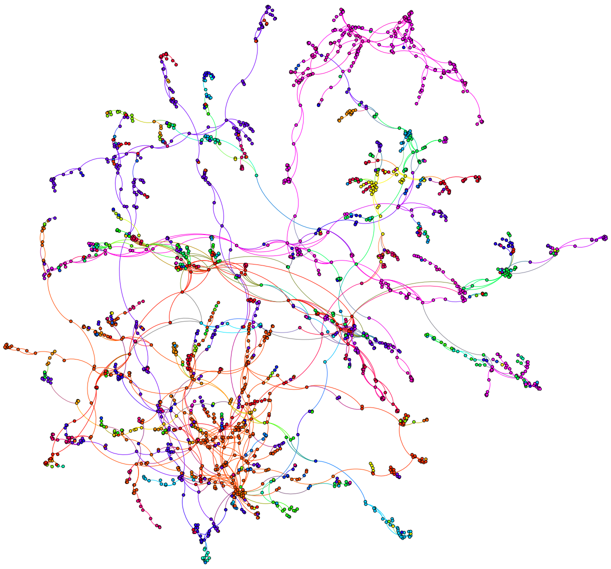
Mathematically, a network is usually represented as a graph. A natural way to represent a co-authorship network as a graph is to assign authors to the vertices and collaborations between them to the weighted edges, with the weight proportional to the number of co-authored papers. Researchers have found that such graphs have quite a few interesting properties. Many social networks exhibit high degrees of transitivity, i.e. if vertex A is connected to vertex B and vertex B to vertex C, then there is a heightened probability that vertex A will also be connected to vertex C [4]. Other interesting quantities that one can look at are various centrality measures, assortativity, and degree distributions. I look at them in more detail later in the dissertation and try to explain what is their significance for the changes in mathematical subfields.

A lot of real-world networks have mesoscopic structures called communities [43]. They divide network vertices into groups within which the network connections are dense, but between which they are sparse. In the case of social networks this can correspond to a close circle of friends or colleagues. These structures can provide a lot of insight into the structure of the network [37, 26, 49] and a large part of this report will be dedicated to their studies. A good example of a successful analysis of network community structure is an investigation of social structure of university Facebook friendship networks [49]. Some interesting insights in this paper is that the organisational structure of a student network varies quite a lot across different institutions. For instance in Caltech it depends strongly on House affiliation, while in Princeton and other three universities the communities more strongly correlate with class year.

The rest of the report is structured as follows. First, I give an introduction to network theory and define the terms that will be commonly used throughout the paper. Next, I present the data used for the analysis, including what are its possible limitations and what has already been done with this data. Then I will investigate some fairly general properties of the network and highlight the methods used in their analysis. The next section will be dedicated to the community structure of the network and how it relates to changes in mathematical fields. In this section, I will use two different methods of community detection and highlight their differences. Finally, I will summarise and discuss the work done in this paper and suggest possibilities for future research.

2 Preliminary Network Theory

Figure 1: Largest connected component of the AMS co-authorship network in 1985. Colours correspond to author's main subject of interest. The image was produced using Gephi visualisation platform and the layout obtained using a force-based algorithm by M. Jacomy [5].



The study of networks, in the form of mathematical graph theory, is one of the fundamental pillars of discrete mathematics [33]. A *network* G is an ordered pair of disjoint sets (V, E), where V is the set of *vertices* and E is the set of edges. In an *undirected* network $E \subseteq V^{(2)}$, a set of unordered pairs of vertices. In a *directed* network, the edges are ordered pairs of vertices. A network is *finite* if V is finite [34]. In this dissertation I will only work with finite networks.

Let $n = |V|$, the *Adjacency matrix*, $A \in \mathcal{M}_{n\times n}$ of a network G is defined such that each matrix element a_{ij} indicates if there is an edge e_{ij} between vertices i and j.

$$a_{ij} = \begin{cases} 1 & \text{if there is an edge connecting } i \text{ and } j \\ 0 & \text{otherwise} \end{cases} \tag{1}$$

Weighted network associates a weight $w(e) \in \mathbb{R}$ with every edge $e \in E$. In a weighted network, the adjacency matrix has edge weights $a_{ij} = w(e_{ij})$ instead of the incidence indicators . In this report the weights will represent the number of publications between two authors and are always positive integers.

The neighbourhood of a vertex i, denoted $\Gamma(i)$ is the set of vertices j connected to i [34].

$$\Gamma(i) = \{j \in V : e_{ij} \in E\}\,. \tag{2}$$

The *degree* of a vertex i is the size of its neighbourhood, $d_i = |\Gamma(i)|$, or equivalently the number of edges incident to it. In a weighted network, the corresponding quantity, often called *strength* of a vertex is the sum of the edge-weights of edges incident to it.

$$k_i = \sum_{j\in\Gamma(i)} w(e_{ij}). \tag{3}$$

By a partition of a network $\mathcal{P} = G_1, G_2, \dots G_k$, I will mean a partition of a vertex set V into subsets $G_i \subseteq V$, s.t. $G_1 \cup G_2 \cup \ldots \cup G_k = V$ and $G_i \cap G_j = \emptyset$ for all i and j. These are pretty much all the definitions that we will require for now and everything else will be introduced as the need arises.

3 Data

The data under investigation comes from the database Mathematical Reviews, maintained by American Mathematical Society (AMS). The database covers the period of 25 years from 1985 to 2009 and consists of nearly 1.5 million publications by hundreds of thousands researchers. The publications come from peer-reviewed books and articles in *mathematical* journals. This is an important comment as quite a lot of publications in applied mathematics happens in physical, medical, and other journals, so the database by no means accounts to the total body of mathematical literature. Each entry in the database corresponds to a publication and includes the year of publication, a primary subject classification, sometimes several secondary subject classifications, and anonymised authors' IDs. Subject classifications are given according to the AMS Mathematics Subject Classification (MSC). The MSC classification is a 5 digit code that consists of two numbers followed by a letter or a dash, followed by another two numbers. The first two digits indicate the broadest discipline and the latter ones specify more specialised fields within that discipline. For instance, if a paper's primary classification is 14K25, then 14 means that the paper belongs to the field of Algebraic Geometry, 14T means the subject lies within a subfield of "Abelian varieties and schemes", and finally 25 means that the paper is on theta functions. Sometimes the number of MSC classifications of a paper is quite high, e.g. [44] has 1 primary and 19 secondary tags. There are no such extreme examples in the database, but there are over a thousand papers with 6 or more secondary classifications.

It should be noted that the subject classifications were given according to the edition of MSC used at that time (MSC 1985, MSC 1991, and MSC 2000). I have converted them according to the AMS conversion schemes to match the most up to date classification used in the database. There is no one-to-one correspondence between different revisions of MSC, so some of the papers might have been misclassified. However, the are only several thousand papers that had multiple possible classifications and this should not affect the global trends that we are after.

There have been several previous studies of different parts of the MR database, usually at smaller scale [10, 31, 19]. A paper by Brunson et. al. [10] studied pretty much the same database I am considering in this paper. They have more papers and authors in their network, so they seem to have been working on a more updated version. Their paper includes the discussion of several network measures (and correlations between them) and mainly tried to highlight the differences between pure and applied mathematicians. It is worth investigation to see what interesting information can be extracted from this database. However, most of the papers mentioned above focus on a general structure of the network. They try to deduce global structure of mathematical publishing or some large scale trends within it. The aim of this report is to investigate the development of different and temporal evolution of mathematical subfields.

4 Network Statistics

To get some general idea of general changes in various mathematical fields, I examine some measures and statistics commonly used in network analysis. They can provide some insights of their own as well as assist in identifying which subfields have interesting community dynamics.

4.1 Subject proportions

The first and simplest useful thing to do is to compute the changes in relative size of different fields. A natural way to do this is to calculate what proportion of papers have been published with some primary subject classifications in each year. The plot in Figure 2 gives details about primary 2-digit classifications. Two plots in Figure 3 show some subjects that have interesting dynamics within their 3-digit classifications. 2009 is very incomplete, so I omitted in the plots.

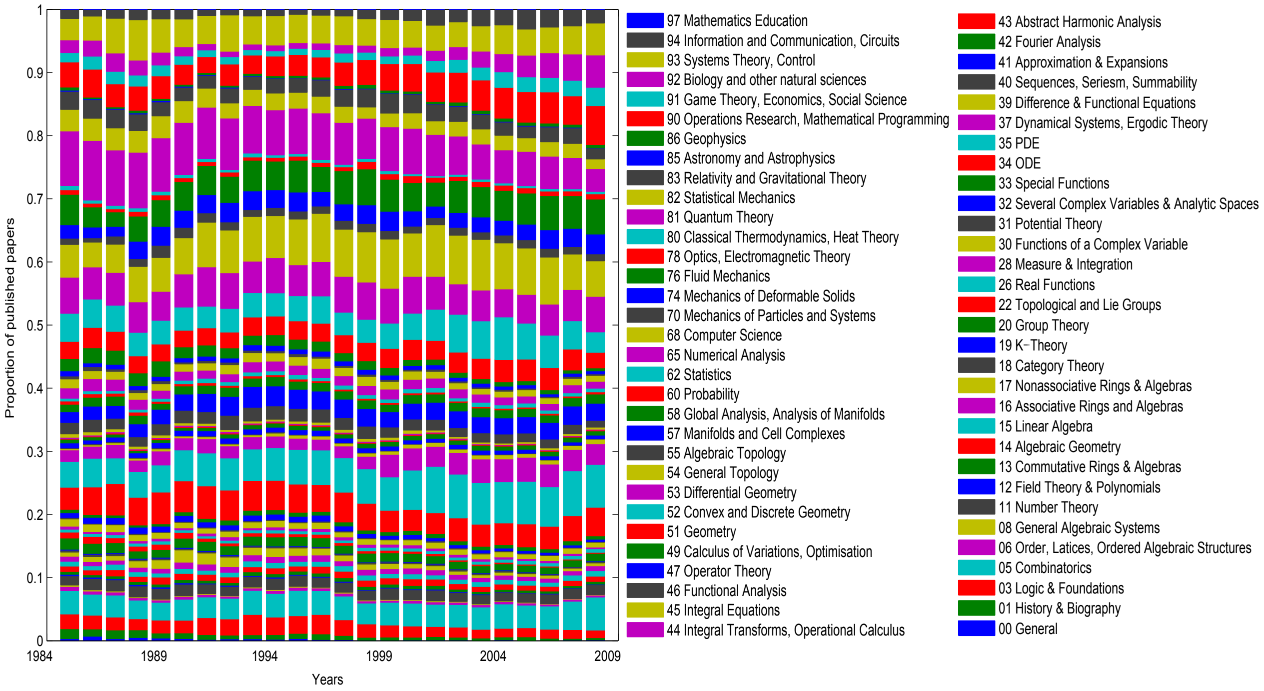


Figure 2: Subject proportions. Each bar corresponds to the percentage of all papers published in a year, that have the given 22digit primary subject classification.

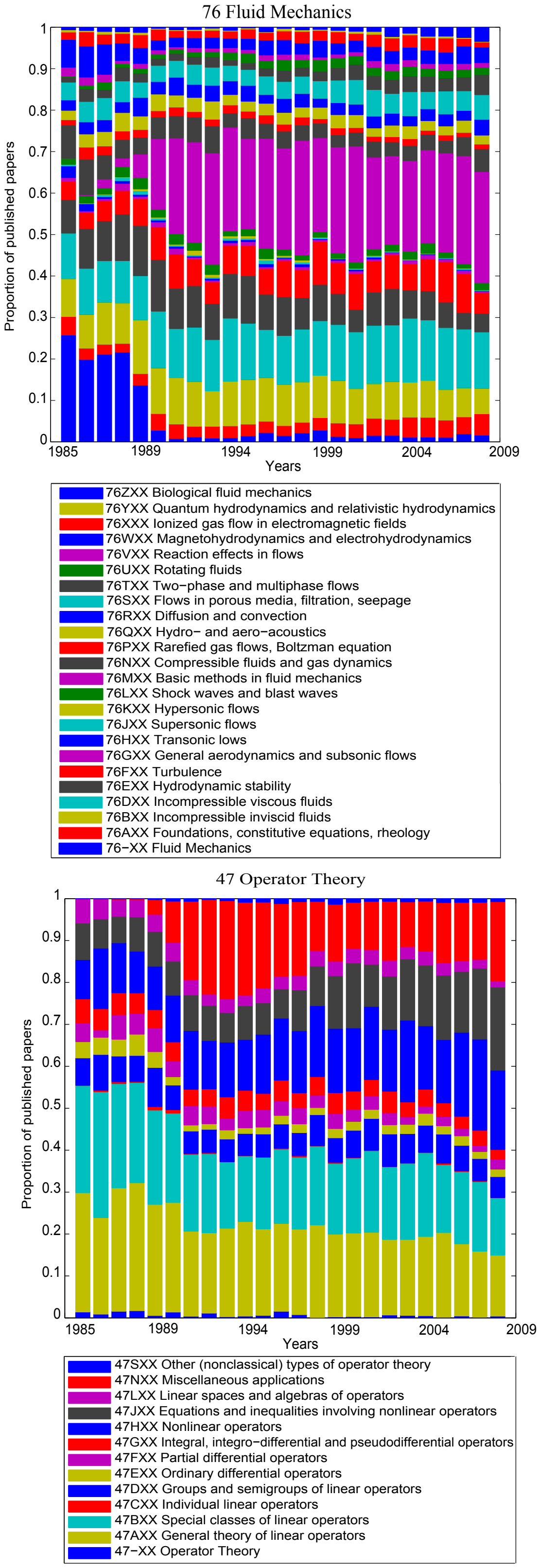
We can see from Figure 2 that mathematical biology had a slump in the number of publications in early 1990 but has grown very rapidly since then. Quantum Theory has experienced a steady decline in the number of published papers (at least in mathematical journals). If we look at 3-digit classifications the changes in some subfields become quite interesting. For instance, there are some curious developments in 47 Operator Theory and 76 Fluid Dynamics. In both subjects in the early 1990s there was an explosive growth in the number of publications within subfields that had not been very developed before. Intriguingly, in the case of Operator Theory, the subfields that grew the most were applications of the subject (to optimisation, physical sciences, numerical analysis, etc.). However, in the case of Fluid Mechanics, more development happened in a more theoretic part of the subject (stochastic analysis, perturbation methods, homogenisation, etc.). We can also see a rather sharp drop in the number of papers published under the 'General Fluid Mechanics' tag. This happened in 1991, the year of change of classification, so it is likely that this change happened due to AMS becoming better at being more specific about the subjects of papers on Fluid Mechanics.

4.2 Overlap between subfields

Another fairly simple thing one can do is investigate the overlap between different fields. This can provide some interesting diagnostics as we have the division of classification into primary and secondary fields. This implies that for each paper there are 4 different relations between each pair of subjects. Hence, to investigate these relationships, I will use 2 measures which I define below. One will measure the strength of the overlap between different subfields and another will measure whether one is influencing another and how strong is this influence.

Let the size of a subject be defined as the number of papers that have this subject in its classification. To measure the strength of the overlap between subjects A and B, I use the number of papers that have both A and B in their classification over the expected number of papers with A and B in their classification if each paper were assigned a subject independently and uniformly at random while keeping the size of subjects the same [37]. I give tables of these values for different five year periods in Appendix A. Five-year periods are used from here on onwards, for several reasons. The main reason is that community structure algorithms are quite computationally taxing, so I had to do some collapsing of data. Also, other studies of collaboration networks [10, 31] use five-year periods, so this will allow the direct comparison of other measures that I calculate later. Using this measure, the fields with the strongest connection were "19 K-theory" and "18 Category Theory" in 1985–1990 with the score of over 50 (while the average is about 0.3). This overlap decreased quite rapidly afterwards, but it remained fairly substantial at around 8. The most consistent (in terms of the least percentage change) strong connection is between "22 Topological groups, Lie groups" and "43 Abstract harmonic analysis" and it was increasing over the period of investigation.

Figure 3: 3-digit classifications for Fluid Mechanics and Operator Theory



To measure a directed overlap between subjects A and B, let the contribution of a paper be +1 if it has A in its primary classification and B in its secondary classifications. Afterwards, I normalise the sum of these contributions over the total number of papers that have A and B in their classifications and multiply by the score above. Full tables of these values are again in Appendix A. An example of an interesting results is that a lot of papers in the late 1980s that had “80 Classical thermodynamics, heat transfer” as the main subject included “85 Astronomy and Astrophysics” as a secondary one, but in the later years these fields stopped having a lot of overlap.

4.3 Transitivity

A very important property for social networks is transitivity. A relation $\circ$ is called *transitive* if $a \circ b$ and $b \circ c$ implies $a \circ c$. In a network, the simplest relation is being connected by an edge. For a social network, a transitive relation between 3 vertices can be stated as “the friend of my is also my friend”. There are two main ways to measure transitivity. There is a global transitivity that is defined as [34]

$$C = \frac{6 \times \text{number of triangles in the network}}{\text{number of paths of length two}}, \tag{4}$$

where 6 comes from the number of paths of length two in each triangle. In our network, these coefficients for each five-year period satisfy $0.22 < C < 0.32$. These values are fairly typical for the co-authorship networks of mathematical or physical sciences [31].

Alternatively, one can measure local transitivity by defining a local value for each vertex as [34]

$$C_i = \frac{\text{number of triangles connected to vertex } i}{\text{number of triples centered on vertex } i}, \tag{5}$$

and then taking the average to get

$$C_{\text{local}} = \frac{1}{n} \sum_i C_i. \tag{6}$$

This definition weighs the contribution of low-degree vertices higher (as they have lower denominators) and usually gives a higher value then the previous measure [13, 47]. For the whole network these work out to be $C_{\text{local}} \in (0.32, 0.5)0$, also consistent with other studies of co-authorship networks [31]. They are also strictly increasing with time, which suggests that there is a growing number of collaborations of three or more people.

We can also examine these coefficients restricted to the sub-networks of a single field (as indicated by their 2-digit classification). All these coefficients are in the Appendix B. Interestingly, both these transitivity measures are higher in more ‘applied’ fields. Furthermore, although the local transitivity measure still takes values within the usual range for co-authorship networks, global transitivity can get higher than then those usually reported in the literature. In the fields of Statistical Mechanics, Relativity and Gravitational Theory, Geophysics, and Game Theory, the values get as high as 0.72, i.e. overwhelming majority of collaborations are in groups of tree or more.

4.4 Centrality Measures

Another set of interesting diagnostics to compute are *centrality measures*. They assign a value to each vertex in a network that signifies its importance [34]. To investigate which fields have important vertices, I define the researcher’s subject as the mode of 2-digit subject classification which this researcher authored or co-authored. In a social network, one can imagine that a person with many connections to other people might be quite important. A measure of this is the degree of a vertex, often called *degree centrality* to emphasise it as a centrality measure. This is a very simple measure and a natural way to extend it is to say that a vertex is important if it is connected to many vertices that are important themselves. This is the motivation behind *eigenvector centrality* [34]. The way it works is we make an initial guess about the centrality of e_i for each vertex i, say 1. We then calculate a better guess by summing over the centralities of its neighbours $e'_i = \sum_i A_{ij} x_j$, where $A_{ij} = 1$ if authors i and j wrote a paper together and 0 otherwise. In matrix notation, at an iteration t, we have

$$\mathbf{x}'(t) = \mathbf{A}^t \mathbf{x}(0), \tag{7}$$

where $\mathbf{A}$ is the adjacency matrix of our network. If we decompose $\mathbf{x}(0)$ into the linear combination of eigenvectors v_i of the adjacency matrix, we get

$$\mathbf{x}(t) = \mathbf{A}^t \sum_i c_i \mathbf{v}_i = \sum_i c_i \lambda_i^t \mathbf{v}_i = \lambda_1^t \sum_i c_i \left[\frac{\lambda_i}{\lambda_1}\right]^t \mathbf{v}_i, \tag{8}$$

where λ_i are the eigenvalues of A and λ_1 is the largest of them. Taking the limit as $t \to \infty$, $\mathbf{x}(t) \to c_1 k_1^t \mathbf{v}_1$ - i.e. the vector of centralities tends to the leading eigenvector of the adjacency matrix. We don't usually care about the normalisation of this quantity, as we seek vertices with high or low centrality, but we can normalise by requiring that all centralities sum to n, the number of vertices. A generalisation of this approach that I will be using is called *Katz centrality* [24] which also gives some "free" centrality to each vertex regardless of its position in the network or the centrality of its neighbours, i.e.

$$x_i = \alpha \sum_i A_{ij} x_j + \beta, \tag{9}$$

where α and β are positive constants. $\beta = 0$ will reduce this measure to the previous one. The motivation for this is that this slightly evens out the difference between the vertices that are connected to many vertices and the vertices that are connected to many vertices with high centrality. Using matrices we get

$$\mathbf{x} = \alpha \mathbf{A} \mathbf{x} + \beta \mathbf{1}. \tag{10}$$

Rearranging for $\mathbf{x}$ gives

$$\mathbf{x} = \beta (\mathbf{I} - \alpha \mathbf{A})^{-1} \mathbf{1}. \tag{11}$$

We don't care about the absolute magnitude, so we can drop the β term. As $\alpha \to 0$, $\mathbf{x} = \mathbf{1}$, that is all vertices have the same centrality values. As α increases, the centralities increase and eventually diverge. The first point of divergence is the first root of

$$\det(\mathbf{A} - \alpha^{-1} \mathbf{I}) = 0, \tag{12}$$

which is the characteristic polynomial of adjacency matrix. Hence, we require that $\alpha^{-1} < \lambda_1$. M.E.J. Newman states that most researchers have employed values close the maximum, hence I picked $\alpha^{-1} = 0.9\lambda_1$.

There are some interesting developments that can be deduced using this measure. For instance, in the older parts of the database (1985–1994), many researchers with high Katz centrality values came from Combinatorics, Probability Theory, and Quantum Theory. They still had quite a large presence in late 1990s, but were beginning to get phased out by researchers with a focus on Computer Science and Differential Equations. This trend continued throughout the 2000s, and in 2005–2009 almost a third of scientists with the top 100 centrality values came from the background in Differential Equations.

The importance of a vertex can also be measured in a different way. Imagine that knowledge is passed from one researcher to another via collaborating. Hence, one might want to know which vertices are more important for the spread of information. Suppose that every (connected) pair of researchers exchanges messages with equal probability per unit time and that messages always take the shortest path - or one such path - chosen uniformly at random, if there are several. If we wait a suitably long time, then the number of messages passing through each vertex is proportional to the number of geodesic paths that go through this vertex. This is the idea behind the geodesic *betweenness centrality* [16]. Mathematically it can be defined as

$$x_i = \sum_{i,j,k \in V} \frac{\sigma_{jk}(i)}{\sigma_{jk}}, \tag{13}$$

where i,j and k are distinct vertices, σ_{jk} is the total number of geodesic paths between vertices j and k, and $\sigma_{jk}(i)$ is the number of those paths that pass through vertex i. We define $\sigma_{jk}(i)/\sigma_{jk} = 0$ if both σ_{jk} and $\sigma_{jk}(i)$ are zero.

Over 1985–1999 a lot of vertices with high betweenness centrality came from Combinatorics. Hence, in that period, combinatorics researchers seem to be important for the spread of information throughout the network. However, in the 2000s, we see them being overtaken by the authors on Operations Research and Mathematical Programming. They do not have very high scores in Katz and eigenvector centrality measures mentioned above, but they seem to be very important in spreading the knowledge between different disciplines

4.5 Assortative mixing

To make a bridge between summary statistics and community structure, I will investigate the way researchers tend to form groups between each other. People form friendships, acquaintances, working, and other relationships based on various characteristics including age, nationality, language and many others. They tend to associate strongly with others whom they perceive to be similar to themselves in some way [28]. This tendency is called *homophily* or *assortative mixing*. A network can have assortative or dissasortative mixing based on some characteristic of the vertices. It can either be based on some enumerative characteristic - vertices classified into a finite set of values - or it can be based on some scalar characteristics like income or age.

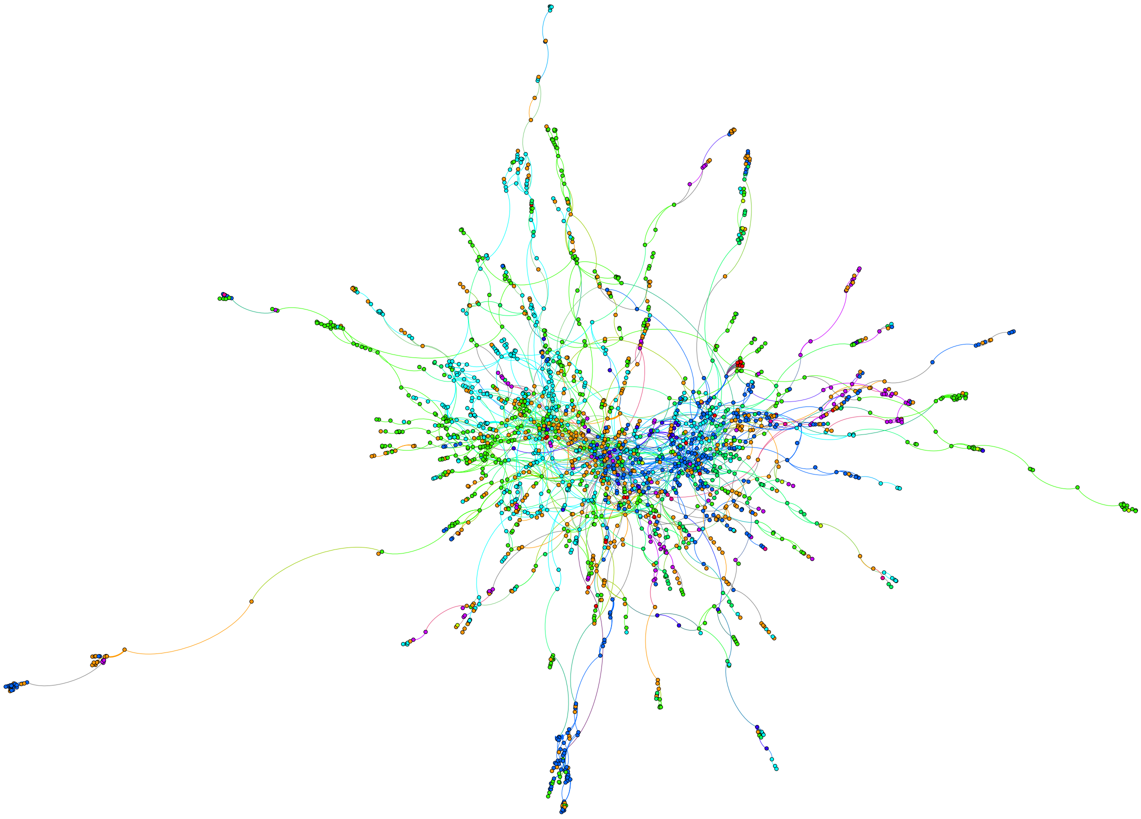


Figure 4: An example of a network with relatively high degree of assortative mixing by subject. This is a subset of AMS network, that consists of researchers that focused "03 Mathematical logic and foundations" in 1985–1989. Colours correspond to 3-digit classifications.

One case of assortative mixing by a scalar quantity is mixing by degree. In a social network, this might occur if sociable people are friends with other sociable people and hermits are friends with other hermits. This is of particular interest, as degree is the property of network itself rather then some imposed one like age or publishing rate. In a network where high-degree vertices tend to stick together, there is often a *core* of well connected high-degree vertices surrounded by a less dense *periphery* of vertices with lower degree. This *core/periphery structure* often presents itself in social networks and is quite an interesting object of study [40], but it is outside the scope of this report.

Assortative mixing by degree can be measured by calculating covariance. Let d_i be the degree of a vertex i. The mean degree over the edges of our network is

$$\mu = \frac{\sum_{ij} A_{ij} d_i}{\sum_{ij} A_{ij}} = \frac{1}{2m} \sum_i d_i^2, \tag{14}$$

where m is the number of edges in the network. The covariance of d_i and d_j over the edges is then

$$\begin{aligned}
\operatorname{cov}(d_i, d_j) &= \frac{\sum_{ij} A_{ij}(d_i - \mu)(d_j - \mu)}{\sum_{ij} A_i j} \\
&= \frac{1}{2m} \sum_{ij} A_{ij} \left(d_i d_j - \mu d_i - \mu d_j + \mu^2\right) \\
&= \frac{1}{2m} \sum_{ij} A_{ij} d_i d_j - \mu^2 \\
&= \frac{1}{2m} \sum_{ij} A_{ij} d_i d_j - \frac{1}{(2m)^2} \sum_{ij} d_i^2 d_j^2 \\
&= \frac{1}{2m} \sum_{ij} \left(A_{ij} - \frac{d_i d_j}{2m}\right) d_i d_j. \qquad (15)
\end{aligned}$$

The covariance is positive if the values d_i and d_j at each end of and edge tend to be both large or both small, otherwise it tends to be negative. That is it will be positive when there is assortative mixing and negative for disassortative mixing. It is convenient to normalise $\operatorname{cov}(d_i, d_j)$ so that it takes the value 1 in a perfectly assortative network, i.e. where all the edges fall between vertices of equal degrees. Putting $k_i = k_j$ in the Equation 15, we get a perfect mixing value of

$$\frac{1}{2m} \sum_{ij} \left(d_i \delta_{ij} - \frac{d_i d_j}{2m}\right) d_i d_j, \qquad (16)$$

where δ_{ij} is the Kronecker delta. The normalised measure, called the *assortativity coefficient*, is the ratio

$$r = \frac{\frac{1}{2m} \sum_{ij} \left(A_{ij} - \frac{d_i d_j}{2m}\right) d_i d_j}{\frac{1}{2m} \sum_{ij} \left(d_i \delta_{ij} - \frac{d_i d_j}{2m}\right) d_i d_j}. \qquad (17)$$

The aggregate assortativity by degree of the network is about 0.12 in most five year periods (with a dip to 0.04 in 1990–1994).

Another way in which one can expect assortative mixing in our network is the mixing by subject - i.e. one should expect more edges between authors within the same field rather than different fields. This is an example of mixing by enumerative characteristic, so we need a slightly different approach then we used before. To measure this, we compute the fraction of edges between vertices of the same field and then subtract the fraction of edges that we would have expected to find if edges were distributed uniformly at random without taking into account the relation of a vertex to any field. The total number of edges between vertices in the same field is

$$\sum_{\text{edges}(i,j)} \delta(c_i, c_j) = \frac{1}{2} \sum_{ij} A_{ij} \delta(c_i, c_j). \qquad (18)$$

For the expected number of edges, consider a graph in which we create edges between vertices at uniformly at random while preserving vertex degrees. If we look a particular edge attached to a vertex i, with degree d_i, there are $2m$ ends of edges in a network, and the probability that the other end of our edge is attached to a vertex j is $d_j/(2m)$. Counting over all edges attached to a vertex i, the expected number of edges between vertices i and j is then $d_i d_j/(2m)$. Hence the expected number of edges between all pairs of vertices of the same type is

$$\frac{1}{2} \sum_{ij} \frac{d_i d_j}{2m} \delta(c_i, c_j). \qquad (19)$$

Therefore, the difference between the Equations 18 and 19 normalised by the number of edges is

$$Q = \frac{1}{2m} \sum_{ij} \left(A_{ij} - \frac{d_i d_j}{2m}\right) \delta(c_i, c_j). \qquad (20)$$

The quantity Q is called *modularity* [32, 35] and is a measure of the extent to which like is connected to like in a network. It takes values in $[-1/2, 1)$ and is positive when there are more edges between vertices of the same type than expected and negative if there are fewer. Modularity commonly appears in the study of networks and I will discuss it further in the section on community detection.

Modularity is always less than 1, even for a perfectly mixed network [32]. This is undesirable as we want to know how strong is assortative mixing compared to a perfectly mixed network. Hence, we normalise by the modularity for a network where for all $a_{ij} = 1$ we get $\delta(i, j) = 1$. The assortativity coefficient then becomes

$$r = \frac{\sum_{ij}\left(A_{ij} - \frac{k_i k_j}{2m}\right)\delta(c_i, c_j)}{2m - \sum_{ij}\left(\frac{k_i k_j}{2m}\right)\delta(c_i, c_j)}, \tag{21}$$

which takes the value 1 in a perfectly assortative network. In our network we get values $r \in (0.64, 0.67)$.

5 Community Structure

In this section, I discuss the community structure of the network. Detecting and analysing communities is quite a complex process and there is no single best way to it. Hence, I will describe two different approaches to community detection, explain their differences and apply them to the network built from MR database to try to investigate changes in mathematical subfields.

5.1 Generalised modularity optimisation

As we have seen from previous section, the modularity function can be used to quantify how well some partition of a network reflects the way different vertices tend to associate between themselves. The idea behind modularity optimisation is that if we find a partition that maximises the modularity function, it will closely resemble the community structure of the network, if one exists The modularity function in Equation 20 is good for a relatively simple network with no edge weights or time dependency but is not sufficient in our case. Hence, we need a more general framework. One such framework was developed by P.J. Mucha et al. and it employs a multislice modularity function [30] derived from the connection between community structure and the stability of Laplacian dynamics [25]. To show how it works, I will follow the derivations given in the above papers and try to fill in the details. The idea is that one can rederive the normal modularity function from Laplacian dynamics and then generalise this approach to produce a new modularity function that we need for our network.

Let M be an ergodic Markov process on the network. An important property of ergodicity is that any initial configuration will reach the same stationary distribution. Let this Markov process M be the motion of a random walker. Let $\{G_1, G_2, G_3, .., G_l\} = \mathcal{P}$ be a partition of the network into communities. The *stability* of a partition $\mathcal{P}$ is defined as

$$R_M(t) = \sum_{G \in \mathcal{P}} p(G, t) - p(G, \infty), \tag{22}$$

where $p(G, t)$ is the probability that the walker is in the same community G initially and at a time t. This definition comes from the autocovariance function of a Markov process on the network [12]. Intuitively, this function gives a positive contribution to communities from which the walker is unlikely to escape within the given time frame, that is stability measures the quality of a partition in terms of how persistent it is.

First, to clarify these concepts, consider a discrete-time random walker on a network, where the probability of a walker to move between two vertices is proportional to the weight of the edge between them. Hence,

$$p_i(t + 1) = \sum_j \frac{A_{ij}}{k_j} p_j(t), \tag{23}$$

where $p_i(t)$ is the density of random walkers on vertex i at time t, the quantity A_ij is the weight of the edge from i to j, and $k_j = \sum_i A_{ij}$ is the vertex strength of vertex j. To find the stationary distribution, we solve

$$p_i^* = \sum_j \frac{A_{ij}}{k_j} p_j^*, \tag{24}$$

which works out to be $p_i^* = k_i/(2m)$, where m is the now the sum of edge weights of the network. Hence, the stability at time $t = 1$ is

$$R(1) = \sum_{C \in \mathcal{P}} \sum_{i,j \in C} \left(\frac{A_{ij}}{k_j} \frac{k_j}{2m} - \frac{k_i}{2m} \frac{k_j}{2m} \right) = \frac{1}{2m} \sum_{ij} \left(A_{ij} - \frac{k_i k_j}{2m} \right) \delta(g_i, g_j) = Q, \tag{25}$$

where g_i is the community of a vertex i. This is our modularity function from before. It is great news as we can see that the partition stability is indeed equivalent to the modularity in the case of undirected network. However, we want to include the time as a parameter, as this will make the modularity function more flexible and alleviate some problems that I discuss later.

To do this, we consider a continuous-time process associated with the random walk. Suppose that there are independent, identical homogeneous Poisson processes defined on each vertex of the graph, so that the walkers jump at a constant rate from each vertex. This is governed by Kolmogorov equation

$$\dot{p_i} = \sum_j \frac{A_{ij}}{k_j} - p_i. \tag{26}$$

This equation is driven by the operator $A_{ij}/k_j - \delta_{ij}$ which is an entry L_{ij} of a normalised Laplacian matrix $\mathbf{L}$ that often occurs in graph theory [11, 1]. The stationary distribution of the process is again $p_i^* = k_i/2m$ and the stability of the partition becomes

$$R(t) = \sum_{G \in \mathcal{P}} \sum_{i,j \in G} \left(e^{t\mathbf{L}} p_j^* - p_i^* p_j^* \right) = \sum_{G \in \mathcal{P}} \sum_{i,j \in G} \left(e^{t\mathbf{L}} \frac{k_j}{2m} - \frac{k_i}{2m} \frac{k_j}{2m} \right). \tag{27}$$

Expanding the matrix exponential to the first order in t, so that $(e^{t\mathbf{L}})_{ij} = \delta_{ij} + L_{ij}$ and ignoring all the constant factors δ_{ij} (as they do not affect the optimality of a partition and just shift the value of stability), the equation becomes

$$R(t) \simeq \frac{1}{2m} \sum_{ij} \left(t A_{ij} - \frac{k_i k_j}{2m} \right) \delta(g_i, g_j). \tag{28}$$

Furthermore, dividing by t, which has no effect on the optimality of a partition, we get a modularity function with the resolution parameter $\gamma = 1/t$

$$Q = \frac{1}{2m} \sum_{ij} \left(A_{ij} - \gamma \frac{k_i k_j}{2m} \right) \delta(g_i, g_j). \tag{29}$$

The parameter γ is important as a the usual modularity function suffers from the resolution limit problem [15]. Modularity optimisation may fail to detect the natural community structure of a network if communities are too small. However, varying γ can help to deal with this problem. If $\gamma \gg 1$ we get that $Q \approx -\sum_{ij} (k_i k_j/(2m)) \delta(g_i, g_j)$ and it is maximised when $\delta(g_i, g_j) = 0$ for all i and j, i.e. when each vertex is in its own community. If $\gamma \ll 1$, then $Q \approx \sum_{ij} A_{ij} \delta(g_i, g_j)$ and it can be shown [25] that this is maximised when we have a partition into two communities. Hence, varying γ gives some control over the size of communities we want to detect and this derivation gives it a direct interpretation as the time scale for random walker to escape from a community.

This approach was later extended by P.J. Mucha et al. [**?**] to develop a generalised version of modularity for a multislice network. A multislice network is a combination of individual networks coupled through links that connect each node in one network slice to itself in other slices. In our case the slices are aggregated networks for each of the 5 year periods, but in general this can be any other division of the network. Their derivation requires a more general stability function. To get it, we replace the $p_i^* p_j^*$ in Eq 29 with $\rho_{i|j} p_j^*$ where $\rho_{i|j}$ is the conditional probability at the stationary distribution of jumping from vertex j to vertex i along the edge types allowed in the network. So for our network these will be edges between vertices in a given slice or between the vertex in one slice to itself in a different slice. The stability of a partition then becomes

$$R(t) = \sum_{ij} \left(t L_{ij} p_j^* - \rho_{i|j} p_j^* \right) \delta(g_i, g_j) \tag{30}$$

after the linearisation of the exponential matrix.

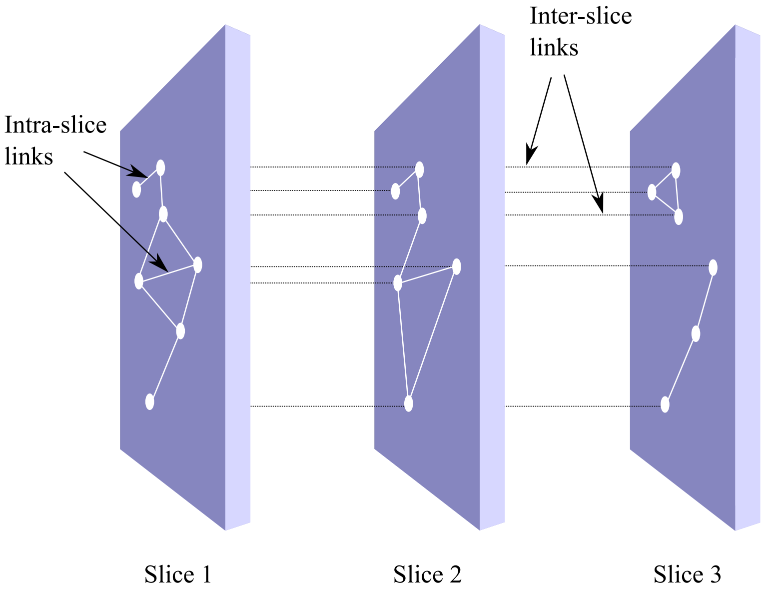


Figure 5: Schematic of a multislice network. Three slices s = 1,2,3 represented by adjacency matrices A_{ijs} encode intra-slice connections (white lines). Inter-slice connections (dashed lines) are encoded by C_{jrs}, specifying the coupling of vertex j to itself between slices r and s. Couplings are only between neighbouring slices as appropriate for an ordered slices.

For the multislice network, let A_{ijs} be the weight of the edge ij in the slice s and C_{isr} be the weight of the coupling between vertex i in slice s and itself in slice r. Let $k_{is} = \sum_j A_{jis}$, $c_{is} = \sum_r C_{isr}$ and the multislice strength of vertex i in slice s be $\kappa_{is} = k_{is} + c_{is}$. Then the Kolmorgorov equation becomes

$$\dot{p}_{is} = \sum_{jr} \left(A_{ijs} \delta_{sr} - C_{jsr} \delta ij \right) \frac{p_{jr}}{\kappa_{jr}} - p_{is}, \tag{31}$$

with the steady state distribution $p_{jr}^* = \kappa_{jr}/2\mu$, where $\mu = \sum_{jr} \kappa_{jr}$. In the $\rho_{is|jr}$ we have two contributions. One contribution comes from an intra-slice step when $s = r$, which will be $(k_{is}/2m_s)(k_{js}/\kappa_{js})$. Another contribution comes from inter-slice step for $i = j$, which is $(C_{isr}/c_{ir})(c_{ir}/\kappa_{ir})$, where $m_s = \sum_i k_{is}$. This yields the stationary distribution

$$\rho_{is|jr} p_{jr}^* = \left[\frac{k_{is}}{2m_s} \frac{k_{jr}}{\kappa_{jr}} \delta_{sr} + \frac{C_{jsr}}{c_{jr}} \frac{c_{jr}}{\kappa_{jr}} \delta_{ij} \right] \frac{\kappa_{jr}}{2\mu} = \frac{1}{2\mu} \left[\frac{k_{is} k_{jr}}{2m_s} \delta_{sr} + C_{jsr} \delta_{ij} \right]. \tag{32}$$

Substituting this into Equation 30 and taking the linear approximation gives a multislice generalisation of modularity:

$$Q = \frac{1}{2\mu} \sum_{ijsr} \left[\left(A_{ijs} - \gamma \frac{k_{is} k_{js}}{2m_s} \right) \delta_{sr} + (1 - \gamma) \delta_{ij} C_{jsr} \right] \delta(g_{is}, g_{jr}). \tag{33}$$

One can also reweight the conditional probabilities by using some factor other then relative strength of the edges at a vertex j which will allow for a more flexible resolution parameters. This gives

$$Q = \frac{1}{2\mu} \sum_{ijsr} \left[\left(A_{ijs} - \gamma_s \frac{k_{is}k_{js}}{2m_s} \right) \delta_{sr} + \delta_{ij} C_{jsr} \right] \delta(g_{is}, g_{jr}), \tag{34}$$

where the resolution parameters for inter-slice coupling have been absorbed into the magnitude of the elements in C_{irs}. For simplicity C_{irs} will take binary values $\{0, \omega\}$ indicating the presence or absence of inter-slice edges. This way, only one variable ω is required to control the correspondence between communities in different slices. For $\omega = 0$, there is no correspondence between communities within different slices, so the optimal partition is just the union of optimal partitions between different slices. If $\omega \gg 1$ the vertices will be forced to remain within the same communities across all slices, so if γ_s are the same this will be a modularity function for the adjacency matrix where edge weights are summed over all slices.

Now that we have the modularity function that is applicable to our network, it is theoretically possible to find the optimal partition into communities and see what sort of insights they might provide. However, one can not find a global optimum in practice, as modularity optimisation is NP-hard [9]. The best we can attain 'good' partition that is ideally found relatively fast. The way I did it is by using the "generalised Louvain" code from [23], that uses the procedure similar to "Louvain Method" [8], with the important distinction that the Louvain passes in this code work directly with the modularity matrix rather than the adjacency matrix.

The Louvain method is a heuristic algorithm that consists of two phases that are repeated iteratively. In the first phase, each vertex is assigned to its own community, so in the initial partition there are as many communities as there are vertex. For each vertex i, the algorithm then considers all vertices j in the neighbourhood of i and evaluates the gain in modularity that would take place by removing i from its community and placing it in the community of j. For the standard modularity function, the gain associated with moving vertex i into community G is

$$\Delta Q = \left[\frac{S_{G,in} + k_{i,G}}{2m} - \left(\frac{S_G + k_i}{2m} \right)^2 \right] - \left[\frac{S_{G,in}}{2m} - \left(\frac{S_G}{2m} \right)^2 - \left(\frac{k_i}{2m} \right)^2 \right], \tag{35}$$

where S_G is the total weight of edges incident to vertices in G, quantity $S_{G,in}$ is the total weight of edges inside G, and $k_{i,G}$ is the total weight of edges between i and vertices in G. If positive gains in modularity are possible, then i is placed into the community which the gain is maximal, otherwise i remains in its original community. This process is applied to all vertices and repeated until no more positive gains are possible. In the second phase, the communities that have been found in the first phase are compressed into a single vertex with the edge weight between a pair of new vertices equal to the edge weight between the corresponding communities. Afterwards, the first phase is applied to the new vertices. The combination of these two phases is called a "pass" and the algorithm usually goes through just a few (5–6) passes.

There are quite a few benefits to using this algorithm for community detection. It is relatively easy to implement and generalise to other modularity functions as well as being quite fast. The algorithm has been experimentally validated and finds partitions with quite a large value for modularity. There are some algorithms [20, 36] that can slightly outperform it in terms of finding higher modularity but their computational costs make it virtually impossible to apply them to a network with over 100000 vertices.

Before performing the actual computation, one has to choose the values of the parameters γ_s and ω. Some analysis can be found in the paper that developed the method [30]. I chose $\gamma_s = 1$ for all s to simplify the calculation. Choosing ω is a little trickier and ideally I would have ran the computation over different values and tried to assess the results. However, even for a collapsed network of five five-year periods the computation took almost two months, so this has not been possible. Hence, $\omega = 1$ is what I will be working with.

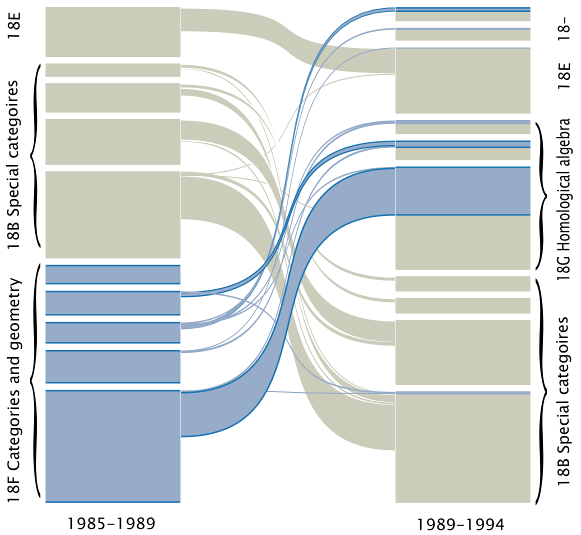


Figure 6: 10 largest communities in Category Theory and Homological Algebra and their changes from 1985 to 1994 within the subject. The bars correspond to different communities in the respective time periods. The lines between them correspond to people staying within the same community with each other.

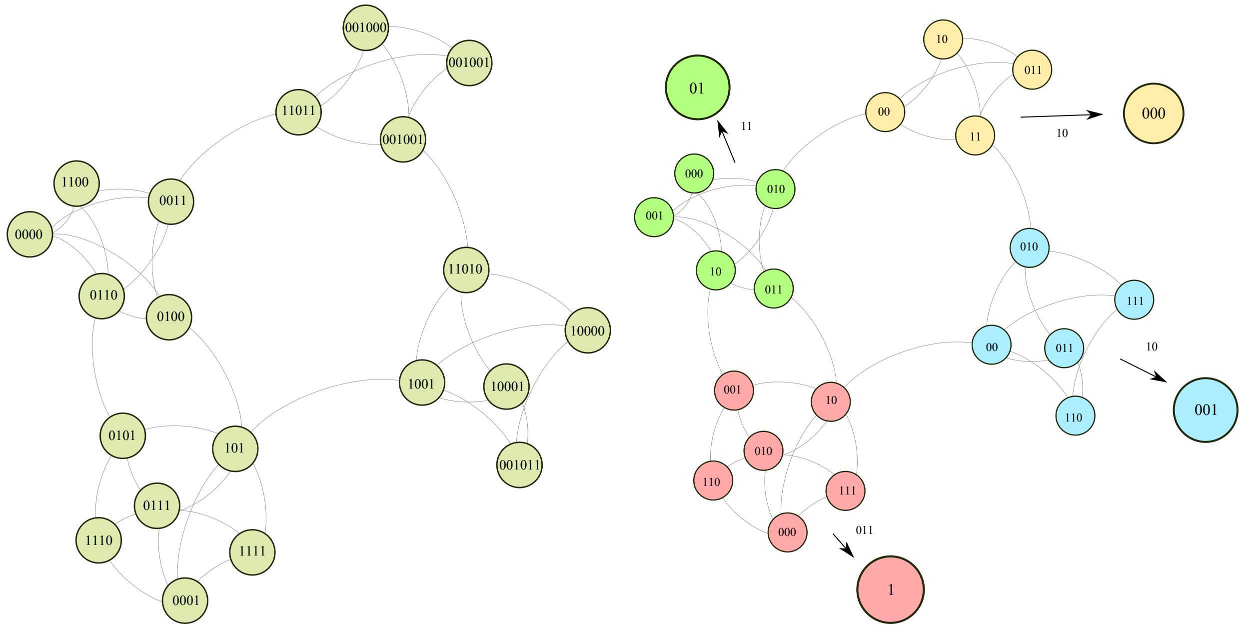
Some examples of how community structure can illuminate aspects of evolution within mathematical subfields include the subfields of "18 Category Theory; Homological Algebra". In the early 1990s volume of publications in "18F Categories and Geometry" dropped quite significantly and was not able recovered since then. This drop in the number of publications was accompanied by the dissolution of large communities that have focused on this subfield. A lot of researchers have moved on to the areas outside Category theory and the few that remained within this classification have shifted their focus to "18G Homological Algebra". Actually, almost half of the researchers from the largest community studying categories and geometry have formed the heart of a new large community that now studies homological algebra. This can be contrasted with what happened in "92 Biology and other natural sciences", where there was also a relatively sharp drop in the number of publications within a subfield "92C Physiological, cellular and medical topics" in mid 1990s. However, in this case, the communities did not really change as much and the subfield quickly recovered, becoming the largest subfield in that area by the late 2000s. Hence, the volume of publications is not necessarily indicative of how well the field is doing at a given time and some computation of community structure can provide some additional perspective, which can help to to understand what is actually happening to the subfield.

One can also examine the birth of a research are. In section 4.1, I mentioned how various applications of '47 Operator theory" have emerged and became fairly substantial subfields in their own right. In late 1980s, the second largest community of researchers in Operator Theory did not have a clear focus but rather consisted of people working on pretty much all subfields of within the subject. This is relatively uncommon, as in most other subjects a large proportion (about 60-70%) of the people in large communities focus on one or two subfields. By the early 1990s, there was a merger between this community and several smaller communities outside of Operator Theory (mainly from "46N Miscellaneous applications of functional analysis). Since then, the majority of publications within the new community focused on the applications of Operator Theory. Hence, one can argue that if one has a large group of researcher that are working together but not within confines of an already existing subject, it is possible that they might be brewing a new area of research.

5.2 Information-theoretic clustering method

An important aspect of investigating changes within large quantities of data is to filter out the statistical noise. The problem is that in our case it is impossible take more samples of the network. For instance, there is only one global network of mathematicians in 1987. One possibility to solve this problem is to apply some resampling technique to assess the accuracy of an estimate. [41] describes a method of doing exactly this using the bootstrap resampling. The authors have quite successfully applied their approach to analyse changes in biology and medicine. The way they do it is by using parametric bootstrapping applied to the edge weights. The edge weights are resampled independently from a Poisson distribution with the actual edge weight as its mean. Afterwards, the bootstrap network is partitioned into communities. This procedure is repeated to generate a large number (about 1000) of bootstrap partitions into communities. To identify the vertices that are assigned significantly to community, we search for the largest subset of vertices in each community that were also in the same community in the 95% of bootstrap networks. The author in [41] actually used a different method of detecting communities based on information theory. It can be useful to take a look at another approach to the community detection problem. It will also let me talk a little about the differences between methods of community detection.

The information-theoretic approach from [42] works as follows. Suppose we have a random walk over the network, we want to find an assignment of codewords to each vertex in such a way that the description of the random walk is as short as possible. If we assign a unique name to each vertex then by Shannon's source coding theorem [45], the lower bound for the mean codeword length is the entropy rate of the Markov process behind the random walk. In practice, we can use Huffman's procedure [22] to produce a compact prefix code for the vertex that will have mean codeword length close to the entropy. However, this code will not fully utilise the underlying structure of the network if there exists one. If we have community structure in the network, the random walker is likely to spend long periods of time inside communities but shorter time travelling between them. One can compare this to the way the modularity function has been deduced from the stability function, which finds the communities in which random walker spends a long time. Hence, we can use a two-level description where at a higher level each community is given a unique codeword and at a lower level a different code is used to name the vertices within a community together with an exit codeword. Note that the vertices in different communities can have the same codeword, but there is no ambiguity, as we first specify the community that contains the random walker is moving. A good division of the network into communities will give considerable improvement in the code length, see Figure 7.



(a) 0000 0100 101 0100 101 1111 101 0101 0111 0001 1110 0101 1110 0001 0111 0001 101 0111 0001 1110 0001 1111 101 1001 10000 11010 10000 11010 1001 11010 001001 001000 11011 001001 11011 0011 11011 001001 11011 001000

(b) 01 001 011 11 1 10 011 01 011 11 1 10 111 10 001 010 000 110 001 110 000 010 000 10 010 000 110 000 111 10 011 001 00 111 010 111 010 00 010 10 000 11 10 00 11 00 10 01 010 11 000 00 011 00 10

Figure 7: One-level (a) and two-level (b) description of vertices in a network. Big circles in (b) represent the communities and colours represent all vertices that belong to that community. Arrow and a code above it correspond to exit codes. The codes in the captions correspond to a path of random walker that starts at vertex 0000, jumps to 0100, . . . , and stops at 001000. The description length is 174 bits in (a) and 138 bits in (b).

To measure the quality of partition $\mathcal{P} = \{G_1, G_2, G_3, \ldots, G_l\}$, we want to find the lower bound for mean codeword length (measured in bits) per step in an infinite random walk for this partition. There are two components in the movement of a random walker, the movement between communities and the movement inside them. By Shannon's source coding theorem the entropy of movements between communities gives lower bound for the average length of a codeword used to name a community. Additionally, the entropy of movement inside each community gives a lower bound for the mean length of a codeword used to name a vertex inside this community. Combining these we get *map equation*

$$L(\mathcal{P}) = \sum_{i=1}^{l} q_i \mathcal{H}(Q) + \sum_{i=1}^{l} \left[q_i + \sum_{j \in G_i} p_j \right] \mathcal{H}(P_i), \tag{36}$$

where q_i is the probability of exiting community i, p_j is probability of being at vertex j, and $\mathcal{H}(Q)$ and $\mathcal{H}(P_i)$ are, respectively, the entropies of movement between the communities and within the community i. The entropy of a random variable X with probability distribution $\{p_1, p_2, .., p_k\}$ is defined as $\mathcal{H}(X) = -\sum_i p_i \log(p_i)$, so the entropies in the map equation become

$$\mathcal{H}(Q) = -\sum_{i=1}^{l} \frac{q_i}{\sum_{j=1}^{l} q_j} \log\left(\frac{q_i}{\sum_{j=1}^{l} q_j}\right), \tag{37}$$

$$\mathcal{H}(P_i) = -\frac{q_i}{q_i + \sum_{v \in G_i} p_v} \log\left(\frac{q_i}{q_i + \sum_{v \in G_i} p_v}\right) \tag{38}$$

$$- \sum_{j \in G_i} \frac{p_j}{q_i + \sum_{v \in G_i} p_v} \log\left(\frac{p_j}{q_i + \sum_{v \in G_i} p_v}\right). \tag{39}$$

Substituting this into the map equation 36 and doing some simplification results in

$$L(\mathcal{P}) = \left(\sum_{i=1}^{l} q_i\right) \log\left(\sum_{i=1}^{l} q_i\right) - 2\sum_{i=1}^{l} q_i \log(q_i) - \sum_{i=1}^{n} p_i \log(p_i) + \sum_{i=1}^{l} q_i + \sum_{v \in G_i} p_v \log\left(q_i + \sum_{v \in G_i} p_v\right). \tag{40}$$

All of the probabilities are at their steady state distribution. Hence, they depend on how we define transition probabilities for our random walker and the partition $\mathcal{P}$.

In [42], the authors considered a *random surfer* with a small teleportation probability τ. The surfer moves as follows, at each step with probability $(1-\tau)$, it moves via one of the edges from the vertex i it currently occupies to vertex j with probability w_{ij}/k_i, where w_{ij} is the weight of edge (ij) and k_i is the strength of vertex i. With the remaining probability τ or with probability 1 if the vertex it occupies is disconnected, the surfer teleports to a random vertex anywhere in the network with uniform probability. By the Perron-Frobineous, theorem there exists a unique stationary distribution for this Markov process and the steady state probabilities p_j for being at vertex j can be calculated by using a power iteration on the initial distribution $p_j(0) = 1/n$, n being the number of vertices in a network. Given these probabilities we can also calculate the steady-state escape probability q_i from the community G_i as

$$q_i = \tau \frac{n - |G_i|}{n-1} \sum_{\mathrm{J} \in G_i} p_j + (1-\tau) \sum_{j \in G_i} \sum_{v \notin G_i} p_j \frac{k_{jv}}{k_j}. \tag{41}$$

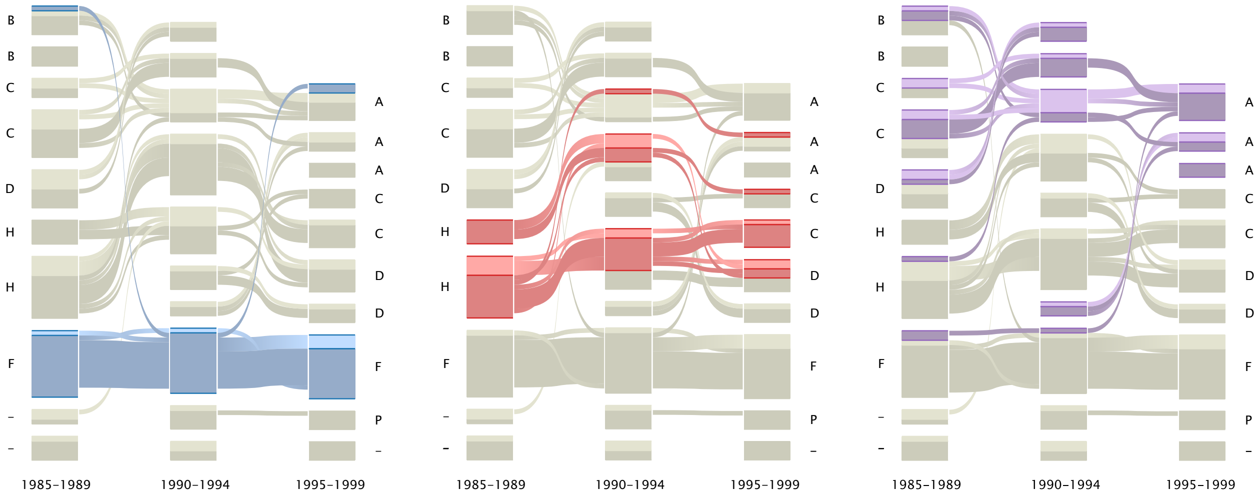
The left sum comes from the teleportation outside of the community and the right one comes from the edges between the communities.

The algorithm that was used in [42] to find the optimal partition closely resembles the Louvain method described earlier. It again runs a two-step greedy search which now needs to reduce the value of the map equation and hence the length of the code describing the network. The difference between this and Louvain code is that the vertices are taken in a random sequence order and there are some refinements of the partition after the main loop is done. These refinements are different for each paper and include simulated annealing (in the original paper on the method, this algorithm is quite slow) and repartitioning of the large communities. Full details are given in [42] and [41].

We can actually slightly modify the random walk process to make it similar to the one which we considered in the derivation of multislice modularity function - i.e. we add edges between then vertex

i in slice s and itself in other slices. The map equation won't change except for the communities being able to span across different slices. The form of escape probabilities formula also will not change. The only thing that does change are the steady-state vertex frequencies p_i (which become p_{is}, as each vertex can appear in different slices). However, in the original formulation of the method, they were calculated using iterative procedure anyway, so the only thing that we have to do is change the transition matrix. The only problem with this approach is that again in practice it takes much longer to partition a network, so generating 1000 bootstrap partitions is infeasible. I will compare the result of this approach with the partition obtained by optimising generalised modularity in the next section. However, in the bootstrap resampling, I just took the independent partitions of slices.

Some typical behaviour within the communities can be illustrated by examining "13 Commutative Rings and Algebras". There are several interesting changes that can be seen by examining publishing rates within the field. There is a steady decline in the number of papers published within "13B Ring extensions and related topics" and "13H Local rings and Semilocal rings". There was also a very fast growth in the subfields "13A General commutative ring theory" and "13P Computational aspects of commutative algebra". Other subfields have been growing at about the same rate as the subject itself without any significant jumps.



(a) 13F Arithmetic rings and other special rings

(b) 13H Local rings and Semilocal rings

(c) 13A General commutative ring theory

Figure 8: Alluvial diagrams higlighting evolution of different subfields within "13 Commutative Rings and Algebras".

The community structure changes can be investigated using alluvial diagrams [14] (Figure 8).These diagrams are constructed to highlight the changes, fusions, and fissions that the communities undergo between each pair of five-year periods. Each five year period occupies a column in the diagram and is horizontally connected to preceding and succeeding partitions by stream fields. Each block in a row of the alluvial diagram represents a community, and the height of the block reflects the size of the cluster. Darker colours indicate the significant part of each community. There are some patterns within the evolution of communities accompanying the evolution of subfields described above that often occur in other fields. For instance, in "13F Arithmetic rings and other special rings", there are not many changes in the paper publishing rates. Most of the researchers are in one large community with and workon the same subject. Although there are some people splitting away and coming into the community, the community itself only changes gradually over the years.

In a declining field (defined by a dropping number of published papers), such as "13H Local rings and semilocal rings", there are many more communities and they keep splitting over time. The research interests are also not as homogeneous and some communities that split off, often become focused on a different subject. The most interesting process happens in the quickly growing communities. We can see from Figure 8c that quite a few researchers that decided to focus on ”13A General commutative ring theory” created communities by splitting off from some other research field. Some of the new communities have been formed mainly by a large group splitting from other community. These communities are fairly stable in a sense that most of the members can be identified with a high degree of certainty. However, in the community that was formed by researchers from many different groups, it is hard to identify if a researcher is actually within this new community. This observation indicates that one needs to be quite careful if he wants to use the community analysis to find emerging subjects. Without some additional analysis, the new communities of this form can be just statistical noise and not identify any changes within scientific fields.

5.3 Difference between modularity optimisation and the map equation

As we will see in the next section, there is a strong agreement between the two methods of community detection I presented above, so what are actually the differences between them? The differences are best illustrated by examples. In Figure 9 there are two partitions of the same undirected network. Map equation gives a finer partition (5 communities instead of 4). The central vertex can be placed in any of the four communities and hence there will be no decrease in code length if it is assigned to one of them. In our network, the map equation also gave much finer partition with the largest communities containing at most a hundred vertices, as opposed to several hundred in the communities, obtained by modularity optimisation.

(a) Maximum modularity partition (b) Minimum codeword length partition

Figure 9: Undirected network

(a) Maximum modularity partition (b) Minimum codeword length partition

Figure 10: Dircted network

For illustrative purposes only, I will consider a directed network in Figure 10. This behaviour can be seen to a lesser extend in an undirected network, but the smallest example that I was able to come up with has over 100 vertices and would not be very clear. We can see that modularity does find 4 partitions of the network. However, there is no flow in the communities, as all vertices are sinks or sources and hence the map equation is unable to find any community structure. This indicates that without a natural ‘flow’ in the network, the map equation may be unsuitable technique for community detection.

5.4 Z-scores

Thus far most of the comparison we've done were based on visual inspection of the communities. This is reasonable when the communities are fairly homogeneous in terms of authors' research interests. However, in some fields the communities are more heterogeneous and it is not straightforward to assess visually whether there is a strong correlation between subject classifications and the communities given by the two methods discussed above. Therefore, it is important to quantify this correlation. It will be also quite interesting to compute the correlation between communities generated by the two community detection algorithms.

There are three main methods of comparing different graph partitions: pair-counting, cluster-matching and information-based techniques [27, 48]. Cluster matching might not the best choice in our case, as the numbers and sizes of groups can be rather different, which makes the essential identification across partitions rather tricky. The variation of information from [27], results in values that are too close together. This might be the consequence of the mutual information of a pair of partitions being small compared to the total information in each. Hence, I will focus on pair-counting following the approach in [48].

Pair-counting methods assign a similarity score to a pair of partitions by considering every pair of vertices and whether they belong to the same or different groups in both partitions. Let the number of pairs in each of four the possible relationships be w_{11} if vertices in a pair are together in both partitions, w_{10} if they belong to the same group in first partition and different in second, w_{01} if they are in different groups in first and same group in second, and w_{00} if they are in different groups in both partitions. These quantities sum up to the number of pairs $M = w_{11} + w_{10} + w_{01} + w_{00} = \binom{n}{2}$. Different pair-counting similarity coefficients are obtained by various algebraic combinations of these counts.

One similarity coefficient is the Rand similarity coefficient $S_R = (w_{11}+w_{00}/M$, which is the fraction of vertex pairs classified the same way in both partitions. It has been used successfully in many settings [39] but has a problem of skewing toward the values of 1 if there are many groups in the two network partitions as a lot of vertices pairs are placed in different groups. One can exclude w_{00} and use FowlkesMallows similarity coefficient $S_{FM} = w_{11}/\sqrt{(w_{11} + w_{10})(w_{11} + w_{01})}$. However, this coefficient has an opposite problem of giving high values when there are few groups in network partitions. To deal with this one can use quite complicated Γ similarity coefficient defined as

$$S_\Gamma = \frac{Mw_{11} - (w_{11} + w_{10})(w_{11} + w_{01})}{\sqrt{(w_{11} + w_{10})(w_{11} + w_{01})[M - (w_{11} + w_{10}][M - (w_{11} + w_{01})}}. \tag{42}$$

There are quite a few other measures [27]. The problem with all these measures is that they provide a score but no clear cut-off values for good or bad correlation between partitions as they generally depend on the number and sizes of groups in the partitions.

Given these problems, I will use a statistical approach in which similarity coefficients are used to test significance levels of the values against those expected at random. A proper metrics were developed in [48] and uses the z-scores $z_i = (S_i - \mu_i)/\sigma_i$ $(i \in R, FM, \Gamma)$. Suppose that we fix the number and sizes of groups in each partition. Without any external information, a natural null model is to fill the groups by vertices from the network uniformly at random without replacement. Let n_{ij} be the number of vertices that are classified in the ith group of the first partition and jth group of the second partition. This gives three constants: M, the total number of pairs of vertices; $M_1 = \sum_i \binom{\sum_j n_{ij}}{2}$ the number of pairs classified the same way in the first partition; and $M_2 = \sum_j \binom{\sum_i n_{ij}}{2}$ the number of pairs classified the same way in the second partition. Using this we can express w_{ij} counts in terms of only $w := w_{11}$ as $w_{10} = M_1 - w$, $w_{01} = M_2 - w$, $w_{00} = M - M_1 - M_2 + w$. This implies that all the similarity coefficients discussed above are linear functions of w and hence linear functions of each other. Hence, the z-scores for all these coefficients are identical and equal to the z-score of w: $z = (w - \mu_w)/\sigma_w$, where μ_w and σ_w are, respectively, the mean and standard deviation of w. Under the null model (which is the hypergeometric distribution), we get [21] the mean $\mu_w = M_1 M_2/M$, and the variance

$$\sigma_w^2 = \frac{M}{16} - \frac{(4M_1 - 2M)^2(4M_2 - 2M)^2}{256M^2} + \frac{C_1 C_2}{16n(n-1)(n-2)}, \tag{43}$$

where C_1 and C_2 are given by

$$C_1 = n(n^2 - 3n - 2) - 8(n+1)M_1 + 4\sum_i \left(\sum_j n_{ij}\right)^3, \tag{44}$$

$$C_2 = n(n^2 - 3n - 2) - 8(n+1)M_2 + 4\sum_j \left(\sum_i n_{ij}\right)^3. \tag{45}$$

One needs to note that the associated significance levels for z are not not equal to those for a Gaussian distribution. For large samples, the distribution is asymptotically Gaussian, but this is not necessarily the case when comparing a particular pair of partitions. Hence, as in [48] I will be using the z-values directly.

I give tables of z-scores are in the Appendix C. There is quite a lot of variation within the values for different subjects. One needs to be careful with the z-scores, as they cannot be directly compared across different subjects due to the different network sizes. Most of the examples on the community structure in this report had quite large z-scores for their size, i.e. it has been relatively easy to visually assess what is happening. In other cases, it seems that subject classifications are not strongly correlated with the community structure. This indicates that it might not be the best idea to try and evaluate the evolution of mathematical subfields based on community structure in those cases. The comparison of two partitions given algorithmically shows that there is very high correlation between them, so it seems that they mostly agree in identifying the communities.

6 Conclusion

In this dissertation, I started with a large temporal data set and proceed to apply a number of network theoretic tools to investigate its structural changes. The investigation consisted of two parts: first I calculated some network statistics to highlight the important features of the network and show how they relate to some aspects of evolution of mathematical subfields. Afterwards I applied two community detection algorithms to examine these changes in more detail.

The network measures and statistics have shown which fields grew faster than others and which fields are closely related in terms of appearing together as subjects of a single paper. Clustering coefficients indicated that increasing number of papers is written in collaborations of three or more scientists. Centrality measures highlighted the fields that attract very well connected researchers and researchers that are important for the spread of knowledge.

Afterwards, I introduced two methods of community detection and how they can be applied in practice to find the community structure of a network. Some interesting results from this section included examples of growing and declining disciplines and what structural changes accompany these processes. These structural changes within a declining field indicated that publishing rates by themselves are not sufficient to judge whether a discipline is truly in decline, as if the communities within a subfield remain strong it may get out of a slump. I have examined birth of a discipline and found that community detection methods by themselves may not be very reliable in this case. When a field is growing very rapidly, there seems to be a lot of uncertainty in the structure of its communities, so it is hard to say whether this is indeed an emerging discipline or a statistical fluctuation. I have also quantified how well does the community structure correlate with the subject division in the network and found that it differs quite a lot form one field to another.

I have only considered non-overlapping communities in this dissertation as this subject is relatively well developed and there is a substantial body of literature behind it. Further investigations of the MR database network could consider overlapping communities [50] and their relation to the evolution of mathematical subfields. Another possibility is to examine core-periphery structure of the network that I briefly mentioned in section 4.5. This is another mesoscopic structure that is common to social network and it gives a different (vertical vs horizontal) view on the structure of the network. Finally, one could try and model the evolution of mathematical subfields and try to explain some of the observed behaviour. There is a number of models of growing networks [38, 2] and there is some work done specifically for collaboration networks [46] but there is quite a lot of room for improvement in these models.

References

[1] D. Babi, D. J. Klein, I. Lukovits, S. Nikoli, and N. Trinajsti. Resistance-distance matrix: A computational algorithm and its application. *International Journal of Quantum Chemistry*, 90(1):166–176, 2002.

[2] A. L. Barabási and R. Albert. Emergence of Scaling in Random Networks. *Science*, 286(5439):509–512, Oct. 1999.

[3] A. L. Barabási, H. Jeong, Z. Néda, E. Ravasz, A. Schubert, and T. Vicsek. *Physica A: Statistical Mechanics and its Applications*, (3-4):590 – 614.

[4] A. Barrat and M. Weigt. On the properties of small-world network models. *The European Physical Journal B - Condensed Matter and Complex Systems*, 13(3):547–560, Jan. 2000.

[5] M. Bastian, S. Heymann, and M. Jacomy. Gephi: An open source software for exploring and manipulating networks, 2009.

[6] V. Batagelj and A. Mrvar. Some analyses of Erdos collaboration graph. *Social Networks*, 22(2):173–186, May 2000.

[7] L. M. A. Bettencourt, D. I. Kaiser, and J. Kaur. Scientific discovery and topological transitions in collaboration networks. *J. Informetrics*, pages 210–221, 2009.

[8] V. D. Blondel, J.-L. Guillaume, R. Lambiotte, and E. Lefebvre. Fast unfolding of communities in large networks. *Journal of Statistical Mechanics: Theory and Experiment*, 10:8, Oct. 2008.

[9] U. Brandes, D. Delling, M. Gaertler, R. Görke, M. Hoefer, Z. Nikoloski, and D. Wagner. On Finding Graph Clusterings with Maximum Modularity Graph-Theoretic Concepts in Computer Science. volume 4769, chapter 12, pages 121–132. Springer Berlin / Heidelberg, Berlin, Heidelberg, 2007.

[10] J. C. Brunson, S. Fassino, A. McInnes, M. Narayan, B. Richardson, C. Franck, P. Ion, and R. C. Laubenbacher. Evolutionary events in a mathematical sciences research collaboration network. *CoRR*, abs/1203.5158, 2012.

[11] D. Cvetković, M. Doob, and H. Sachs. *Spectra of graphs: theory and application.* Pure and applied mathematics. Academic Press, 1980.

[12] J. C. Delvenne, S. N. Yaliraki, and M. Barahona. Stability of graph communities across time scales. *Proceedings of the National Academy of Sciences*, 107(29):12755–12760, July 2010.

[13] S. N. Dorogovtsev, A. V. Goltsev, and J. F. F. Mendes. Pseudofractal scale-free web. *Phys. Rev. E*, 65:066122, 2002.

[14] Edler D and Rosvall M. The mapequation software package, available online at. *http://www.mapequation.org*, Dec. 2011.

[15] S. Fortunato and M. Barthélemy. Resolution limit in community detection. *Proceedings of the National Academy of Sciences*, 104(1):36–41, Jan. 2007.

[16] L. C. Freeman. A Set of Measures of Centrality Based on Betweenness. *Sociometry*, 40(1):35–41, Mar. 1977.

[17] W. Goffman and V. A. Newill. Generalisation of empidemic theory. An application to the transimission of ideas. *Nature*, 204:225–228, Oct 1964.

[18] J. W. Grossman and P. D. F. Ion. On a portion of the well known collaboration graph. *Congressus Numerantium*, 108:129–131, 1995.

[19] J. W. Grossman and P. D. F. Ion. On a portion of the well-known collaboration graph. *Congressus Numerantium*, 108:129–131, 1995.

[20] R. Guimerà and L. Amaral. Functional cartography of complex metabolic networks. *Nature*, 433:895–900, 2005.

[21] L. Hubert. Nominal scale response agreement as a generalized correlation. *British Journal of Mathematical and Statistical Psychology*, 30(1):98–103, 1977.

[22] D. Huffman. A Method for the Construction of Minimum-Redundancy Codes. *Proceedings of the IRE*, 40(9):1098–1101, Sept. 1952.

[23] Inderjit S. Jutla, Lucas G. S. Jeub, and Peter J. Mucha. A generalized louvain method for community detection implemented in matlab,. *http://netwiki.amath.unc.edu/GenLouvain*, Dec. 2011.

[24] L. Katz. A new status index derived from sociometric analysis. *Psychometrika*, 18(1):39–43, March 1953.

[25] R. Lambiotte, J. . Delvenne, and M. Barahona. Laplacian Dynamics and Multiscale Modular Structure in Networks. *ArXiv e-prints*, Dec. 2008.

[26] K. T. Macon, P. J. Mucha, and M. A. Porter. Community structure in the united nations general assembly. *Physica A: Statistical Mechanics and its Applications*, 391(12):343 – 361, 2012.

[27] M. Meila. Comparing Clusterings by the Variation of Information. pages 173–187. 2003.

[28] J. Moody. Race, School Integration, and Friendship Segregation in America. *The American Journal of Sociology*, 107(3):679–716, 2001.

[29] J. Moody. The structure of a social science collaboration network: Disciplinary cohesion from 1963 to 1999. *American Sociological Review*, 69(2):213–238, 2004.

[30] P. J. Mucha, T. Richardson, K. Macon, M. A. Porter, and J.-P. Onnela. Community Structure in Time-Dependent, Multiscale, and Multiplex Networks. *Science*, 328(5980):876–878, May 2010.

[31] M. E. J. Newman. The structure of scientific collaboration networks. *Proceedings of the National Academy of Sciences*, 98(2):404–409, 2001.

[32] M. E. J. Newman. Mixing patterns in networks. *Phys. Rev. E*, 67:026126, Feb 2003.

[33] M. E. J. Newman. The structure and function of complex networks. *SIAM REVIEW*, 45:167–256, 2003.

[34] M. E. J. Newman. *Networks: An Introduction.* OUP Oxford, 2010.

[35] M. E. J. Newman and M. Girvan. Finding and evaluating community structure in networks. *Physical Review E*, 69(2):026113+, Feb. 2004.

[36] P. Pons and M. Latapy. Computing communities in large networks using random walks. *J. of Graph Alg. and App. bf*, 10:284–293, 2004.

[37] M. Porter, P. Mucha, M. Newman, and A. Friend. Community structure in the United States House of Representatives. *Physica A: Statistical Mechanics and its Applications*, 386(1):414–438, Dec. 2007.

[38] D. D. S. Price. A general theory of bibliometric and other cumulative advantage processes. *Journal of the American Society for Information Science*, pages 292–306, 1976.

[39] W. M. Rand. Objective Criteria for the Evaluation of Clustering Methods. *Journal of the American Statistical Association*, 66(336):846–850, 1971.

[40] M. P. Rombach, M. A. Porter, J. H. Fowler, and P. J. Mucha. Core-periphery structure in networks. *CoRR*, abs/1202.2684, 2012.

[41] M. Rosvall and C. T. Bergstrom. Mapping change in large networks. Dec. 2008.

[42] M. Rosvall and C. T. Bergstrom. Maps of random walks on complex networks reveal community structure. *Proceedings of the National Academy of Sciences*, 105(4):1118–1123, Jan. 2008.

[43] N. Schwartz, R. Cohen, B. D. Avraham, A. L. Barabási, and S. Havlin. Percolation in directed scale-free networks. *Physical Review E*, 66(1), 2002.

[44] A. D. Scott and A. D. Sokal. Complete monotonicity for inverse powers of some combinatorially defined polynomials. 2013.

[45] C. E. Shannon. A mathematical theory of communication. *Bell system technical journal*, 27, 1948.

[46] X. Sun, J. Kaur, S. Milojevic, A. Flammini, and F. Menczer. Social dynamics of science. *Sci Rep*, 3:1069, 2013.

[47] G. Szabó, M. J. Alava, and J. Kertész. Structural Transitions in Scale-free Networks. *Physical Review E*, 67, 2003.

[48] A. L. Traud, E. D. Kelsic, P. J. Mucha, and M. A. Porter. Comparing community structure to characteristics in online collegiate social networks. *SIAM Rev.*, 53(3):526–543, Aug. 2011.

[49] A. L. Traud, P. J. Mucha, and M. A. Porter. Social structure of facebook networks. *Physica A: Statistical Mechanics and its Applications*, 391(16):4165 – 4180, 2012.

[50] J. Xie, S. Kelley, and B. K. Szymanski. Overlapping Community Detection in Networks: the State of the Art and Comparative Study. *ArXiv e-prints*, Oct. 2011.

A Scores for undirected and directed overlap between subjects.

Table 1: Undirected overlap scores in 1985–1989

	44	**45**	**46**	**47**	**49**	**51**	**52**	**53**	**54**	**55**	**57**	**58**	**60**	**62**	**65**	**68**	**70**	**74**	**76**	**78**	**80**	**81**	**82**	**83**	**85**	**86**	**90**	**91**	**92**	**93**	**94**
00	0.94	0.69	0.41	0.26	0.45	1.77	1.15	0.24	0.26	0.29	0.27	0.75	0.21	0.16	0.55	0.48	0.96	0.42	0.48	1.01	0.72	0.30	0.44	0.38	0.93	0.78	0.34	0.78	1.71	0.41	0.79
01	0.29	0.10	0.15	0.04	0.29	1.31	0.38	0.28	0.20	0.37	0.25	0.26	0.17	0.18	0.10	0.16	1.03	0.16	0.10	0.65	0.41	0.27	0.21	0.73	2.72	0.05	0.23	0.39	0.35	0.04	0.23
03	0.01	0.00	0.24	0.06	0.03	0.35	0.11	0.01	1.43	0.06	0.01	0.03	0.24	0.12	0.04	4.58	0.03	0.02	0.01	0.01	0.01	0.15	0.03	0.02	0.00	0.04	0.35	0.75	0.12	0.13	0.95
05	0.05	0.01	0.03	0.02	0.02	3.04	2.37	0.03	0.13	0.16	0.53	0.04	0.28	0.30	0.06	2.02	0.05	0.03	0.01	0.01	0.04	0.04	0.42	0.01	0.00	0.01	1.84	0.51	1.02	0.05	1.35
06	0.09	0.00	0.54	0.17	0.04	1.43	1.53	0.00	2.25	0.32	0.20	0.01	0.10	0.04	0.02	0.87	0.00	0.00	0.00	0.00	0.00	0.23	0.02	0.00	0.00	0.00	0.27	0.74	0.17	0.01	2.90
08	0.00	0.08	0.33	0.19	0.00	0.25	0.27	0.02	2.00	0.00	0.00	0.00	0.14	0.00	0.00	0.87	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.25	0.05	0.04	0.32
11	0.05	0.04	0.07	0.04	0.01	0.36	0.90	0.03	0.07	0.23	0.23	0.32	0.12	0.01	0.14	0.48	0.01	0.00	0.00	0.01	0.01	0.12	0.18	0.01	0.02	0.00	0.10	0.02	0.03	0.01	1.27
12	0.74	0.06	0.10	0.04	0.04	1.73	0.31	0.03	0.20	0.23	0.17	0.53	0.01	0.01	0.39	1.21	0.12	0.02	0.05	0.00	0.00	0.03	0.01	0.01	0.00	0.00	0.08	0.00	0.02	0.21	0.23
13	0.00	0.00	0.09	0.01	0.01	0.35	0.54	0.00	0.08	0.97	0.13	0.05	0.01	0.00	0.03	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.01	0.10	0.12
14	0.00	0.01	0.02	0.02	0.00	0.83	0.28	0.48	0.03	0.75	1.43	0.72	0.00	0.00	0.02	0.06	0.13	0.00	0.00	0.02	0.00	0.31	0.06	0.26	0.00	0.00	0.00	0.00	0.00	0.02	0.31
15	0.23	0.21	0.25	1.38	0.28	1.18	0.43	0.53	0.09	0.29	0.22	0.18	0.25	0.20	1.43	0.16	0.28	0.09	0.01	0.26	0.11	0.23	0.17	0.17	0.00	0.00	0.40	0.21	0.22	1.08	0.66
16	0.04	0.00	0.31	0.05	0.00	0.41	0.00	0.03	0.14	0.67	0.44	0.16	0.00	0.00	0.00	0.09	0.01	0.00	0.00	0.00	0.00	0.07	0.07	0.01	0.00	0.00	0.01	0.00	0.00	0.02	0.07
17	0.05	0.05	0.66	0.16	0.03	0.85	0.05	0.77	0.00	0.79	0.98	1.76	0.02	0.00	0.00	0.03	0.30	0.01	0.02	0.18	0.00	2.24	0.89	0.51	0.00	0.00	0.00	0.00	0.24	0.06	0.00
18	0.00	0.00	1.06	0.09	0.02	0.30	0.07	0.13	2.59	10.92	2.23	1.07	0.02	0.00	0.00	0.78	0.00	0.02	0.00	0.00	0.08	0.03	0.00	0.01	0.00	0.00	0.01	0.07	0.03	0.04	0.02
19	0.00	0.00	3.31	0.40	0.00	0.06	0.28	0.20	0.22	10.88	5.72	2.29	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.02	0.00	0.09	0.03	0.01	2.80	0.76	0.20	0.29	0.88	1.60	0.12	0.02	0.01	0.01	0.63	0.02	0.00	0.00	0.02	0.01	0.15	0.80	0.01	0.00	0.00	0.01	0.04	0.09	0.02	0.27
22	0.97	0.09	1.47	0.39	0.02	0.56	0.20	1.61	1.29	1.15	3.15	2.70	0.15	0.01	0.01	0.03	0.19	0.03	0.05	0.77	0.00	1.98	0.28	0.60	0.15	0.04	0.00	0.02	0.07	0.05	0.18
26	3.64	1.07	1.55	0.38	1.92	0.84	1.12	0.06	1.68	0.04	0.05	0.71	0.28	0.03	0.25	0.04	0.10	0.04	0.01	0.00	0.00	0.01	0.10	0.00	0.00	0.00	0.73	0.25	0.10	0.09	0.22
28	0.53	0.10	3.38	1.18	1.31	0.43	1.59	0.06	3.60	0.14	0.17	0.59	1.85	0.07	0.08	0.11	0.04	0.01	0.03	0.05	0.12	0.21	0.71	0.04	0.13	0.22	0.18	0.52	0.10	0.04	0.89
30	1.37	1.19	1.28	0.66	0.10	0.17	0.14	0.26	0.13	0.03	0.78	0.30	0.09	0.00	0.31	0.02	0.03	0.14	0.06	0.25	0.03	0.06	0.09	0.02	0.00	0.05	0.02	0.00	0.02	0.20	0.11
31	1.25	1.36	1.25	0.40	0.28	0.00	0.52	0.31	0.12	0.00	0.03	0.81	1.11	0.00	0.19	0.00	0.14	0.52	0.18	1.56	0.13	0.04	0.03	0.02	0.31	6.26	0.00	0.00	0.02	0.01	0.00
32	0.56	0.10	1.54	0.43	0.05	0.12	0.17	2.70	0.05	0.89	2.97	2.94	0.03	0.01	0.01	0.01	0.07	0.01	0.01	0.08	0.04	0.74	0.05	0.64	0.05	0.02	0.00	0.00	0.02	0.02	0.03
33	11.50	2.04	0.19	0.16	0.05	0.17	0.21	0.04	0.00	0.00	0.04	0.30	0.15	0.14	0.58	0.04	0.19	0.11	0.07	2.04	1.26	0.35	0.22	0.05	1.32	0.61	0.03	0.03	0.03	0.02	0.36
34	0.49	0.91	0.09	1.66	0.86	0.01	0.02	0.07	0.49	0.06	0.08	1.02	0.32	0.02	0.67	0.05	2.93	0.34	0.70	0.59	0.94	0.34	0.57	0.04	0.68	0.75	0.09	0.15	1.38	1.21	0.41
35	0.30	0.95	0.34	1.30	0.97	0.00	0.01	0.26	0.03	0.01	0.01	2.22	0.23	0.00	0.61	0.01	0.13	0.93	2.00	1.56	2.35	0.63	0.48	0.06	0.52	1.10	0.02	0.03	0.71	0.24	0.04
37	0.05	0.10	0.15	0.35	0.74	0.07	0.10	1.81	2.62	0.51	2.22	3.90	0.20	0.00	0.38	0.25	8.33	0.27	1.09	1.17	0.76	1.00	2.28	0.47	1.05	0.66	0.05	0.23	1.54	0.46	0.55
39	2.03	1.89	0.49	1.29	0.16	0.43	0.16	0.06	0.50	0.12	0.03	0.33	0.24	0.08	0.61	0.07	0.26	0.07	0.07	0.52	0.13	0.15	0.31	0.00	0.26	0.18	0.15	0.38	0.52	1.04	1.84
40	10.38	0.16	2.21	0.50	0.03	0.00	0.00	0.00	0.12	0.00	0.00	0.02	0.24	0.02	0.58	0.01	0.04	0.00	0.00	0.12	0.00	0.08	0.08	0.00	0.00	0.00	0.03	0.00	0.00	0.02	0.24
41	1.76	0.41	1.76	0.47	0.33	0.00	0.28	0.02	0.18	0.00	0.03	0.18	0.11	0.05	2.05	0.06	0.05	0.07	0.01	0.19	0.00	0.03	0.01	0.00	0.00	0.07	0.23	0.04	0.04	0.19	0.42
42	7.80	0.95	2.14	1.51	0.06	0.06	0.20	0.06	0.06	0.00	0.02	0.16	0.34	0.03	0.25	0.03	0.04	0.02	0.02	0.37	0.00	0.04	0.08	0.00	0.09	0.11	0.03	0.01	0.11	0.06	1.15
43	5.38	0.30	2.79	1.37	0.05	0.06	0.18	0.22	0.23	0.00	0.00	0.79	0.99	0.04	0.01	0.00	0.00	0.00	0.00	0.46	0.00	0.08	0.05	0.00	0.00	0.00	0.01	0.02	0.03	0.01	0.28
44	0.00	2.81	3.32	1.50	0.10	0.00	0.11	0.33	0.00	0.00	0.00	0.25	0.34	0.07	0.82	0.08	0.00	0.18	0.11	1.49	0.96	0.12	0.06	0.02	0.00	1.71	0.09	0.07	2.47	0.16	0.90
45	2.81	0.00	0.32	3.09	0.45	0.00	0.05	0.02	0.05	0.05	0.02	0.26	0.22	0.03	1.59	0.01	0.14	1.58	0.76	2.90	0.95	0.08	1.60	0.01	4.07	0.30	0.06	0.03	1.16	0.30	0.19
46	3.32	0.32	0.00	4.37	0.57	0.07	0.91	0.09	0.86	0.23	0.29	1.46	0.62	0.01	0.07	0.01	0.02	0.05	0.04	0.03	0.01	0.49	0.49	0.01	0.00	0.04	0.31	0.16	0.02	0.07	0.09
47	1.50	3.09	4.37	0.00	0.93	0.02	0.11	0.01	0.77	0.26	0.02	1.77	0.40	0.01	0.74	0.00	0.08	0.24	0.15	0.24	0.05	0.44	0.43	0.00	0.31	0.03	0.21	0.07	0.17	0.42	0.11
49	0.10	0.45	0.57	0.93	0.00	0.02	0.47	0.96	0.44	0.04	0.11	2.06	0.17	0.02	0.80	0.02	0.99	1.96	0.47	0.45	0.73	0.06	0.13	0.06	0.00	0.19	2.90	2.03	0.34	3.79	0.33
51	0.00	0.00	0.07	0.02	0.02	0.00	9.55	0.80	0.27	0.31	0.75	0.06	0.01	0.01	0.06	0.28	0.40	0.05	0.00	0.00	0.00	0.01	0.23	0.15	0.11	0.06	0.07	0.10	0.13	0.00	0.72
52	0.11	0.05	0.91	0.11	0.47	9.55	0.00	0.63	0.41	0.76	1.38	0.18	0.52	0.02	0.09	1.22	0.36	0.09	0.00	0.07	0.22	0.01	1.11	0.00	0.15	0.09	1.04	0.33	0.50	0.02	0.46
53	0.33	0.02	0.09	0.01	0.96	0.80	0.63	0.00	0.07	0.73	2.71	5.64	0.04	0.03	0.04	0.01	0.52	0.19	0.05	0.41	0.16	1.22	0.10	3.59	0.03	0.11	0.00	0.01	0.06	0.01	0.02
54	0.00	0.05	0.86	0.77	0.44	0.27	0.41	0.07	0.00	2.64	1.43	0.29	0.08	0.00	0.04	0.10	0.24	0.02	0.03	0.01	0.09	0.01	0.09	0.02	0.04	0.00	0.15	0.36	0.22	0.04	0.11
55	0.00	0.05	0.23	0.26	0.04	0.31	0.76	0.73	2.64	0.00	10.97	1.52	0.01	0.00	0.04	0.07	0.06	0.02	0.01	0.00	0.00	0.17	0.08	0.05	0.00	0.00	0.07	0.07	0.03	0.02	0.00
57	0.00	0.02	0.29	0.02	0.11	0.75	1.38	2.71	1.43	10.97	0.00	2.91	0.01	0.00	0.01	0.02	0.10	0.03	0.02	0.17	0.00	0.28	0.28	0.24	0.00	0.00	0.02	0.04	0.25	0.04	0.01
58	0.25	0.26	1.46	1.77	2.06	0.06	0.18	5.64	0.29	1.52	2.91	0.00	0.52	0.00	0.36	0.06	1.15	0.66	0.74	1.16	0.47	1.69	0.52	1.40	0.36	0.24	0.47	0.12	0.39	0.17	0.07
60	0.34	0.22	0.62	0.40	0.17	0.01	0.52	0.04	0.08	0.01	0.01	0.52	0.00	2.09	0.15	0.48	0.10	0.03	0.06	0.03	0.12	0.25	1.17	0.00	0.18	0.19	2.02	0.36	0.53	0.63	0.40
62	0.07	0.03	0.01	0.01	0.02	0.01	0.02	0.03	0.00	0.00	0.00	0.00	2.09	0.00	0.20	0.17	0.00	0.01	0.00	0.00	0.00	0.01	0.03	0.00	0.06	0.25	0.47	0.72	0.44	0.28	0.46
65	0.82	1.59	0.07	0.74	0.80	0.06	0.09	0.04	0.04	0.04	0.01	0.36	0.15	0.20	0.00	0.37	0.16	0.79	1.59	0.70	0.99	0.08	0.24	0.01	0.36	1.10	1.38	0.05	0.29	0.35	0.37
68	0.08	0.01	0.01	0.00	0.02	0.28	1.22	0.01	0.10	0.07	0.02	0.06	0.48	0.17	0.37	0.00	0.06	0.01	0.04	0.06	0.01	0.01	0.19	0.00	0.04	0.01	1.71	0.70	0.62	0.18	1.62
70	0.00	0.14	0.02	0.08	0.99	0.40	0.36	0.52	0.24	0.06	0.10	1.15	0.10	0.00	0.16	0.06	0.00	1.58	0.52	1.58	0.39	0.42	0.40	0.26	2.75	0.35	0.05	0.11	0.20	0.73	0.30
74	0.18	1.58	0.05	0.24	1.96	0.05	0.09	0.19	0.02	0.02	0.03	0.66	0.03	0.01	0.79	0.01	1.58	0.00	1.40	0.91	1.73	0.01	0.29	0.06	0.11	2.11	0.16	0.02	0.24	0.33	0.03
76	0.11	0.76	0.04	0.15	0.47	0.00	0.00	0.05	0.03	0.01	0.02	0.74	0.06	0.00	1.59	0.04	0.52	1.40	0.00	1.14	2.91	0.06	1.98	0.13	2.72	5.71	0.02	0.01	0.49	0.06	0.04
78	1.49	2.90	0.03	0.24	0.45	0.00	0.07	0.41	0.01	0.00	0.17	1.16	0.03	0.00	0.70	0.06	1.58	0.91	1.14	0.00	2.18	0.80	0.75	0.57	2.94	4.54	0.02	0.07	0.58	0.08	0.53
80	0.96	0.95	0.01	0.05	0.73	0.00	0.22	0.16	0.09	0.00	0.00	0.47	0.12	0.00	0.99	0.01	0.39	1.73	2.91	2.18	0.00	0.04	1.79	0.17	0.43	1.81	0.04	0.04	4.66	0.22	0.16
81	0.12	0.08	0.49	0.44	0.06	0.01	0.01	1.22	0.01	0.17	0.28	1.69	0.25	0.01	0.08	0.01	0.42	0.01	0.06	0.80	0.04	0.00	1.27	2.40	0.21	0.05	0.00	0.01	0.10	0.02	0.07
82	0.06	1.60	0.49	0.43	0.13	0.23	1.11	0.10	0.09	0.08	0.28	0.52	1.17	0.03	0.24	0.19	0.40	0.29	1.98	0.75	1.79	1.27	0.00	0.14	2.84	0.20	0.12	0.14	1.28	0.04	0.29
83	0.02	0.01	0.01	0.00	0.06	0.15	0.00	3.59	0.02	0.05	0.24	1.40	0.00	0.00	0.01	0.00	0.26	0.06	0.13	0.57	0.17	2.40	0.14	0.00	2.19	0.02	0.00	0.01	0.01	0.01	0.02
85	0.00	4.07	0.00	0.31	0.00	0.11	0.15	0.03	0.04	0.00	0.00	0.36	0.18	0.06	0.36	0.04	2.75	0.11	2.72	2.94	0.43	0.21	2.84	2.19	0.00	5.26	0.04	0.00	0.24	0.00	0.06
86	1.71	0.30	0.04	0.03	0.19	0.06	0.09	0.11	0.00	0.00	0.00	0.24	0.19	0.25	1.10	0.01	0.35	2.11	5.71	4.54	1.81	0.05	0.20	0.02	5.26	0.00	0.05	0.08	0.82	0.11	0.40
90	0.09	0.06	0.31	0.21	2.90	0.07	1.04	0.00	0.15	0.07	0.02	0.47	2.02	0.47	1.38	1.71	0.05	0.16	0.02	0.02	0.04	0.00	0.12	0.00	0.04	0.05	0.00	1.66	0.30	1.14	0.94
91	0.07	0.03	0.16	0.07	2.03	0.10	0.33	0.01	0.36	0.07	0.04	0.12	0.36	0.72	0.05	0.70	0.11	0.02	0.01	0.07	0.04	0.01	0.14	0.01	0.00	0.08	1.66	0.00	2.65	0.55	0.64
92	2.47	1.16	0.02	0.17	0.34	0.13	0.50	0.06	0.22	0.03	0.25	0.39	0.53	0.44	0.29	0.62	0.20	0.24	0.49	0.58	4.66	0.10	1.28	0.01	0.24	0.82	0.30	2.65	0.00	0.48	0.85
93	0.16	0.30	0.07	0.42	3.79	0.00	0.02	0.01	0.04	0.02	0.04	0.17	0.63	0.28	0.35	0.18	0.73	0.33	0.06	0.08	0.22	0.02	0.04	0.01	0.00	0.11	1.14	0.55	0.48	0.00	1.20
94	0.90	0.19	0.09	0.11	0.33	0.72	0.46	0.02	0.11	0.00	0.01	0.07	0.40	0.46	0.37	1.62	0.30	0.03	0.04	0.53	0.16	0.07	0.29	0.02	0.06	0.40	0.94	0.64	0.85	1.20	0.00

Table 2: Undirected overlap scores in 1985–1989, cont.

	00	**01**	**03**	**05**	**06**	**08**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**22**	**26**	**28**	**30**	**31**	**32**	**33**	**34**	**35**	**37**	**39**	**40**	**41**	**42**	**43**
00	0.00	6.04	2.01	0.42	0.43	0.47	0.17	0.87	0.77	0.12	0.59	0.31	0.15	0.76	0.24	0.42	0.37	2.53	1.30	0.35	0.22	0.21	0.56	0.43	0.42	0.44	0.51	0.33	0.54	0.63	0.23
01	6.04	0.00	1.41	0.23	0.06	0.05	0.48	0.56	0.13	0.32	0.24	0.15	0.12	0.20	0.07	0.21	0.21	0.92	0.36	0.45	0.34	0.17	0.37	0.09	0.04	0.11	0.13	0.52	0.22	0.31	0.18
03	2.01	1.41	0.00	0.39	4.12	3.25	0.14	1.44	0.29	0.07	0.19	0.25	0.07	1.49	0.05	0.76	0.10	0.68	1.11	0.03	0.02	0.02	0.01	0.07	0.00	0.03	0.10	0.13	0.03	0.05	0.15
05	0.42	0.23	0.39	0.00	1.84	0.55	0.82	0.17	0.14	0.09	0.86	0.14	0.26	0.18	0.06	1.47	0.17	0.11	0.12	0.04	0.05	0.05	1.49	0.01	0.01	0.07	0.10	0.09	0.08	0.03	0.19
06	0.43	0.06	4.12	1.84	0.00	14.93	0.13	0.78	2.31	0.07	0.55	1.84	0.31	5.17	0.44	1.66	0.48	0.43	2.07	0.00	0.07	0.02	0.05	0.00	0.00	0.02	0.19	0.08	0.04	0.00	0.00
08	0.47	0.05	3.25	0.55	14.93	0.00	0.01	0.82	0.38	0.02	0.33	2.48	1.56	6.65	0.27	3.42	0.29	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.01	0.00	0.55	0.00	0.00	0.00	0.00
11	0.17	0.48	0.14	0.82	0.13	0.01	0.00	4.13	0.69	2.44	0.75	0.47	0.24	0.79	2.92	1.05	1.60	0.30	0.55	0.49	0.05	0.51	0.92	0.03	0.03	0.22	0.22	0.60	0.10	0.28	0.30
12	0.87	0.56	1.44	0.17	0.78	0.82	4.13	0.00	7.56	3.49	2.12	4.90	0.69	1.92	5.97	1.62	0.33	1.76	0.06	0.58	0.00	1.07	1.58	0.38	0.24	0.85	1.55	0.00	0.12	0.09	0.00
13	0.77	0.13	0.29	0.14	2.31	0.38	0.69	7.56	0.00	5.58	1.27	3.04	0.68	4.68	5.42	0.71	0.02	0.13	0.00	0.05	0.07	0.60	0.06	0.00	0.01	0.11	0.73	0.00	0.04	0.00	0.00
14	0.12	0.32	0.07	0.09	0.07	0.02	2.44	3.49	5.58	0.00	0.61	0.86	0.98	1.55	4.00	1.03	0.81	0.08	0.00	0.74	0.07	7.95	0.32	0.05	0.06	0.96	0.06	0.03	0.02	0.00	0.02
15	0.59	0.24	0.19	0.86	0.55	0.33	0.75	2.12	1.27	0.61	0.00	1.58	0.86	0.45	0.24	0.76	0.44	0.64	0.37	0.53	0.00	0.15	0.18	0.21	0.02	0.27	1.31	0.37	0.42	0.34	0.09
16	0.31	0.15	0.25	0.14	1.84	2.48	0.47	4.90	3.04	0.86	1.58	0.00	3.76	4.90	6.42	3.04	0.59	0.02	0.03	0.04	0.00	0.32	0.14	0.01	0.01	0.19	0.00	0.00	0.00	0.00	0.00
17	0.15	0.12	0.07	0.26	0.31	1.56	0.24	0.69	0.68	0.98	0.86	3.76	0.00	1.37	1.61	1.51	8.64	0.02	0.02	0.05	0.00	1.57	1.27	0.14	0.16	2.91	0.18	0.00	0.00	0.06	0.42
18	0.76	0.20	1.49	0.18	5.17	6.65	0.79	1.92	4.68	1.55	0.45	4.90	1.37	0.00	56.51	2.09	1.50	0.18	0.21	0.00	0.10	0.37	0.08	0.00	0.00	0.12	0.18	0.00	0.00	0.00	0.30
19	0.24	0.07	0.05	0.06	0.44	0.27	2.92	5.97	5.42	4.00	0.24	6.42	1.61	56.51	0.00	2.03	2.79	0.00	0.15	0.00	0.00	0.46	0.31	0.00	0.01	0.43	0.00	0.00	0.00	0.00	0.00
20	0.42	0.21	0.76	1.47	1.66	3.42	1.05	1.62	0.71	1.03	0.76	3.04	1.51	2.09	2.03	0.00	2.52	0.04	0.10	0.44	0.00	0.49	0.09	0.01	0.00	0.16	0.23	0.00	0.00	0.04	0.16
22	0.37	0.21	0.10	0.17	0.48	0.29	1.60	0.33	0.02	0.81	0.44	0.59	8.64	1.50	2.79	2.52	0.00	0.15	1.87	0.51	0.66	2.25	3.39	0.11	0.27	1.31	0.38	0.09	0.06	0.91	18.66
26	2.53	0.92	0.68	0.11	0.43	0.00	0.30	1.76	0.13	0.08	0.64	0.02	0.02	0.18	0.00	0.04	0.15	0.00	8.36	1.32	1.89	0.47	3.32	0.70	0.15	1.51	7.00	2.71	2.15	4.71	0.39
28	1.30	0.36	1.11	0.12	2.07	0.00	0.55	0.06	0.00	0.00	0.37	0.03	0.02	0.21	0.15	0.10	1.87	8.36	0.00	0.40	1.82	0.07	0.05	0.41	0.08	3.73	1.15	0.73	0.19	1.79	3.55
30	0.35	0.45	0.03	0.04	0.00	0.05	0.49	0.58	0.05	0.74	0.53	0.04	0.05	0.00	0.00	0.44	0.51	1.32	0.40	0.00	4.55	3.52	1.61	0.22	0.30	1.22	1.15	2.08	2.41	1.91	0.18
31	0.22	0.34	0.02	0.05	0.07	0.00	0.05	0.00	0.07	0.07	0.00	0.00	0.00	0.10	0.00	0.00	0.66	1.89	1.82	4.55	0.00	1.95	1.16	0.01	1.78	0.02	0.71	0.00	0.89	2.32	3.46
32	0.21	0.17	0.02	0.05	0.02	0.00	0.51	1.07	0.60	7.95	0.15	0.32	1.57	0.37	0.46	0.49	2.25	0.47	0.07	3.52	1.95	0.00	1.00	0.38	0.36	1.14	0.18	0.17	0.20	0.53	0.82
33	0.56	0.37	0.01	1.49	0.05	0.00	0.92	1.58	0.06	0.32	0.18	0.14	1.27	0.08	0.31	0.09	3.39	3.32	0.05	1.61	1.16	1.00	0.00	0.55	0.21	0.21	5.05	5.60	3.20	6.90	3.69
34	0.43	0.09	0.07	0.01	0.00	0.00	0.03	0.38	0.00	0.05	0.21	0.01	0.14	0.00	0.00	0.01	0.11	0.70	0.41	0.22	0.01	0.38	0.55	0.00	0.83	3.36	1.46	0.10	0.09	0.11	0.02
35	0.42	0.04	0.00	0.01	0.00	0.01	0.03	0.24	0.01	0.06	0.02	0.01	0.16	0.00	0.01	0.00	0.27	0.15	0.08	0.30	1.78	0.36	0.21	0.83	0.00	1.31	0.40	0.01	0.05	0.16	0.10
37	0.44	0.11	0.03	0.07	0.02	0.00	0.22	0.85	0.11	0.96	0.27	0.19	2.91	0.12	0.43	0.16	1.31	1.51	3.73	1.22	0.02	1.14	0.21	3.36	1.31	0.00	2.28	0.07	0.05	0.09	0.04
39	0.51	0.13	0.10	0.10	0.19	0.55	0.22	1.55	0.73	0.06	1.31	0.00	0.18	0.18	0.00	0.23	0.38	7.00	1.15	1.15	0.71	0.18	5.05	1.46	0.40	2.28	0.00	1.33	0.49	0.50	0.54
40	0.33	0.52	0.13	0.09	0.08	0.00	0.60	0.00	0.00	0.03	0.37	0.00	0.00	0.00	0.00	0.00	0.09	2.71	0.73	2.08	0.00	0.17	5.60	0.10	0.01	0.07	1.33	0.00	2.19	7.04	1.03
41	0.54	0.22	0.03	0.08	0.04	0.00	0.10	0.12	0.04	0.02	0.42	0.00	0.00	0.00	0.00	0.00	0.06	2.15	0.19	2.41	0.89	0.20	3.20	0.09	0.05	0.05	0.49	2.19	0.00	6.60	0.32
42	0.63	0.31	0.05	0.03	0.00	0.00	0.28	0.09	0.00	0.00	0.34	0.00	0.06	0.00	0.00	0.04	0.91	4.71	1.79	1.91	2.32	0.53	6.90	0.11	0.16	0.09	0.50	7.04	6.60	0.00	8.39
43	0.23	0.18	0.15	0.19	0.00	0.00	0.30	0.00	0.00	0.02	0.09	0.00	0.42	0.30	0.00	0.16	18.66	0.39	3.55	0.18	3.46	0.82	3.69	0.02	0.10	0.04	0.54	1.03	0.32	8.39	0.00
44	0.94	0.29	0.01	0.05	0.09	0.00	0.05	0.74	0.00	0.00	0.23	0.04	0.05	0.00	0.00	0.02	0.97	3.64	0.53	1.37	1.25	0.56	11.50	0.49	0.30	0.05	2.03	10.38	1.76	7.80	5.38
45	0.69	0.10	0.00	0.01	0.00	0.08	0.04	0.06	0.00	0.01	0.21	0.00	0.05	0.00	0.00	0.00	0.09	1.07	0.10	1.19	1.36	0.10	2.04	0.91	0.95	0.10	1.89	0.16	0.41	0.95	0.30
46	0.41	0.15	0.24	0.03	0.54	0.33	0.07	0.10	0.09	0.02	0.25	0.31	0.66	1.06	3.31	0.09	1.47	1.55	3.38	1.28	1.25	1.54	0.19	0.09	0.34	0.15	0.49	2.21	1.76	2.14	2.79
47	0.26	0.04	0.06	0.02	0.17	0.19	0.04	0.04	0.01	0.02	1.38	0.05	0.16	0.09	0.40	0.03	0.39	0.38	1.18	0.66	0.40	0.43	0.16	1.66	1.30	0.35	1.29	0.50	0.47	1.51	1.37
49	0.45	0.29	0.03	0.02	0.04	0.00	0.01	0.04	0.01	0.00	0.28	0.00	0.03	0.02	0.00	0.01	0.02	1.92	1.31	0.10	0.28	0.05	0.05	0.86	0.97	0.74	0.16	0.03	0.33	0.06	0.05
51	1.77	1.31	0.35	3.04	1.43	0.25	0.36	1.73	0.35	0.83	1.18	0.41	0.85	0.30	0.06	2.80	0.56	0.84	0.43	0.17	0.00	0.12	0.17	0.01	0.00	0.07	0.43	0.00	0.00	0.06	0.06
52	1.15	0.38	0.11	2.37	1.53	0.27	0.90	0.31	0.54	0.28	0.43	0.00	0.05	0.07	0.28	0.76	0.20	1.12	1.59	0.14	0.52	0.17	0.21	0.02	0.01	0.10	0.16	0.00	0.28	0.20	0.18
53	0.24	0.28	0.01	0.03	0.00	0.02	0.03	0.03	0.00	0.48	0.53	0.03	0.77	0.13	0.20	0.20	1.61	0.06	0.06	0.26	0.31	2.70	0.04	0.07	0.26	1.81	0.06	0.00	0.02	0.06	0.22
54	0.26	0.20	1.43	0.13	2.25	2.00	0.07	0.20	0.08	0.03	0.09	0.14	0.00	2.59	0.22	0.29	1.29	1.68	3.60	0.13	0.12	0.05	0.00	0.49	0.03	2.62	0.50	0.12	0.18	0.06	0.23
55	0.29	0.37	0.06	0.16	0.32	0.00	0.23	0.23	0.97	0.75	0.29	0.67	0.79	10.92	10.88	0.88	1.15	0.04	0.14	0.03	0.00	0.89	0.00	0.06	0.01	0.51	0.12	0.00	0.00	0.00	0.00
57	0.27	0.25	0.01	0.53	0.20	0.00	0.23	0.17	0.13	1.43	0.22	0.44	0.98	2.23	5.72	1.60	3.15	0.05	0.17	0.78	0.03	2.97	0.04	0.08	0.01	2.22	0.03	0.00	0.03	0.02	0.00
58	0.75	0.26	0.03	0.04	0.01	0.00	0.32	0.53	0.05	0.72	0.18	0.16	1.76	1.07	2.29	0.12	2.70	0.71	0.59	0.30	0.81	2.94	0.30	1.02	2.22	3.90	0.33	0.02	0.18	0.16	0.79
60	0.21	0.17	0.24	0.28	0.10	0.14	0.12	0.01	0.01	0.00	0.25	0.00	0.02	0.02	0.02	0.02	0.15	0.28	1.85	0.09	1.11	0.03	0.15	0.32	0.23	0.20	0.24	0.24	0.11	0.34	0.99
62	0.16	0.18	0.12	0.30	0.04	0.00	0.01	0.01	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.01	0.01	0.03	0.07	0.00	0.00	0.01	0.14	0.02	0.00	0.00	0.08	0.02	0.05	0.03	0.04
65	0.55	0.10	0.04	0.06	0.02	0.00	0.14	0.39	0.03	0.02	1.43	0.00	0.00	0.00	0.00	0.01	0.01	0.25	0.08	0.31	0.19	0.01	0.58	0.67	0.61	0.38	0.61	0.58	2.05	0.25	0.01
68	0.48	0.16	4.58	2.02	0.87	0.87	0.48	1.21	0.38	0.06	0.16	0.09	0.03	0.78	0.00	0.63	0.03	0.04	0.11	0.02	0.00	0.01	0.04	0.05	0.01	0.25	0.07	0.01	0.06	0.03	0.00
70	0.96	1.03	0.03	0.05	0.00	0.00	0.01	0.12	0.00	0.13	0.28	0.01	0.30	0.00	0.00	0.02	0.19	0.10	0.04	0.03	0.14	0.07	0.19	2.93	0.13	8.33	0.26	0.04	0.05	0.04	0.00
74	0.42	0.16	0.02	0.03	0.00	0.00	0.00	0.02	0.00	0.00	0.09	0.00	0.01	0.02	0.00	0.00	0.03	0.04	0.01	0.14	0.52	0.01	0.11	0.34	0.93	0.27	0.07	0.00	0.07	0.02	0.00
76	0.48	0.10	0.01	0.01	0.00	0.00	0.00	0.05	0.00	0.00	0.01	0.00	0.02	0.00	0.00	0.00	0.05	0.01	0.03	0.06	0.18	0.01	0.07	0.70	2.00	1.09	0.07	0.00	0.01	0.02	0.00
78	1.01	0.65	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.02	0.26	0.00	0.18	0.00	0.00	0.02	0.77	0.00	0.05	0.25	1.56	0.08	2.04	0.59	1.56	1.17	0.52	0.12	0.19	0.37	0.46
80	0.72	0.41	0.01	0.04	0.00	0.00	0.01	0.00	0.00	0.00	0.11	0.00	0.00	0.08	0.00	0.01	0.00	0.00	0.12	0.03	0.13	0.04	1.26	0.94	2.35	0.76	0.13	0.00	0.00	0.00	0.00
81	0.30	0.27	0.15	0.04	0.23	0.01	0.12	0.03	0.00	0.31	0.23	0.07	2.24	0.03	0.08	0.15	1.98	0.01	0.21	0.06	0.04	0.74	0.35	0.34	0.63	1.00	0.15	0.08	0.03	0.04	0.08
82	0.44	0.21	0.03	0.42	0.02	0.00	0.18	0.01	0.00	0.06	0.17	0.07	0.89	0.00	0.05	0.80	0.28	0.10	0.71	0.09	0.03	0.05	0.22	0.57	0.48	2.28	0.31	0.08	0.01	0.08	0.05
83	0.38	0.73	0.02	0.01	0.00	0.00	0.01	0.01	0.01	0.26	0.17	0.01	0.51	0.01	0.00	0.01	0.60	0.00	0.04	0.02	0.02	0.64	0.05	0.04	0.06	0.47	0.00	0.00	0.00	0.00	0.00
85	0.93	2.72	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.13	0.00	0.31	0.05	1.32	0.68	0.52	1.05	0.26	0.00	0.00	0.09	0.00
86	0.78	0.05	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.22	0.05	6.26	0.02	0.61	0.75	1.10	0.66	0.18	0.00	0.07	0.11	0.00
90	0.34	0.23	0.35	1.84	0.27	0.00	0.10	0.08	0.01	0.00	0.40	0.01	0.00	0.01	0.00	0.01	0.00	0.73	0.18	0.02	0.00	0.00	0.03	0.09	0.02	0.05	0.15	0.03	0.23	0.03	0.01
91	0.78	0.39	0.75	0.51	0.74	0.25	0.02	0.00	0.00	0.00	0.21	0.00	0.00	0.07	0.00	0.04	0.02	0.25	0.52	0.00	0.00	0.00	0.03	0.15	0.03	0.23	0.38	0.00	0.04	0.01	0.02
92	1.71	0.35	0.12	1.02	0.17	0.05	0.03	0.02	0.01	0.00	0.22	0.00	0.24	0.03	0.00	0.09	0.07	0.10	0.10	0.02	0.02	0.02	0.03	1.38	0.71	1.54	0.52	0.00	0.04	0.11	0.03
93	0.41	0.04	0.13	0.05	0.01	0.04	0.01	0.21	0.10	0.02	1.08	0.02	0.06	0.04	0.00	0.02	0.05	0.09	0.04	0.20	0.01	0.02	0.02	1.21	0.24	0.46	1.04	0.02	0.19	0.06	0.01
94	0.79	0.23	0.95	1.35	2.90	0.32	1.27	0.23	0.12	0.31	0.66	0.07	0.00	0.02	0.00	0.27	0.18	0.22	0.89	0.11	0.00	0.03	0.36	0.41	0.04	0.55	1.84	0.24	0.42	1.15	0.28

Table 3: Undirected overlap scores in 1990–1994

	44	**45**	**46**	**47**	**49**	**51**	**52**	**53**	**54**	**55**	**57**	**58**	**60**	**62**	**65**	**68**	**70**	**74**	**76**	**78**	**80**	**81**	**82**	**83**	**85**	**86**	**90**	**91**	**92**	**93**	**94**
00	0.79	0.41	0.37	0.23	0.30	2.16	1.20	0.45	0.27	0.29	0.31	1.18	0.23	0.13	0.50	0.36	0.43	0.34	0.36	0.79	0.53	0.39	0.59	0.40	0.43	0.54	0.31	0.46	1.83	0.18	0.75
01	0.46	0.14	0.19	0.06	0.17	1.62	0.26	0.31	0.21	0.44	0.42	0.26	0.18	0.13	0.08	0.13	0.78	0.11	0.06	0.64	0.57	0.16	0.26	0.55	1.59	0.17	0.16	0.17	0.27	0.03	0.18
03	0.00	0.02	0.24	0.04	0.03	0.19	0.09	0.02	1.41	0.04	0.03	0.03	0.24	0.10	0.03	3.48	0.03	0.01	0.01	0.00	0.03	0.16	0.03	0.03	0.00	0.03	0.38	0.63	0.12	0.18	0.50
05	0.10	0.00	0.05	0.03	0.01	2.09	1.60	0.02	0.12	0.11	0.51	0.05	0.32	0.21	0.05	1.60	0.03	0.02	0.00	0.01	0.01	0.04	0.22	0.00	0.00	0.01	1.28	0.31	0.73	0.02	1.13
06	0.08	0.00	0.51	0.09	0.07	1.39	1.63	0.00	2.28	0.13	0.06	0.01	0.06	0.02	0.01	0.79	0.00	0.00	0.00	0.00	0.00	0.36	0.02	0.02	0.00	0.00	0.18	0.44	0.33	0.01	1.96
08	0.00	0.00	0.06	0.01	0.00	0.43	0.26	0.00	0.59	0.07	0.09	0.00	0.01	0.00	0.00	0.71	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.02	0.00	0.00	0.00	0.06	0.05	0.02	0.19
11	0.09	0.00	0.06	0.03	0.01	0.30	0.57	0.02	0.02	0.16	0.19	0.30	0.09	0.01	0.09	0.23	0.02	0.00	0.00	0.01	0.00	0.20	0.19	0.03	0.00	0.00	0.04	0.02	0.03	0.01	1.24
12	0.86	0.00	0.18	0.01	0.00	1.33	0.28	0.03	0.21	0.32	0.03	0.17	0.01	0.00	0.15	0.61	0.11	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.22	0.33
13	0.14	0.00	0.04	0.01	0.00	0.31	1.50	0.01	0.21	0.70	0.06	0.06	0.00	0.00	0.03	0.32	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.04	0.17
14	0.10	0.00	0.02	0.01	0.01	0.33	0.75	0.44	0.06	0.93	1.46	0.91	0.00	0.00	0.03	0.11	0.09	0.00	0.00	0.00	0.00	0.28	0.15	0.13	0.00	0.00	0.01	0.02	0.00	0.03	0.48
15	0.14	0.11	0.19	1.00	0.26	1.28	0.59	0.39	0.12	0.18	0.17	0.22	0.31	0.20	1.31	0.13	0.14	0.15	0.01	0.38	0.03	0.27	0.26	0.13	0.00	0.08	0.37	0.17	0.29	0.60	0.47
16	0.00	0.02	0.41	0.05	0.00	0.40	0.04	0.10	0.19	0.63	0.86	0.55	0.01	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.52	0.37	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.09
17	0.00	0.00	0.53	0.07	0.01	0.29	0.18	0.64	0.02	0.35	1.40	1.79	0.02	0.00	0.00	0.02	0.25	0.01	0.01	0.08	0.00	3.62	1.75	0.29	0.00	0.03	0.00	0.00	0.18	0.02	0.00
18	0.00	0.00	0.35	0.01	0.00	0.48	0.79	0.13	3.47	10.58	1.56	0.56	0.01	0.01	0.01	0.90	0.02	0.00	0.00	0.00	0.00	0.15	0.00	0.04	0.00	0.00	0.01	0.07	0.04	0.03	0.03
19	0.00	0.00	3.74	0.31	0.02	0.00	0.53	0.33	0.15	14.38	4.27	2.84	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.02	0.00	0.11	0.02	0.00	2.16	0.50	0.31	0.25	0.97	2.41	0.11	0.03	0.01	0.02	0.37	0.01	0.01	0.00	0.01	0.00	0.17	0.64	0.05	0.00	0.00	0.01	0.02	0.06	0.01	0.33
22	0.88	0.06	1.46	0.35	0.02	0.43	0.15	1.51	1.77	0.99	1.83	2.45	0.20	0.01	0.01	0.02	0.24	0.01	0.02	0.47	0.10	1.50	0.21	0.31	0.00	0.00	0.00	0.06	0.12	0.06	0.16
26	4.83	1.36	1.83	0.56	1.75	0.23	1.12	0.07	1.99	0.15	0.07	0.75	0.20	0.04	0.19	0.04	0.01	0.05	0.01	0.04	0.09	0.02	0.09	0.00	0.00	0.00	0.59	0.16	0.16	0.04	0.24
28	0.52	0.10	2.56	0.80	1.04	0.52	1.28	0.06	2.81	0.04	0.27	0.52	1.79	0.11	0.08	0.09	0.06	0.03	0.06	0.09	0.00	0.18	0.50	0.01	0.14	0.20	0.10	0.45	0.28	0.03	0.76
30	1.25	1.24	1.36	0.75	0.05	0.35	0.40	0.40	0.18	0.06	1.49	0.37	0.08	0.01	0.24	0.01	0.02	0.07	0.07	0.16	0.02	0.07	0.06	0.03	0.00	0.05	0.01	0.01	0.04	0.16	0.15
31	0.39	1.76	1.07	0.72	0.13	0.06	0.48	0.41	0.07	0.00	0.08	0.59	1.84	0.01	0.12	0.00	0.00	0.31	0.10	1.52	0.39	0.05	0.03	0.00	0.31	2.38	0.04	0.00	0.17	0.01	0.23
32	0.46	0.08	1.05	0.31	0.04	0.05	0.54	2.11	0.02	0.72	1.72	2.77	0.04	0.00	0.03	0.01	0.13	0.01	0.01	0.03	0.00	0.66	0.02	0.43	0.00	0.00	0.00	0.00	0.04	0.01	0.00
33	10.26	1.30	0.23	0.20	0.05	0.36	0.45	0.05	0.00	0.12	0.14	0.24	0.14	0.12	0.41	0.06	0.08	0.06	0.04	0.96	1.47	0.89	0.63	0.09	1.18	0.37	0.01	0.01	0.05	0.01	0.56
34	0.41	1.55	0.10	1.66	0.76	0.01	0.01	0.05	0.47	0.05	0.07	0.78	0.25	0.01	0.73	0.03	2.43	0.34	0.47	0.52	0.58	0.28	0.32	0.06	0.42	0.49	0.03	0.20	1.65	0.76	0.23
35	0.40	1.31	0.29	1.25	0.80	0.00	0.01	0.30	0.03	0.02	0.01	1.35	0.23	0.00	0.66	0.01	0.10	0.95	1.76	1.71	2.57	0.47	0.53	0.08	0.56	0.96	0.01	0.03	0.79	0.21	0.02
37	0.07	0.10	0.06	0.31	0.28	0.10	0.08	1.84	2.03	0.59	1.82	3.49	0.11	0.02	0.56	0.17	7.55	0.19	0.79	1.31	0.61	0.97	1.55	0.36	0.79	0.63	0.05	0.24	1.34	0.21	0.25
39	2.40	1.63	0.54	0.93	0.11	0.64	0.09	0.02	0.39	0.11	0.06	0.24	0.24	0.06	0.57	0.05	0.33	0.04	0.07	0.25	0.12	0.37	0.71	0.01	0.00	0.13	0.07	0.41	1.48	0.40	0.72
40	6.45	0.33	1.66	0.47	0.05	0.22	0.06	0.02	0.31	0.00	0.00	0.05	0.13	0.02	0.42	0.00	0.03	0.01	0.00	0.00	0.00	0.06	0.04	0.00	0.00	0.00	0.03	0.03	0.05	0.02	0.38
41	1.53	0.21	1.58	0.46	0.44	0.05	0.30	0.01	0.16	0.00	0.02	0.17	0.11	0.07	1.95	0.04	0.03	0.01	0.03	0.16	0.02	0.02	0.05	0.00	0.00	0.03	0.18	0.03	0.30	0.13	0.99
42	6.63	1.05	2.14	1.27	0.09	0.00	0.08	0.03	0.04	0.00	0.00	0.16	0.45	0.05	0.49	0.05	0.02	0.04	0.04	0.22	0.11	0.07	0.09	0.01	0.00	0.33	0.00	0.00	0.23	0.02	3.69
43	12.22	0.22	3.03	1.18	0.00	0.22	0.00	0.44	0.18	0.00	0.12	1.00	0.96	0.01	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.11	0.05	0.00	0.00	0.00	0.00	0.00	0.15	0.01	0.42
44	0.00	4.48	2.88	1.22	0.05	0.08	0.41	1.04	0.00	0.00	0.00	0.66	0.26	0.12	0.77	0.04	0.07	0.22	0.03	1.52	0.60	0.09	0.08	0.00	0.47	0.99	0.05	0.14	4.25	0.15	1.07
45	4.48	0.00	0.30	3.09	0.59	0.00	0.00	0.02	0.02	0.00	0.00	0.13	0.20	0.01	1.45	0.01	0.00	1.31	0.76	4.77	1.55	0.05	1.47	0.00	3.71	0.84	0.03	0.06	2.09	0.30	0.24
46	2.88	0.30	0.00	3.18	0.71	0.06	0.63	0.10	0.79	0.18	0.29	1.47	0.66	0.01	0.07	0.00	0.01	0.04	0.03	0.05	0.00	0.60	0.46	0.04	0.00	0.00	0.17	0.10	0.01	0.03	0.10
47	1.22	3.09	3.18	0.00	1.19	0.00	0.05	0.02	0.63	0.13	0.02	1.08	0.43	0.01	0.57	0.01	0.04	0.30	0.18	0.21	0.11	0.53	0.36	0.01	0.12	0.04	0.16	0.11	0.25	0.49	0.06
49	0.05	0.59	0.71	1.19	0.00	0.05	0.49	0.90	0.80	0.04	0.12	2.14	0.15	0.03	0.74	0.02	0.89	1.41	0.31	0.46	0.62	0.02	0.15	0.03	0.25	0.21	4.79	2.24	0.45	2.69	0.07
51	0.08	0.00	0.06	0.00	0.05	0.00	6.78	0.77	0.15	0.14	0.50	0.08	0.00	0.02	0.11	0.19	0.22	0.01	0.00	0.24	0.00	0.03	0.14	0.23	0.00	0.13	0.06	0.05	0.17	0.00	2.12
52	0.41	0.00	0.63	0.05	0.49	6.78	0.00	0.58	0.39	1.40	1.44	0.07	0.50	0.02	0.20	1.31	0.20	0.03	0.00	0.04	0.00	0.01	0.75	0.00	0.25	0.12	0.99	0.14	0.56	0.02	0.33
53	1.04	0.02	0.10	0.02	0.90	0.77	0.58	0.00	0.03	0.60	2.47	6.72	0.04	0.03	0.08	0.05	0.46	0.15	0.08	0.47	0.21	0.62	0.18	2.38	0.12	0.05	0.01	0.02	0.19	0.01	0.02
54	0.00	0.02	0.79	0.63	0.80	0.15	0.39	0.03	0.00	2.17	1.07	0.25	0.05	0.01	0.03	0.08	0.12	0.00	0.02	0.02	0.01	0.01	0.06	0.02	0.00	0.04	0.14	0.31	0.28	0.04	0.10
55	0.00	0.00	0.18	0.13	0.04	0.14	1.40	0.60	2.17	0.00	9.81	1.51	0.01	0.00	0.02	0.05	0.04	0.00	0.00	0.05	0.05	0.14	0.05	0.05	0.14	0.00	0.03	0.09	0.00	0.02	0.00
57	0.00	0.00	0.29	0.02	0.12	0.50	1.44	2.47	1.07	9.81	0.00	3.16	0.02	0.00	0.01	0.06	0.19	0.01	0.02	0.05	0.00	0.51	0.62	0.39	0.07	0.00	0.02	0.03	0.32	0.05	0.07
58	0.66	0.13	1.47	1.08	2.14	0.08	0.07	6.72	0.25	1.51	3.16	0.00	0.38	0.01	0.14	0.02	1.43	0.28	0.29	0.89	0.27	1.59	0.57	1.29	0.31	0.08	0.21	0.10	0.14	0.13	0.02
60	0.26	0.20	0.66	0.43	0.15	0.00	0.50	0.04	0.05	0.01	0.02	0.38	0.00	2.29	0.18	0.26	0.07	0.05	0.06	0.04	0.04	0.20	1.12	0.01	0.04	0.08	1.28	0.46	0.51	0.47	0.32
62	0.12	0.01	0.01	0.01	0.03	0.02	0.02	0.03	0.01	0.00	0.00	0.01	2.29	0.00	0.17	0.10	0.00	0.01	0.00	0.01	0.00	0.01	0.03	0.00	0.00	0.15	0.27	0.40	0.23	0.19	0.31
65	0.77	1.45	0.07	0.57	0.74	0.11	0.20	0.08	0.03	0.02	0.01	0.14	0.18	0.17	0.00	0.36	0.28	0.68	1.51	1.01	1.04	0.06	0.20	0.01	0.40	0.95	1.39	0.08	0.39	0.29	0.32
68	0.04	0.01	0.00	0.01	0.02	0.19	1.31	0.05	0.08	0.05	0.06	0.02	0.26	0.10	0.36	0.00	0.05	0.00	0.01	0.04	0.00	0.01	0.15	0.01	0.02	0.01	0.91	0.34	1.00	0.12	1.32
70	0.07	0.00	0.01	0.04	0.89	0.22	0.20	0.46	0.12	0.04	0.19	1.43	0.07	0.00	0.28	0.05	0.00	1.20	0.27	1.72	0.19	0.29	0.27	0.41	4.03	0.31	0.06	0.09	0.15	1.14	0.05
74	0.22	1.31	0.04	0.30	1.41	0.01	0.03	0.15	0.00	0.00	0.01	0.28	0.05	0.01	0.68	0.00	1.20	0.00	1.29	1.13	1.99	0.01	0.40	0.03	0.09	1.84	0.16	0.01	0.22	0.51	0.00
76	0.03	0.76	0.03	0.18	0.31	0.00	0.00	0.08	0.02	0.00	0.02	0.29	0.06	0.00	1.51	0.01	0.27	1.29	0.00	1.19	2.68	0.02	1.34	0.08	3.27	6.00	0.01	0.01	0.26	0.05	0.01
78	1.52	4.77	0.05	0.21	0.46	0.24	0.04	0.47	0.02	0.05	0.05	0.89	0.04	0.01	1.01	0.04	1.72	1.13	1.19	0.00	2.81	0.56	1.03	0.55	2.89	3.38	0.04	0.06	1.28	0.06	0.81
80	0.60	1.55	0.00	0.11	0.62	0.00	0.00	0.21	0.01	0.05	0.00	0.27	0.04	0.00	1.04	0.00	0.19	1.99	2.68	2.81	0.00	0.01	1.29	0.07	1.00	2.30	0.01	0.00	3.97	0.11	0.20
81	0.09	0.05	0.60	0.53	0.02	0.03	0.01	0.62	0.01	0.14	0.51	1.59	0.20	0.01	0.06	0.01	0.29	0.01	0.02	0.56	0.01	0.00	1.39	1.82	0.14	0.01	0.00	0.01	0.06	0.01	0.10
82	0.08	1.47	0.46	0.36	0.15	0.14	0.75	0.18	0.06	0.05	0.62	0.57	1.12	0.03	0.20	0.15	0.27	0.40	1.34	1.03	1.29	1.39	0.00	0.21	1.85	0.23	0.04	0.17	1.93	0.02	0.24
83	0.00	0.00	0.04	0.01	0.03	0.23	0.00	2.38	0.02	0.05	0.39	1.29	0.01	0.00	0.01	0.01	0.41	0.03	0.08	0.55	0.07	1.82	0.21	0.00	2.26	0.00	0.00	0.01	0.00	0.00	0.00
85	0.47	3.71	0.00	0.12	0.25	0.00	0.25	0.12	0.00	0.14	0.07	0.31	0.04	0.00	0.40	0.02	4.03	0.09	3.27	2.89	1.00	0.14	1.85	2.26	0.00	7.04	0.00	0.07	0.10	0.02	0.10
86	0.99	0.84	0.00	0.04	0.21	0.13	0.12	0.05	0.04	0.00	0.00	0.08	0.08	0.15	0.95	0.01	0.31	1.84	6.00	3.38	2.30	0.01	0.23	0.00	7.04	0.00	0.08	0.09	0.47	0.12	0.09
90	0.05	0.03	0.17	0.16	4.79	0.06	0.99	0.01	0.14	0.03	0.02	0.21	1.28	0.27	1.39	0.91	0.06	0.16	0.01	0.04	0.01	0.00	0.04	0.00	0.00	0.08	0.00	2.22	0.36	0.61	0.49
91	0.14	0.06	0.10	0.11	2.24	0.05	0.14	0.02	0.31	0.09	0.03	0.10	0.46	0.40	0.08	0.34	0.09	0.01	0.01	0.06	0.00	0.01	0.17	0.01	0.07	0.09	2.22	0.00	2.30	0.66	0.49
92	4.25	2.09	0.01	0.25	0.45	0.17	0.56	0.19	0.28	0.00	0.32	0.14	0.51	0.23	0.39	1.00	0.15	0.22	0.26	1.28	3.97	0.06	1.93	0.00	0.10	0.47	0.36	2.30	0.00	0.41	1.12
93	0.15	0.30	0.03	0.49	2.69	0.00	0.02	0.01	0.04	0.02	0.05	0.13	0.47	0.19	0.29	0.12	1.14	0.51	0.05	0.06	0.11	0.01	0.02	0.00	0.02	0.12	0.61	0.66	0.41	0.00	0.40
94	1.07	0.24	0.10	0.06	0.07	2.12	0.33	0.02	0.10	0.00	0.07	0.02	0.32	0.31	0.32	1.32	0.05	0.00	0.01	0.81	0.20	0.10	0.24	0.00	0.10	0.09	0.49	0.49	1.12	0.40	0.00

Table 4: Undirected overlap scores in 1990–1994, cont.

	00	**01**	**03**	**05**	**06**	**08**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**22**	**26**	**28**	**30**	**31**	**32**	**33**	**34**	**35**	**37**	**39**	**40**	**41**	**42**	**43**
00	0.00	8.63	1.72	0.42	0.29	0.63	0.31	1.42	0.84	0.21	0.68	0.35	0.30	0.90	0.33	0.40	0.40	2.34	2.03	0.37	0.26	0.34	0.34	0.40	0.39	0.43	0.56	0.32	0.35	0.65	0.05
01	8.63	0.00	1.21	0.15	0.11	0.13	0.43	0.70	0.15	0.40	0.26	0.09	0.13	0.18	0.14	0.15	0.38	0.71	0.39	0.39	0.09	0.15	0.27	0.09	0.03	0.07	0.11	0.27	0.20	0.27	0.27
03	1.72	1.21	0.00	0.30	3.64	2.91	0.13	1.14	0.25	0.07	0.25	0.22	0.03	1.28	0.00	0.61	0.11	0.50	1.37	0.03	0.02	0.02	0.02	0.05	0.01	0.03	0.04	0.08	0.03	0.04	0.21
05	0.42	0.15	0.30	0.00	1.43	0.26	0.83	0.17	0.27	0.08	1.09	0.15	0.26	0.14	0.05	1.33	0.15	0.10	0.10	0.02	0.09	0.04	0.71	0.01	0.01	0.05	0.15	0.10	0.04	0.02	0.19
06	0.29	0.11	3.64	1.43	0.00	18.59	0.05	1.31	1.70	0.08	0.50	1.03	0.12	7.25	0.37	1.84	0.43	0.38	2.67	0.00	0.30	0.01	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00
08	0.63	0.13	2.91	0.26	18.59	0.00	0.02	0.63	0.32	0.00	0.22	0.93	0.42	10.07	0.00	2.61	0.43	0.06	0.21	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.13	0.00	0.03	0.00	0.00
11	0.31	0.43	0.13	0.83	0.05	0.02	0.00	3.05	0.36	1.94	0.45	0.19	0.28	0.05	2.30	0.64	1.16	0.18	0.47	0.26	0.06	0.25	1.02	0.04	0.01	0.26	0.25	0.37	0.07	0.14	0.11
12	1.42	0.70	1.14	0.17	1.31	0.63	3.05	0.00	6.96	3.02	1.19	2.97	0.14	1.65	3.62	1.36	0.21	2.00	0.12	1.05	0.18	0.88	0.93	0.31	0.04	0.14	0.86	0.63	0.09	0.09	0.42
13	0.84	0.15	0.25	0.27	1.70	0.32	0.36	6.96	0.00	4.46	1.32	2.08	0.22	2.80	2.81	0.86	0.17	0.11	0.04	0.03	0.00	0.40	0.19	0.04	0.02	0.03	0.33	0.00	0.10	0.11	0.00
14	0.21	0.40	0.07	0.08	0.08	0.00	1.94	3.02	4.46	0.00	0.26	0.82	0.77	0.72	3.53	0.85	0.53	0.11	0.01	0.66	0.02	5.70	0.55	0.04	0.05	0.85	0.18	0.00	0.03	0.01	0.05
15	0.68	0.26	0.25	1.09	0.50	0.22	0.45	1.19	1.32	0.26	0.00	1.44	0.39	0.34	0.46	0.78	0.59	0.52	0.09	0.54	0.11	0.09	0.24	0.19	0.02	0.19	1.14	0.31	0.45	0.51	0.00
16	0.35	0.09	0.22	0.15	1.03	0.93	0.19	2.97	2.08	0.82	1.44	0.00	6.87	4.25	3.42	2.31	0.61	0.01	0.01	0.04	0.00	0.08	0.33	0.01	0.01	0.12	0.18	0.00	0.02	0.00	0.08
17	0.30	0.13	0.03	0.26	0.12	0.42	0.28	0.14	0.22	0.77	0.39	6.87	0.00	1.18	1.02	1.24	4.90	0.00	0.04	0.09	0.02	1.14	2.07	0.10	0.12	2.39	0.51	0.03	0.00	0.01	0.20
18	0.90	0.18	1.28	0.14	7.25	10.07	0.05	1.65	2.80	0.72	0.34	4.25	1.18	0.00	16.50	1.34	1.12	0.00	0.36	0.00	0.00	0.20	0.05	0.00	0.01	0.11	0.00	0.00	0.00	0.00	0.00
19	0.33	0.14	0.00	0.05	0.37	0.00	2.30	3.62	2.81	3.53	0.46	3.42	1.02	16.50	0.00	1.73	2.18	0.00	0.00	0.08	0.00	0.61	0.89	0.00	0.02	0.13	0.14	0.00	0.00	0.00	0.58
20	0.40	0.15	0.61	1.33	1.84	2.61	0.64	1.36	0.86	0.85	0.78	2.31	1.24	1.34	1.73	0.00	1.86	0.02	0.09	0.62	0.01	0.23	0.20	0.01	0.01	0.11	0.20	0.02	0.00	0.02	0.56
22	0.40	0.38	0.11	0.15	0.43	0.43	1.16	0.21	0.17	0.53	0.59	0.61	4.90	1.12	2.18	1.86	0.00	0.15	2.05	0.29	0.51	1.20	3.05	0.07	0.21	1.17	0.50	0.34	0.06	1.12	19.46
26	2.34	0.71	0.50	0.10	0.38	0.06	0.18	2.00	0.11	0.11	0.52	0.01	0.00	0.00	0.00	0.02	0.15	0.00	8.74	1.43	1.48	0.31	4.89	0.55	0.15	0.79	6.42	2.92	2.14	4.59	0.44
28	2.03	0.39	1.37	0.10	2.67	0.21	0.47	0.12	0.04	0.01	0.09	0.01	0.04	0.36	0.00	0.09	2.05	8.74	0.00	0.60	2.18	0.05	0.04	0.54	0.06	3.47	1.03	0.56	0.25	1.85	3.28
30	0.37	0.39	0.03	0.02	0.00	0.00	0.26	1.05	0.03	0.66	0.54	0.04	0.09	0.00	0.08	0.62	0.29	1.43	0.60	0.00	5.92	4.35	1.42	0.17	0.27	0.64	1.28	2.36	2.74	1.99	0.34
31	0.26	0.09	0.02	0.09	0.30	0.00	0.06	0.18	0.00	0.02	0.11	0.00	0.02	0.00	0.00	0.01	0.51	1.48	2.18	5.92	0.00	1.48	0.33	0.02	1.60	0.13	1.09	0.38	1.40	2.48	3.76
32	0.34	0.15	0.02	0.04	0.01	0.00	0.25	0.88	0.40	5.70	0.09	0.08	1.14	0.20	0.61	0.23	1.20	0.31	0.05	4.35	1.48	0.00	1.64	0.44	0.30	0.77	0.44	0.32	0.30	0.45	0.26
33	0.34	0.27	0.02	0.71	0.00	0.07	1.02	0.93	0.19	0.55	0.24	0.33	2.07	0.05	0.89	0.20	3.05	4.89	0.04	1.42	0.33	1.64	0.00	0.50	0.19	0.35	6.39	3.50	2.56	6.76	3.16
34	0.40	0.09	0.05	0.01	0.00	0.00	0.04	0.31	0.04	0.04	0.19	0.01	0.10	0.00	0.00	0.01	0.07	0.55	0.54	0.17	0.02	0.44	0.50	0.00	0.94	3.14	1.38	0.14	0.10	0.11	0.03
35	0.39	0.03	0.01	0.01	0.00	0.00	0.01	0.04	0.02	0.05	0.02	0.01	0.12	0.01	0.02	0.01	0.21	0.15	0.06	0.27	1.60	0.30	0.19	0.94	0.00	1.32	0.36	0.01	0.07	0.25	0.15
37	0.43	0.07	0.03	0.05	0.00	0.00	0.26	0.14	0.03	0.85	0.19	0.12	2.39	0.11	0.13	0.11	1.17	0.79	3.47	0.64	0.13	0.77	0.35	3.14	1.32	0.00	2.14	0.06	0.05	0.08	0.08
39	0.56	0.11	0.04	0.15	0.16	0.13	0.25	0.86	0.33	0.18	1.14	0.18	0.51	0.00	0.14	0.20	0.50	6.42	1.03	1.28	1.09	0.44	6.39	1.38	0.36	2.14	0.00	2.82	0.59	1.43	2.01
40	0.32	0.27	0.08	0.10	0.00	0.00	0.37	0.63	0.00	0.00	0.31	0.00	0.03	0.00	0.00	0.02	0.34	2.92	0.56	2.36	0.38	0.32	3.50	0.14	0.01	0.06	2.82	0.00	2.28	5.86	2.60
41	0.35	0.20	0.03	0.04	0.00	0.03	0.07	0.09	0.10	0.03	0.45	0.02	0.00	0.00	0.00	0.00	0.06	2.14	0.25	2.74	1.40	0.30	2.56	0.10	0.07	0.05	0.59	2.28	0.00	7.38	0.65
42	0.65	0.27	0.04	0.02	0.00	0.00	0.14	0.09	0.11	0.01	0.51	0.00	0.01	0.00	0.00	0.02	1.12	4.59	1.85	1.99	2.48	0.45	6.76	0.11	0.25	0.08	1.43	5.86	7.38	0.00	7.87
43	0.05	0.27	0.21	0.19	0.00	0.00	0.11	0.42	0.00	0.05	0.00	0.08	0.20	0.00	0.58	0.56	19.46	0.44	3.28	0.34	3.76	0.26	3.16	0.03	0.15	0.08	2.01	2.60	0.65	7.87	0.00
44	0.79	0.46	0.00	0.10	0.08	0.00	0.09	0.86	0.14	0.10	0.14	0.00	0.00	0.00	0.00	0.02	0.88	4.83	0.52	1.25	0.39	0.46	10.26	0.41	0.40	0.07	2.40	6.45	1.53	6.63	12.22
45	0.41	0.14	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.02	0.00	0.00	0.00	0.00	0.06	1.36	0.10	1.24	1.76	0.08	1.30	1.55	1.31	0.10	1.63	0.33	0.21	1.05	0.22
46	0.37	0.19	0.24	0.05	0.51	0.06	0.06	0.18	0.04	0.02	0.19	0.41	0.53	0.35	3.74	0.11	1.46	1.83	2.56	1.36	1.07	1.05	0.23	0.10	0.29	0.06	0.54	1.66	1.58	2.14	3.03
47	0.23	0.06	0.04	0.03	0.09	0.01	0.03	0.01	0.01	0.01	1.00	0.05	0.07	0.01	0.31	0.02	0.35	0.56	0.80	0.75	0.72	0.31	0.20	1.66	1.25	0.31	0.93	0.47	0.46	1.27	1.18
49	0.30	0.17	0.03	0.01	0.07	0.00	0.01	0.00	0.00	0.01	0.26	0.00	0.01	0.00	0.02	0.00	0.02	1.75	1.04	0.05	0.13	0.04	0.05	0.76	0.80	0.28	0.11	0.05	0.44	0.09	0.00
51	2.16	1.62	0.19	2.09	1.39	0.43	0.30	1.33	0.31	0.33	1.28	0.40	0.29	0.48	0.00	2.16	0.43	0.23	0.52	0.35	0.06	0.05	0.36	0.01	0.00	0.10	0.64	0.22	0.05	0.00	0.22
52	1.20	0.26	0.09	1.60	1.63	0.26	0.57	0.28	1.50	0.75	0.59	0.04	0.18	0.79	0.53	0.50	0.15	1.12	1.28	0.40	0.48	0.54	0.45	0.01	0.01	0.08	0.09	0.06	0.30	0.08	0.00
53	0.45	0.31	0.02	0.02	0.00	0.00	0.02	0.03	0.01	0.44	0.39	0.10	0.64	0.13	0.33	0.31	1.51	0.07	0.06	0.40	0.41	2.11	0.05	0.05	0.30	1.84	0.02	0.02	0.01	0.03	0.44
54	0.27	0.21	1.41	0.12	2.28	0.59	0.02	0.21	0.21	0.06	0.12	0.19	0.02	3.47	0.15	0.25	1.77	1.99	2.81	0.18	0.07	0.02	0.00	0.47	0.03	2.03	0.39	0.31	0.16	0.04	0.18
55	0.29	0.44	0.04	0.11	0.13	0.07	0.16	0.32	0.70	0.93	0.18	0.63	0.35	10.58	14.38	0.97	0.99	0.15	0.04	0.06	0.00	0.72	0.12	0.05	0.02	0.59	0.11	0.00	0.00	0.00	0.00
57	0.31	0.42	0.03	0.51	0.06	0.09	0.19	0.03	0.06	1.46	0.17	0.86	1.40	1.56	4.27	2.41	1.83	0.07	0.27	1.49	0.08	1.72	0.14	0.07	0.01	1.82	0.06	0.00	0.02	0.00	0.12
58	1.18	0.26	0.03	0.05	0.01	0.00	0.30	0.17	0.06	0.91	0.22	0.55	1.79	0.56	2.84	0.11	2.45	0.75	0.52	0.37	0.59	2.77	0.24	0.78	1.35	3.49	0.24	0.05	0.17	0.16	1.00
60	0.23	0.18	0.24	0.32	0.06	0.01	0.09	0.01	0.00	0.00	0.31	0.01	0.02	0.01	0.02	0.03	0.20	0.20	1.79	0.08	1.84	0.04	0.14	0.25	0.23	0.11	0.24	0.13	0.11	0.45	0.96
62	0.13	0.13	0.10	0.21	0.02	0.00	0.01	0.00	0.00	0.00	0.20	0.00	0.00	0.01	0.00	0.01	0.01	0.04	0.11	0.01	0.01	0.00	0.12	0.01	0.00	0.02	0.06	0.02	0.07	0.05	0.01
65	0.50	0.08	0.03	0.05	0.01	0.00	0.09	0.15	0.03	0.03	1.31	0.00	0.00	0.01	0.00	0.02	0.01	0.19	0.08	0.24	0.12	0.03	0.41	0.73	0.66	0.56	0.57	0.42	1.95	0.49	0.01
68	0.36	0.13	3.48	1.60	0.79	0.71	0.23	0.61	0.32	0.11	0.13	0.06	0.02	0.90	0.00	0.37	0.02	0.04	0.09	0.01	0.00	0.01	0.06	0.03	0.01	0.17	0.05	0.00	0.04	0.05	0.01
70	0.43	0.78	0.03	0.03	0.00	0.00	0.02	0.11	0.01	0.09	0.14	0.00	0.25	0.02	0.00	0.01	0.24	0.01	0.06	0.02	0.00	0.13	0.08	2.43	0.10	7.55	0.33	0.03	0.03	0.02	0.00
74	0.34	0.11	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.01	0.00	0.00	0.01	0.01	0.05	0.03	0.07	0.31	0.01	0.06	0.34	0.95	0.19	0.04	0.01	0.01	0.04	0.01
76	0.36	0.06	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.02	0.01	0.06	0.07	0.10	0.01	0.04	0.47	1.76	0.79	0.07	0.00	0.03	0.04	0.00
78	0.79	0.64	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.38	0.00	0.08	0.00	0.00	0.01	0.47	0.04	0.09	0.16	1.52	0.03	0.96	0.52	1.71	1.31	0.25	0.00	0.16	0.22	0.00
80	0.53	0.57	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.10	0.09	0.00	0.02	0.39	0.00	1.47	0.58	2.57	0.61	0.12	0.00	0.02	0.11	0.00
81	0.39	0.16	0.16	0.04	0.36	0.02	0.20	0.01	0.00	0.28	0.27	0.52	3.62	0.15	0.15	0.17	1.50	0.02	0.18	0.07	0.05	0.66	0.89	0.28	0.47	0.97	0.37	0.06	0.02	0.07	0.11
82	0.59	0.26	0.03	0.22	0.02	0.00	0.19	0.00	0.00	0.15	0.26	0.37	1.75	0.00	0.11	0.64	0.21	0.09	0.50	0.06	0.03	0.02	0.63	0.32	0.53	1.55	0.71	0.04	0.05	0.09	0.05
83	0.40	0.55	0.03	0.00	0.02	0.02	0.03	0.00	0.01	0.13	0.13	0.01	0.29	0.04	0.00	0.05	0.31	0.00	0.01	0.03	0.00	0.43	0.09	0.06	0.08	0.36	0.01	0.00	0.00	0.01	0.00
85	0.43	1.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.31	0.00	1.18	0.42	0.56	0.79	0.00	0.00	0.00	0.00	0.00
86	0.54	0.17	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.20	0.05	2.38	0.00	0.37	0.49	0.96	0.63	0.13	0.00	0.03	0.33	0.00
90	0.31	0.16	0.38	1.28	0.18	0.00	0.04	0.02	0.00	0.01	0.37	0.00	0.00	0.01	0.00	0.01	0.00	0.59	0.10	0.01	0.04	0.00	0.01	0.03	0.01	0.05	0.07	0.03	0.18	0.00	0.00
91	0.46	0.17	0.63	0.31	0.44	0.06	0.02	0.00	0.01	0.02	0.17	0.00	0.00	0.07	0.00	0.02	0.06	0.16	0.45	0.01	0.00	0.00	0.01	0.20	0.03	0.24	0.41	0.03	0.03	0.00	0.00
92	1.83	0.27	0.12	0.73	0.33	0.05	0.03	0.00	0.00	0.00	0.29	0.01	0.18	0.04	0.00	0.06	0.12	0.16	0.28	0.04	0.17	0.04	0.05	1.65	0.79	1.34	1.48	0.05	0.30	0.23	0.15
93	0.18	0.03	0.18	0.02	0.01	0.02	0.01	0.22	0.04	0.03	0.60	0.00	0.02	0.03	0.00	0.01	0.06	0.04	0.03	0.16	0.01	0.01	0.01	0.76	0.21	0.21	0.40	0.02	0.13	0.02	0.01
94	0.75	0.18	0.50	1.13	1.96	0.19	1.24	0.33	0.17	0.48	0.47	0.09	0.00	0.03	0.00	0.33	0.16	0.24	0.76	0.15	0.23	0.00	0.56	0.23	0.02	0.25	0.72	0.38	0.99	3.69	0.42

Table 5: Undirected overlap scores in 1995–1999

	44	**45**	**46**	**47**	**49**	**51**	**52**	**53**	**54**	**55**	**57**	**58**	**60**	**62**	**65**	**68**	**70**	**74**	**76**	**78**	**80**	**81**	**82**	**83**	**85**	**86**	**90**	**91**	**92**	**93**	**94**
00	0.41	0.19	0.43	0.25	0.33	1.80	0.94	0.30	0.32	0.36	0.47	1.15	0.21	0.15	0.36	0.38	0.68	0.38	0.38	0.96	0.60	0.45	0.41	0.45	1.24	0.86	0.24	0.49	0.94	0.19	0.52
01	0.16	0.06	0.13	0.05	0.17	1.70	0.23	0.25	0.31	0.63	0.74	0.25	0.15	0.09	0.07	0.09	0.75	0.04	0.09	0.47	0.34	0.20	0.30	0.43	0.98	0.18	0.08	0.19	0.13	0.02	0.12
03	0.01	0.04	0.22	0.07	0.03	0.25	0.06	0.01	1.12	0.03	0.03	0.02	0.17	0.06	0.03	2.73	0.06	0.01	0.01	0.01	0.02	0.16	0.01	0.04	0.06	0.01	0.29	0.46	0.06	0.20	0.27
05	0.06	0.01	0.06	0.02	0.01	1.74	1.63	0.02	0.13	0.14	0.51	0.05	0.34	0.18	0.03	1.44	0.03	0.00	0.00	0.01	0.02	0.04	0.28	0.01	0.06	0.01	1.14	0.31	0.70	0.01	1.06
06	0.00	0.00	0.39	0.06	0.05	1.05	1.51	0.00	2.56	0.41	0.08	0.02	0.06	0.02	0.01	0.77	0.00	0.00	0.00	0.00	0.00	0.33	0.02	0.02	0.19	0.06	0.11	0.37	0.20	0.02	1.89
08	0.00	0.00	0.01	0.01	0.00	0.17	0.12	0.00	0.43	0.13	0.03	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.01	0.23
11	0.14	0.01	0.10	0.04	0.00	0.24	0.51	0.02	0.04	0.10	0.22	0.26	0.13	0.01	0.09	0.19	0.00	0.00	0.00	0.01	0.00	0.16	0.18	0.01	0.00	0.00	0.02	0.02	0.05	0.00	1.00
12	0.56	0.00	0.39	0.04	0.02	0.79	0.06	0.00	0.13	0.12	0.11	0.14	0.02	0.00	0.17	0.58	0.20	0.00	0.00	0.00	0.15	0.01	0.00	0.00	0.00	0.00	0.03	0.00	0.05	0.04	0.36
13	0.00	0.00	0.03	0.00	0.01	0.25	1.03	0.02	0.11	1.18	0.07	0.09	0.00	0.01	0.08	0.36	0.05	0.00	0.00	0.00	0.04	0.01	0.01	0.00	0.00	0.00	0.05	0.00	0.00	0.03	0.50
14	0.07	0.00	0.02	0.01	0.00	0.34	0.66	0.63	0.04	0.71	1.26	0.95	0.01	0.00	0.04	0.08	0.10	0.00	0.00	0.02	0.00	0.46	0.07	0.22	0.00	0.00	0.01	0.00	0.00	0.02	0.40
15	0.29	0.13	0.21	0.91	0.16	1.27	0.61	0.26	0.04	0.18	0.07	0.16	0.30	0.15	1.50	0.20	0.30	0.14	0.01	0.17	0.03	0.22	0.48	0.09	0.00	0.00	0.36	0.13	0.30	0.57	0.53
16	0.03	0.01	0.48	0.04	0.00	0.13	0.06	0.09	0.19	0.77	0.55	0.73	0.01	0.00	0.01	0.07	0.03	0.00	0.00	0.00	0.00	0.42	0.12	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.08
17	0.00	0.02	0.52	0.09	0.01	0.38	0.15	0.69	0.00	0.48	0.99	1.83	0.03	0.00	0.01	0.02	0.16	0.00	0.00	0.04	0.00	2.93	1.10	0.18	0.00	0.00	0.01	0.00	0.28	0.04	0.07
18	0.00	0.00	0.49	0.02	0.00	0.41	0.62	0.15	3.05	14.72	1.80	0.81	0.00	0.00	0.00	0.70	0.00	0.00	0.00	0.00	0.00	0.27	0.07	0.03	0.00	0.00	0.00	0.05	0.00	0.00	0.09
19	0.00	0.00	3.62	0.29	0.00	0.00	0.30	0.36	0.24	11.02	3.71	2.97	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.17	0.06	0.02	0.00	0.00	0.00	0.03	0.00	0.00	0.00
20	0.04	0.01	0.15	0.03	0.00	1.97	0.71	0.27	0.27	1.04	2.41	0.09	0.05	0.00	0.02	0.26	0.02	0.01	0.00	0.00	0.00	0.12	0.31	0.04	0.05	0.00	0.00	0.03	0.06	0.00	0.26
22	1.43	0.06	1.45	0.32	0.04	0.72	0.30	1.43	1.91	0.89	1.56	2.18	0.32	0.01	0.03	0.02	0.28	0.01	0.01	0.50	0.00	1.10	0.16	0.14	0.00	0.00	0.00	0.01	0.16	0.08	0.11
26	4.44	2.40	1.94	0.58	1.54	0.52	1.56	0.04	1.83	0.11	0.07	0.61	0.23	0.03	0.18	0.04	0.04	0.07	0.01	0.11	0.09	0.02	0.02	0.00	0.00	0.09	0.44	0.09	0.02	0.07	0.29
28	0.33	0.29	2.23	0.71	0.76	0.36	1.27	0.05	2.50	0.09	0.10	0.43	2.02	0.13	0.08	0.16	0.01	0.07	0.03	0.03	0.04	0.13	0.33	0.00	0.00	0.12	0.06	0.48	0.09	0.03	0.56
30	2.45	1.22	1.49	0.81	0.16	0.20	0.56	0.28	0.15	0.06	1.40	0.28	0.13	0.00	0.17	0.01	0.02	0.10	0.06	0.36	0.02	0.05	0.06	0.01	0.15	0.04	0.01	0.00	0.01	0.07	0.10
31	1.20	1.62	1.40	0.81	0.43	0.00	0.38	0.51	0.14	0.00	0.02	1.15	2.25	0.00	0.16	0.00	0.07	0.20	0.10	1.52	0.00	0.04	0.16	0.00	0.79	1.38	0.01	0.00	0.04	0.00	0.15
32	0.58	0.10	1.06	0.31	0.03	0.07	0.41	1.96	0.04	0.38	1.94	2.19	0.01	0.00	0.01	0.01	0.09	0.01	0.01	0.01	0.02	0.63	0.05	0.39	0.00	0.02	0.00	0.00	0.01	0.02	0.00
33	9.19	1.52	0.20	0.23	0.02	0.17	0.35	0.10	0.00	0.06	0.08	0.23	0.16	0.07	0.43	0.05	0.14	0.04	0.01	1.21	0.52	0.92	0.78	0.05	0.31	0.13	0.00	0.02	0.28	0.01	0.27
34	0.46	1.69	0.11	1.91	0.67	0.01	0.00	0.09	0.58	0.08	0.05	0.72	0.23	0.02	0.69	0.05	2.24	0.30	0.35	0.30	0.36	0.26	0.24	0.05	0.35	0.40	0.03	0.11	2.03	0.85	0.14
35	0.41	1.18	0.36	1.20	0.84	0.00	0.02	0.31	0.03	0.01	0.01	1.39	0.29	0.00	0.51	0.02	0.09	0.92	1.65	1.54	2.30	0.35	0.63	0.06	0.66	0.80	0.01	0.04	0.87	0.25	0.03
37	0.04	0.08	0.10	0.52	0.15	0.03	0.12	1.88	1.78	0.44	1.24	2.44	0.20	0.03	0.24	0.13	6.00	0.22	0.66	0.91	0.29	0.61	1.33	0.22	1.09	0.56	0.03	0.15	1.01	0.28	0.23
39	3.22	1.06	0.30	0.99	0.12	0.31	0.31	0.11	0.39	0.00	0.05	0.18	0.13	0.02	0.38	0.08	0.20	0.04	0.01	0.22	0.00	0.48	0.69	0.01	0.00	0.00	0.03	0.38	2.24	0.33	0.44
40	5.46	0.36	2.65	0.56	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.02	0.21	0.01	0.22	0.01	0.00	0.00	0.00	0.00	0.00	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.18
41	2.00	0.28	1.69	0.50	0.42	0.07	0.42	0.02	0.20	0.06	0.01	0.07	0.10	0.07	2.15	0.05	0.02	0.03	0.02	0.15	0.00	0.02	0.03	0.00	0.00	0.12	0.16	0.01	0.36	0.09	0.80
42	7.47	0.78	2.42	1.34	0.10	0.04	0.40	0.02	0.01	0.00	0.01	0.13	0.40	0.12	0.67	0.02	0.06	0.02	0.04	0.14	0.03	0.10	0.10	0.00	0.00	0.20	0.01	0.03	0.29	0.05	4.03
43	9.09	0.20	2.91	1.19	0.02	0.14	0.10	0.24	0.31	0.00	0.10	0.86	1.15	0.03	0.04	0.01	0.00	0.00	0.00	0.06	0.00	0.14	0.05	0.00	0.00	0.13	0.00	0.05	0.08	0.02	0.42
44	0.00	3.76	2.86	1.73	0.16	0.09	1.08	0.47	0.00	0.00	0.00	0.40	0.34	0.08	0.82	0.11	0.07	0.23	0.07	1.94	0.34	0.07	0.13	0.02	0.67	1.39	0.10	0.00	6.14	0.05	1.35
45	3.76	0.00	0.28	2.95	0.25	0.00	0.00	0.02	0.05	0.00	0.00	0.13	0.18	0.01	2.07	0.01	0.14	1.13	0.71	2.91	1.91	0.04	1.82	0.00	3.50	0.84	0.02	0.09	2.10	0.17	0.19
46	2.86	0.28	0.00	3.26	0.81	0.11	0.72	0.13	0.75	0.14	0.21	1.63	0.57	0.01	0.08	0.01	0.01	0.03	0.03	0.03	0.03	0.59	0.38	0.08	0.00	0.02	0.21	0.10	0.02	0.03	0.10
47	1.73	2.95	3.26	0.00	1.62	0.01	0.08	0.02	0.71	0.14	0.02	1.13	0.46	0.01	0.56	0.01	0.04	0.32	0.25	0.21	0.18	0.61	0.46	0.01	0.38	0.07	0.28	0.14	0.20	0.34	0.05
49	0.16	0.25	0.81	1.62	0.00	0.03	0.72	0.72	0.75	0.03	0.04	2.53	0.17	0.01	0.78	0.03	0.79	1.43	0.34	0.30	0.65	0.02	0.19	0.01	0.07	0.21	3.78	2.42	0.49	2.28	0.04
51	0.09	0.00	0.11	0.01	0.03	0.00	6.18	0.63	0.23	0.11	0.68	0.10	0.03	0.02	0.11	0.18	0.17	0.01	0.00	0.18	0.00	0.03	0.06	0.25	0.42	0.06	0.07	0.01	0.28	0.00	1.53
52	1.08	0.00	0.72	0.08	0.72	6.18	0.00	0.62	0.31	1.56	1.35	0.15	0.47	0.03	0.32	1.21	0.23	0.03	0.00	0.10	0.13	0.02	0.90	0.00	0.00	0.00	0.84	0.17	0.51	0.03	0.32
53	0.47	0.02	0.13	0.02	0.72	0.63	0.62	0.00	0.04	0.59	2.34	6.69	0.03	0.02	0.07	0.03	0.70	0.15	0.07	0.34	0.15	0.58	0.10	1.98	0.00	0.09	0.02	0.02	0.12	0.04	0.04
54	0.00	0.05	0.75	0.71	0.75	0.23	0.31	0.04	0.00	1.73	0.95	0.31	0.07	0.01	0.04	0.10	0.24	0.01	0.03	0.02	0.04	0.01	0.04	0.01	0.00	0.04	0.10	0.34	0.29	0.05	0.03
55	0.00	0.00	0.14	0.14	0.03	0.11	1.56	0.59	1.73	0.00	8.63	1.52	0.01	0.00	0.02	0.04	0.01	0.01	0.00	0.00	0.00	0.08	0.02	0.03	0.17	0.00	0.01	0.02	0.02	0.01	0.03
57	0.00	0.00	0.21	0.02	0.04	0.68	1.35	2.34	0.95	8.63	0.00	3.54	0.02	0.00	0.01	0.05	0.11	0.00	0.01	0.08	0.02	0.35	0.34	0.30	0.40	0.00	0.01	0.02	0.23	0.02	0.02
58	0.40	0.13	1.63	1.13	2.53	0.10	0.15	6.69	0.31	1.52	3.54	0.00	0.43	0.01	0.08	0.02	1.30	0.24	0.16	0.63	0.29	1.49	0.56	1.14	0.60	0.05	0.10	0.07	0.12	0.15	0.02
60	0.34	0.18	0.57	0.46	0.17	0.03	0.47	0.03	0.07	0.01	0.02	0.43	0.00	1.99	0.26	0.22	0.06	0.04	0.15	0.01	0.01	0.18	1.27	0.00	0.08	0.09	1.02	0.78	0.65	0.41	0.24
62	0.08	0.01	0.01	0.01	0.01	0.02	0.03	0.02	0.01	0.00	0.00	0.01	1.99	0.00	0.17	0.10	0.00	0.00	0.01	0.01	0.01	0.01	0.03	0.00	0.02	0.17	0.21	0.35	0.28	0.15	0.28
65	0.82	2.07	0.08	0.56	0.78	0.11	0.32	0.07	0.04	0.02	0.01	0.08	0.26	0.17	0.00	0.41	0.35	0.71	1.48	0.93	1.00	0.06	0.27	0.01	0.52	0.70	1.42	0.12	0.37	0.33	0.37
68	0.11	0.01	0.01	0.01	0.03	0.18	1.21	0.03	0.10	0.04	0.05	0.02	0.22	0.10	0.41	0.00	0.07	0.01	0.01	0.04	0.02	0.09	0.11	0.01	0.06	0.00	0.90	0.25	0.92	0.13	1.35
70	0.07	0.14	0.01	0.04	0.79	0.17	0.23	0.70	0.24	0.01	0.11	1.30	0.06	0.00	0.35	0.07	0.00	0.97	0.21	1.69	0.15	0.25	0.42	0.39	3.67	0.22	0.05	0.06	0.17	1.04	0.05
74	0.23	1.13	0.03	0.32	1.43	0.01	0.03	0.15	0.01	0.01	0.00	0.24	0.04	0.00	0.71	0.01	0.97	0.00	1.06	1.00	2.44	0.01	0.27	0.03	0.04	1.15	0.13	0.00	0.21	0.56	0.01
76	0.07	0.71	0.03	0.25	0.34	0.00	0.00	0.07	0.03	0.00	0.01	0.16	0.15	0.01	1.48	0.01	0.21	1.06	0.00	1.01	3.05	0.03	1.28	0.06	4.46	6.35	0.02	0.01	0.21	0.13	0.01
78	1.94	2.91	0.03	0.21	0.30	0.18	0.10	0.34	0.02	0.00	0.08	0.63	0.01	0.01	0.93	0.04	1.69	1.00	1.01	0.00	2.66	0.55	1.00	0.53	3.14	3.29	0.04	0.01	1.05	0.08	0.58
80	0.34	1.91	0.03	0.18	0.65	0.00	0.13	0.15	0.04	0.00	0.02	0.29	0.01	0.01	1.00	0.02	0.15	2.44	3.05	2.66	0.00	0.02	1.19	0.17	2.42	3.18	0.04	0.04	2.27	0.14	0.08
81	0.07	0.04	0.59	0.61	0.02	0.03	0.02	0.58	0.01	0.08	0.35	1.49	0.18	0.01	0.06	0.09	0.25	0.01	0.03	0.55	0.02	0.00	1.48	2.79	0.13	0.00	0.00	0.01	0.08	0.01	0.22
82	0.13	1.82	0.38	0.46	0.19	0.06	0.90	0.10	0.04	0.02	0.34	0.56	1.27	0.03	0.27	0.11	0.42	0.27	1.28	1.00	1.19	1.48	0.00	0.30	2.33	0.11	0.08	0.08	1.25	0.02	0.30
83	0.02	0.00	0.08	0.01	0.01	0.25	0.00	1.98	0.01	0.03	0.30	1.14	0.00	0.00	0.01	0.01	0.39	0.03	0.06	0.53	0.17	2.79	0.30	0.00	1.73	0.03	0.00	0.00	0.01	0.00	0.00
85	0.67	3.50	0.00	0.38	0.07	0.42	0.00	0.00	0.00	0.17	0.40	0.60	0.08	0.02	0.52	0.06	3.67	0.04	4.46	3.14	2.42	0.13	2.33	1.73	0.00	12.25	0.00	0.00	0.26	0.00	0.10
86	1.39	0.84	0.02	0.07	0.21	0.06	0.00	0.09	0.04	0.00	0.00	0.05	0.09	0.17	0.70	0.00	0.22	1.15	6.35	3.29	3.18	0.00	0.11	0.03	12.25	0.00	0.04	0.04	0.23	0.07	0.00
90	0.10	0.02	0.21	0.28	3.78	0.07	0.84	0.02	0.10	0.01	0.01	0.10	1.02	0.21	1.42	0.90	0.05	0.13	0.02	0.04	0.04	0.00	0.08	0.00	0.00	0.04	0.00	2.06	0.30	0.75	0.41
91	0.00	0.09	0.10	0.14	2.42	0.01	0.17	0.02	0.34	0.02	0.02	0.07	0.78	0.35	0.12	0.25	0.06	0.00	0.01	0.01	0.04	0.01	0.08	0.00	0.00	0.04	2.06	0.00	1.50	0.50	0.25
92	6.14	2.10	0.02	0.20	0.49	0.28	0.51	0.12	0.29	0.02	0.23	0.12	0.65	0.28	0.37	0.92	0.17	0.21	0.21	1.05	2.27	0.08	1.25	0.01	0.26	0.23	0.30	1.50	0.00	0.28	0.80
93	0.05	0.17	0.03	0.34	2.28	0.00	0.03	0.04	0.05	0.01	0.02	0.15	0.41	0.15	0.33	0.13	1.04	0.56	0.13	0.08	0.14	0.01	0.02	0.00	0.00	0.07	0.75	0.50	0.28	0.00	0.25
94	1.35	0.19	0.10	0.05	0.04	1.53	0.32	0.04	0.03	0.03	0.02	0.02	0.24	0.28	0.37	1.35	0.05	0.01	0.01	0.58	0.08	0.22	0.30	0.00	0.10	0.00	0.41	0.25	0.80	0.25	0.00

Table 6: Undirected overlap scores in 1995–1999, cont.

	00	**01**	**03**	**05**	**06**	**08**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**22**	**26**	**28**	**30**	**31**	**32**	**33**	**34**	**35**	**37**	**39**	**40**	**41**	**42**	**43**
00	0.00	8.79	1.92	0.38	0.24	0.26	0.31	0.77	0.58	0.22	0.65	0.32	0.41	0.68	0.21	0.37	0.43	2.19	1.11	0.44	0.37	0.38	0.53	0.28	0.38	0.32	0.28	0.24	0.50	0.90	0.35
01	8.79	0.00	1.43	0.16	0.18	0.16	0.38	0.76	0.20	0.30	0.29	0.20	0.11	0.19	0.08	0.15	0.21	0.77	0.29	0.54	0.17	0.22	0.29	0.07	0.04	0.09	0.14	0.39	0.18	0.21	0.14
03	1.92	1.43	0.00	0.24	3.65	2.73	0.10	0.96	0.19	0.08	0.14	0.23	0.01	1.29	0.03	0.59	0.10	0.46	1.09	0.03	0.01	0.03	0.00	0.04	0.01	0.03	0.07	0.13	0.03	0.03	0.11
05	0.38	0.16	0.24	0.00	1.25	0.21	0.80	0.20	0.21	0.17	0.85	0.12	0.31	0.13	0.06	1.11	0.10	0.05	0.09	0.04	0.14	0.02	1.02	0.01	0.00	0.03	0.24	0.08	0.04	0.04	0.13
06	0.24	0.18	3.65	1.25	0.00	17.45	0.07	0.78	1.26	0.10	0.62	0.95	0.20	5.74	0.31	2.10	0.28	0.54	1.67	0.04	0.19	0.00	0.03	0.01	0.00	0.02	0.00	0.26	0.02	0.00	0.07
08	0.26	0.16	2.73	0.21	17.45	0.00	0.00	0.27	0.17	0.08	0.13	0.82	0.26	8.31	0.31	3.16	0.29	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.31	0.38	0.10	0.80	0.07	0.00	0.00	2.91	0.44	1.96	0.25	0.16	0.31	0.04	2.35	0.61	1.33	0.18	0.40	0.23	0.03	0.26	1.12	0.03	0.02	0.27	0.26	0.36	0.09	0.20	0.21
12	0.77	0.76	0.96	0.20	0.78	0.27	2.91	0.00	5.78	3.19	0.68	2.13	0.10	0.22	8.07	1.63	0.05	1.73	0.00	1.07	0.18	0.61	0.89	0.59	0.07	0.21	1.36	0.00	0.17	0.12	0.84
13	0.58	0.20	0.19	0.21	1.26	0.17	0.44	5.78	0.00	3.37	1.35	1.70	0.36	1.60	2.09	1.17	0.14	0.26	0.09	0.03	0.00	0.41	0.14	0.03	0.02	0.04	0.21	0.00	0.18	0.00	0.00
14	0.22	0.30	0.08	0.17	0.10	0.08	1.96	3.19	3.37	0.00	0.19	0.78	0.77	0.93	3.41	0.84	0.51	0.18	0.01	0.57	0.03	5.64	0.43	0.05	0.04	0.68	0.10	0.00	0.03	0.00	0.00
15	0.65	0.29	0.14	0.85	0.62	0.13	0.25	0.68	1.35	0.19	0.00	1.31	0.65	0.27	0.09	0.56	0.52	0.84	0.14	0.58	0.10	0.07	0.64	0.18	0.03	0.10	0.77	0.36	0.49	0.68	0.04
16	0.32	0.20	0.23	0.12	0.95	0.82	0.16	2.13	1.70	0.78	1.31	0.00	5.07	4.89	3.08	2.17	0.48	0.04	0.00	0.03	0.00	0.13	0.18	0.02	0.01	0.09	0.05	0.00	0.01	0.00	0.07
17	0.41	0.11	0.01	0.31	0.20	0.26	0.31	0.10	0.36	0.77	0.65	5.07	0.00	2.05	0.72	1.42	5.30	0.03	0.00	0.03	0.03	1.01	2.70	0.10	0.13	1.27	0.87	0.00	0.03	0.03	0.53
18	0.68	0.19	1.29	0.13	5.74	8.31	0.04	0.22	1.60	0.93	0.27	4.89	2.05	0.00	12.34	1.29	0.71	0.04	0.34	0.00	0.00	0.16	0.00	0.01	0.01	0.06	0.06	0.13	0.00	0.03	0.31
19	0.21	0.08	0.03	0.06	0.31	0.31	2.35	8.07	2.09	3.41	0.09	3.08	0.72	12.34	0.00	1.95	2.64	0.00	0.30	0.03	0.00	0.24	0.42	0.00	0.03	0.19	0.00	0.00	0.00	0.00	0.43
20	0.37	0.15	0.59	1.11	2.10	3.16	0.61	1.63	1.17	0.84	0.56	2.17	1.42	1.29	1.95	0.00	1.95	0.02	0.10	0.55	0.11	0.18	0.23	0.01	0.00	0.12	0.16	0.00	0.00	0.03	0.56
22	0.43	0.21	0.10	0.10	0.28	0.29	1.33	0.05	0.14	0.51	0.52	0.48	5.30	0.71	2.64	1.95	0.00	0.21	2.94	0.32	0.88	1.23	3.43	0.07	0.22	1.07	0.96	0.41	0.18	1.45	24.77
26	2.19	0.77	0.46	0.05	0.54	0.00	0.18	1.73	0.26	0.18	0.84	0.04	0.03	0.04	0.00	0.02	0.21	0.00	8.46	1.94	1.89	0.38	4.70	0.50	0.20	0.35	5.07	3.72	2.74	3.69	0.76
28	1.11	0.29	1.09	0.09	1.67	0.17	0.40	0.00	0.09	0.01	0.14	0.00	0.00	0.34	0.30	0.10	2.94	8.46	0.00	0.89	2.80	0.02	0.12	0.31	0.10	2.87	1.04	0.62	0.31	2.48	2.48
30	0.44	0.54	0.03	0.04	0.04	0.00	0.23	1.07	0.03	0.57	0.58	0.03	0.03	0.00	0.03	0.55	0.32	1.94	0.89	0.00	5.00	3.59	1.88	0.21	0.27	0.62	0.90	1.90	3.14	2.02	0.34
31	0.37	0.17	0.01	0.14	0.19	0.00	0.03	0.18	0.00	0.03	0.10	0.00	0.03	0.00	0.00	0.11	0.88	1.89	2.80	5.00	0.00	1.81	0.71	0.04	1.52	0.11	0.92	0.21	1.40	2.83	4.95
32	0.38	0.22	0.03	0.02	0.00	0.00	0.26	0.61	0.41	5.64	0.07	0.13	1.01	0.16	0.24	0.18	1.23	0.38	0.02	3.59	1.81	0.00	1.34	0.37	0.22	0.71	0.29	0.25	0.26	0.37	0.67
33	0.53	0.29	0.00	1.02	0.03	0.00	1.12	0.89	0.14	0.43	0.64	0.18	2.70	0.00	0.42	0.23	3.43	4.70	0.12	1.88	0.71	1.34	0.00	0.55	0.16	0.40	7.90	2.93	2.64	6.82	3.44
34	0.28	0.07	0.04	0.01	0.01	0.00	0.03	0.59	0.03	0.05	0.18	0.02	0.10	0.01	0.00	0.01	0.07	0.50	0.31	0.21	0.04	0.37	0.55	0.00	0.83	2.70	1.10	0.11	0.09	0.11	0.05
35	0.38	0.04	0.01	0.00	0.00	0.00	0.02	0.07	0.02	0.04	0.03	0.01	0.13	0.01	0.03	0.00	0.22	0.20	0.10	0.27	1.52	0.22	0.16	0.83	0.00	1.06	0.32	0.02	0.06	0.21	0.19
37	0.32	0.09	0.03	0.03	0.02	0.00	0.27	0.21	0.04	0.68	0.10	0.09	1.27	0.06	0.19	0.12	1.07	0.35	2.87	0.62	0.11	0.71	0.40	2.70	1.06	0.00	1.87	0.04	0.03	0.06	0.10
39	0.28	0.14	0.07	0.24	0.00	0.00	0.26	1.36	0.21	0.10	0.77	0.05	0.87	0.06	0.00	0.16	0.96	5.07	1.04	0.90	0.92	0.29	7.90	1.10	0.32	1.87	0.00	1.58	0.75	1.25	1.11
40	0.24	0.39	0.13	0.08	0.26	0.00	0.36	0.00	0.00	0.00	0.36	0.00	0.00	0.13	0.00	0.00	0.41	3.72	0.62	1.90	0.21	0.25	2.93	0.11	0.02	0.04	1.58	0.00	1.43	4.97	1.63
41	0.50	0.18	0.03	0.04	0.02	0.00	0.09	0.17	0.18	0.03	0.49	0.01	0.03	0.00	0.00	0.00	0.18	2.74	0.31	3.14	1.40	0.26	2.64	0.09	0.06	0.03	0.75	1.43	0.00	8.75	0.70
42	0.90	0.21	0.03	0.04	0.00	0.00	0.20	0.12	0.00	0.00	0.68	0.00	0.03	0.03	0.00	0.03	1.45	3.69	2.48	2.02	2.83	0.37	6.82	0.11	0.21	0.06	1.25	4.97	8.75	0.00	9.05
43	0.35	0.14	0.11	0.13	0.07	0.00	0.21	0.84	0.00	0.00	0.04	0.07	0.53	0.31	0.43	0.56	24.77	0.76	2.48	0.34	4.95	0.67	3.44	0.05	0.19	0.10	1.11	1.63	0.70	9.05	0.00
44	0.41	0.16	0.01	0.06	0.00	0.00	0.14	0.56	0.00	0.07	0.29	0.03	0.00	0.00	0.00	0.04	1.43	4.44	0.33	2.45	1.20	0.58	9.19	0.46	0.41	0.04	3.22	5.46	2.00	7.47	9.09
45	0.19	0.06	0.04	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.13	0.01	0.02	0.00	0.00	0.01	0.06	2.40	0.29	1.22	1.62	0.10	1.52	1.69	1.18	0.08	1.06	0.36	0.28	0.78	0.20
46	0.43	0.13	0.22	0.06	0.39	0.01	0.10	0.39	0.03	0.02	0.21	0.48	0.52	0.49	3.62	0.15	1.45	1.94	2.23	1.49	1.40	1.06	0.20	0.11	0.36	0.10	0.30	2.65	1.69	2.42	2.91
47	0.25	0.05	0.07	0.02	0.06	0.01	0.04	0.04	0.00	0.01	0.91	0.04	0.09	0.02	0.29	0.03	0.32	0.58	0.71	0.81	0.81	0.31	0.23	1.91	1.20	0.52	0.99	0.56	0.50	1.34	1.19
49	0.33	0.17	0.03	0.01	0.05	0.00	0.00	0.02	0.01	0.00	0.16	0.00	0.01	0.00	0.00	0.00	0.04	1.54	0.76	0.16	0.43	0.03	0.02	0.67	0.84	0.15	0.12	0.00	0.42	0.10	0.02
51	1.80	1.70	0.25	1.74	1.05	0.17	0.24	0.79	0.25	0.34	1.27	0.13	0.38	0.41	0.00	1.97	0.72	0.52	0.36	0.20	0.00	0.07	0.17	0.01	0.00	0.03	0.31	0.00	0.07	0.04	0.14
52	0.94	0.23	0.06	1.63	1.51	0.12	0.51	0.06	1.03	0.66	0.61	0.06	0.15	0.62	0.30	0.71	0.30	1.56	1.27	0.56	0.38	0.41	0.35	0.00	0.02	0.12	0.31	0.00	0.42	0.40	0.10
53	0.30	0.25	0.01	0.02	0.00	0.00	0.02	0.00	0.02	0.63	0.26	0.09	0.69	0.15	0.36	0.27	1.43	0.04	0.05	0.28	0.51	1.96	0.10	0.09	0.31	1.88	0.11	0.00	0.02	0.02	0.24
54	0.32	0.31	1.12	0.13	2.56	0.43	0.04	0.13	0.11	0.04	0.04	0.19	0.00	3.05	0.24	0.27	1.91	1.83	2.50	0.15	0.14	0.04	0.00	0.58	0.03	1.78	0.39	0.17	0.20	0.01	0.31
55	0.36	0.63	0.03	0.14	0.41	0.13	0.10	0.12	1.18	0.71	0.18	0.77	0.48	14.72	11.02	1.04	0.89	0.11	0.09	0.06	0.00	0.38	0.06	0.08	0.01	0.44	0.00	0.00	0.06	0.00	0.00
57	0.47	0.74	0.03	0.51	0.08	0.03	0.22	0.11	0.07	1.26	0.07	0.55	0.99	1.80	3.71	2.41	1.56	0.07	0.10	1.40	0.02	1.94	0.08	0.05	0.01	1.24	0.05	0.00	0.01	0.01	0.10
58	1.15	0.25	0.02	0.05	0.02	0.00	0.26	0.14	0.09	0.95	0.16	0.73	1.83	0.81	2.97	0.09	2.18	0.61	0.43	0.28	1.15	2.19	0.23	0.72	1.39	2.44	0.18	0.02	0.07	0.13	0.86
60	0.21	0.15	0.17	0.34	0.06	0.00	0.13	0.02	0.00	0.01	0.30	0.01	0.03	0.00	0.01	0.05	0.32	0.23	2.02	0.13	2.25	0.01	0.16	0.23	0.29	0.20	0.13	0.21	0.10	0.40	1.15
62	0.15	0.09	0.06	0.18	0.02	0.00	0.01	0.00	0.01	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.13	0.00	0.00	0.00	0.07	0.02	0.00	0.03	0.02	0.01	0.07	0.12	0.03
65	0.36	0.07	0.03	0.03	0.01	0.00	0.09	0.17	0.08	0.04	1.50	0.01	0.01	0.00	0.00	0.02	0.03	0.18	0.08	0.17	0.16	0.01	0.43	0.69	0.51	0.24	0.38	0.22	2.15	0.67	0.04
68	0.38	0.09	2.73	1.44	0.77	0.60	0.19	0.58	0.36	0.08	0.20	0.07	0.02	0.70	0.01	0.26	0.02	0.04	0.16	0.01	0.00	0.01	0.05	0.05	0.02	0.13	0.08	0.01	0.05	0.02	0.01
70	0.68	0.75	0.06	0.03	0.00	0.00	0.00	0.20	0.05	0.10	0.30	0.03	0.16	0.00	0.00	0.02	0.28	0.04	0.01	0.02	0.07	0.09	0.14	2.24	0.09	6.00	0.20	0.00	0.02	0.06	0.00
74	0.38	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.01	0.01	0.07	0.07	0.10	0.20	0.01	0.04	0.30	0.92	0.22	0.04	0.00	0.03	0.02	0.00
76	0.38	0.09	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.03	0.06	0.10	0.01	0.01	0.35	1.65	0.66	0.01	0.00	0.02	0.04	0.00
78	0.96	0.47	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.02	0.17	0.00	0.04	0.00	0.00	0.00	0.50	0.11	0.03	0.36	1.52	0.01	1.21	0.30	1.54	0.91	0.22	0.00	0.15	0.14	0.06
80	0.60	0.34	0.02	0.02	0.00	0.00	0.00	0.15	0.04	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.04	0.02	0.00	0.02	0.52	0.36	2.30	0.29	0.00	0.00	0.00	0.03	0.00
81	0.45	0.20	0.16	0.04	0.33	0.09	0.16	0.01	0.01	0.46	0.22	0.42	2.93	0.27	0.17	0.12	1.10	0.02	0.13	0.05	0.04	0.63	0.92	0.26	0.35	0.61	0.48	0.04	0.02	0.10	0.14
82	0.41	0.30	0.01	0.28	0.02	0.00	0.18	0.00	0.01	0.07	0.48	0.12	1.10	0.07	0.06	0.31	0.16	0.02	0.33	0.06	0.16	0.05	0.78	0.24	0.63	1.33	0.69	0.02	0.03	0.10	0.05
83	0.45	0.43	0.04	0.01	0.02	0.00	0.01	0.00	0.00	0.22	0.09	0.01	0.18	0.03	0.02	0.04	0.14	0.00	0.00	0.01	0.00	0.39	0.05	0.05	0.06	0.22	0.01	0.00	0.00	0.00	0.00
85	1.24	0.98	0.06	0.06	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.15	0.79	0.00	0.31	0.35	0.66	1.09	0.00	0.00	0.00	0.00	0.00
86	0.86	0.18	0.01	0.01	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.12	0.04	1.38	0.02	0.13	0.40	0.80	0.56	0.00	0.00	0.12	0.20	0.13
90	0.24	0.08	0.29	1.14	0.11	0.00	0.02	0.03	0.05	0.01	0.36	0.00	0.01	0.00	0.00	0.00	0.00	0.44	0.06	0.01	0.01	0.00	0.00	0.03	0.01	0.03	0.03	0.00	0.16	0.01	0.00
91	0.49	0.19	0.46	0.31	0.37	0.00	0.02	0.00	0.00	0.00	0.13	0.00	0.00	0.05	0.03	0.03	0.01	0.09	0.48	0.00	0.00	0.00	0.02	0.11	0.04	0.15	0.38	0.00	0.01	0.03	0.05
92	0.94	0.13	0.06	0.70	0.20	0.05	0.05	0.05	0.00	0.00	0.30	0.01	0.28	0.00	0.00	0.06	0.16	0.02	0.09	0.01	0.04	0.01	0.28	2.03	0.87	1.01	2.24	0.11	0.36	0.29	0.08
93	0.19	0.02	0.20	0.01	0.02	0.01	0.00	0.04	0.03	0.02	0.57	0.01	0.04	0.00	0.00	0.00	0.08	0.07	0.03	0.07	0.00	0.02	0.01	0.85	0.25	0.28	0.33	0.00	0.09	0.05	0.02
94	0.52	0.12	0.27	1.06	1.89	0.23	1.00	0.36	0.50	0.40	0.53	0.08	0.07	0.09	0.00	0.26	0.11	0.29	0.56	0.10	0.15	0.00	0.27	0.14	0.03	0.23	0.44	0.18	0.80	4.03	0.42

Table 7: Undirected overlap scores in 2000–2004

	44	**45**	**46**	**47**	**49**	**51**	**52**	**53**	**54**	**55**	**57**	**58**	**60**	**62**	**65**	**68**	**70**	**74**	**76**	**78**	**80**	**81**	**82**	**83**	**85**	**86**	**90**	**91**	**92**	**93**	**94**
00	0.38	0.18	0.31	0.23	0.46	2.03	1.31	0.45	0.28	0.40	0.56	0.73	0.30	0.24	0.35	0.39	0.55	0.48	0.28	0.63	0.51	0.47	0.45	0.39	0.57	0.23	0.23	0.42	0.61	0.22	0.41
01	0.15	0.06	0.10	0.04	0.15	1.94	0.28	0.15	0.19	0.23	0.34	0.18	0.19	0.21	0.07	0.12	0.80	0.07	0.09	0.39	0.19	0.24	0.18	0.25	1.24	0.14	0.10	0.25	0.23	0.04	0.23
03	0.00	0.01	0.31	0.06	0.02	0.47	0.12	0.02	1.26	0.03	0.04	0.03	0.15	0.06	0.02	2.33	0.03	0.01	0.00	0.00	0.01	0.12	0.02	0.01	0.03	0.00	0.09	0.49	0.05	0.08	0.26
05	0.12	0.01	0.06	0.03	0.01	2.08	2.19	0.04	0.11	0.16	0.44	0.05	0.47	0.11	0.05	1.66	0.02	0.00	0.00	0.00	0.01	0.07	0.41	0.01	0.00	0.00	0.97	0.36	0.56	0.02	0.83
06	0.00	0.00	0.45	0.11	0.06	1.01	1.97	0.01	3.01	0.68	0.18	0.02	0.07	0.02	0.01	0.62	0.00	0.00	0.00	0.00	0.05	0.29	0.04	0.01	0.00	0.00	0.09	0.40	0.13	0.02	1.45
08	0.00	0.00	0.04	0.00	0.00	0.25	0.05	0.00	0.62	0.32	0.00	0.00	0.03	0.01	0.01	0.50	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.07	0.02	0.01	0.05
11	0.13	0.00	0.09	0.04	0.00	0.23	0.46	0.04	0.02	0.15	0.19	0.22	0.13	0.01	0.10	0.20	0.01	0.00	0.00	0.02	0.01	0.14	0.16	0.03	0.00	0.00	0.01	0.01	0.02	0.00	1.05
12	0.47	0.00	0.30	0.04	0.05	1.87	0.00	0.11	0.17	0.17	0.16	0.27	0.05	0.01	0.21	0.49	0.18	0.00	0.01	0.00	0.16	0.04	0.01	0.00	0.00	0.00	0.02	0.05	0.06	0.07	0.36
13	0.00	0.00	0.05	0.01	0.00	0.26	1.52	0.03	0.09	1.57	0.11	0.10	0.01	0.03	0.12	0.38	0.02	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.03	0.00	0.03	0.05	0.35
14	0.14	0.00	0.03	0.01	0.01	0.46	0.62	0.87	0.01	0.99	0.83	0.65	0.01	0.00	0.06	0.11	0.11	0.00	0.00	0.01	0.00	0.30	0.08	0.16	0.00	0.01	0.01	0.01	0.01	0.02	0.97
15	0.41	0.06	0.29	1.12	0.15	1.22	0.68	0.23	0.05	0.12	0.10	0.29	0.40	0.16	1.42	0.20	0.35	0.10	0.01	0.21	0.00	0.25	0.67	0.15	0.00	0.05	0.26	0.11	0.18	0.59	0.47
16	0.03	0.00	0.47	0.10	0.00	0.05	0.13	0.18	0.19	1.05	0.58	0.80	0.01	0.00	0.01	0.08	0.02	0.00	0.00	0.00	0.00	0.26	0.06	0.02	0.00	0.00	0.01	0.00	0.02	0.03	0.09
17	0.10	0.07	0.54	0.16	0.01	0.49	0.31	1.23	0.00	0.82	0.78	1.50	0.04	0.00	0.01	0.04	0.37	0.00	0.01	0.17	0.00	1.74	0.63	0.21	0.00	0.00	0.02	0.01	0.07	0.03	0.05
18	0.00	0.00	0.45	0.01	0.01	0.18	0.41	0.27	3.10	16.27	1.50	0.59	0.02	0.00	0.00	0.66	0.00	0.01	0.00	0.07	0.00	0.29	0.01	0.04	0.00	0.00	0.00	0.05	0.01	0.00	0.05
19	0.00	0.00	3.72	0.22	0.00	0.17	0.54	0.46	0.28	11.48	3.69	4.87	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54	0.05	0.10	0.00	0.00	0.00	0.00	0.00	0.01	0.00
20	0.05	0.00	0.19	0.03	0.01	1.86	0.62	0.25	0.24	1.24	2.79	0.18	0.08	0.00	0.01	0.27	0.01	0.00	0.00	0.01	0.00	0.11	0.17	0.02	0.00	0.00	0.01	0.01	0.08	0.01	0.38
22	0.99	0.00	1.75	0.32	0.10	0.65	0.14	2.02	2.29	1.37	1.74	3.00	0.24	0.01	0.04	0.02	0.36	0.00	0.02	0.31	0.00	0.71	0.09	0.09	0.00	0.00	0.00	0.02	0.06	0.07	0.13
26	4.12	2.69	2.20	0.70	1.30	0.45	1.83	0.11	1.69	0.05	0.04	0.84	0.35	0.05	0.32	0.04	0.11	0.14	0.03	0.13	0.14	0.05	0.09	0.00	0.00	0.11	0.31	0.12	0.07	0.06	0.32
28	0.98	0.06	2.40	0.69	0.95	0.22	1.70	0.19	1.71	0.03	0.14	0.73	2.01	0.20	0.08	0.21	0.06	0.09	0.03	0.09	0.13	0.16	0.60	0.02	0.00	0.11	0.08	0.35	0.21	0.03	0.49
30	2.42	1.54	1.74	1.06	0.19	0.27	0.24	0.31	0.14	0.05	1.03	0.60	0.11	0.01	0.20	0.02	0.05	0.21	0.11	0.37	0.07	0.05	0.11	0.02	0.06	0.05	0.00	0.01	0.06	0.10	0.14
31	2.95	2.58	2.01	1.14	0.36	0.32	0.39	0.52	0.10	0.00	0.00	1.81	1.29	0.01	0.20	0.00	0.07	0.18	0.09	1.04	0.12	0.04	0.20	0.02	0.00	0.45	0.02	0.02	0.11	0.03	0.10
32	0.46	0.10	1.21	0.47	0.02	0.09	0.68	2.06	0.04	0.85	2.14	2.51	0.01	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.32	0.04	0.19	0.08	0.00	0.01	0.00	0.01	0.02	0.02
33	8.89	1.57	0.29	0.24	0.01	0.11	0.41	0.07	0.01	0.02	0.14	0.30	0.26	0.10	0.42	0.09	0.12	0.03	0.04	1.31	0.25	0.87	0.74	0.13	0.58	0.15	0.01	0.02	0.11	0.01	0.34
34	0.49	2.00	0.13	2.01	0.69	0.00	0.03	0.13	0.06	0.07	0.03	0.57	0.34	0.02	0.59	0.05	1.25	0.23	0.21	0.21	0.47	0.23	0.31	0.03	0.29	0.13	0.06	0.16	2.47	1.14	0.12
35	0.47	0.82	0.22	0.82	0.77	0.01	0.02	0.26	0.00	0.00	0.01	1.14	0.23	0.01	0.47	0.02	0.07	0.78	1.18	1.30	1.92	0.23	0.53	0.05	0.61	0.63	0.02	0.04	0.65	0.22	0.04
37	0.04	0.09	0.17	0.51	0.18	0.07	0.25	1.05	0.67	0.28	0.59	1.00	0.43	0.06	0.35	0.19	2.75	0.13	0.87	0.52	0.37	0.44	1.18	0.11	0.60	0.60	0.06	0.18	1.28	0.54	0.30
39	0.59	0.92	0.45	0.92	0.16	0.58	0.45	0.10	0.23	0.02	0.03	0.20	0.16	0.02	0.38	0.07	0.22	0.02	0.02	0.36	0.00	0.36	0.66	0.02	0.11	0.09	0.03	0.17	1.62	0.38	0.35
40	4.79	0.19	3.42	0.72	0.06	0.00	0.11	0.00	0.28	0.00	0.00	0.06	0.19	0.01	0.20	0.01	0.03	0.02	0.02	0.13	0.00	0.04	0.02	0.00	0.00	0.00	0.00	0.02	0.00	0.01	0.08
41	1.44	0.64	1.68	0.53	0.50	0.07	0.53	0.03	0.38	0.03	0.02	0.14	0.11	0.05	2.12	0.08	0.02	0.05	0.03	0.06	0.08	0.03	0.05	0.00	0.09	0.06	0.17	0.05	0.12	0.13	0.51
42	7.57	0.85	2.80	1.76	0.11	0.07	0.61	0.04	0.04	0.00	0.03	0.35	0.28	0.11	0.80	0.05	0.04	0.03	0.06	0.38	0.00	0.09	0.13	0.00	0.00	0.32	0.01	0.03	0.15	0.07	2.58
43	16.12	0.45	3.43	1.16	0.10	0.15	0.30	0.45	0.21	0.00	0.12	1.42	0.65	0.06	0.06	0.03	0.10	0.01	0.01	0.00	0.00	0.32	0.19	0.05	0.00	0.20	0.00	0.00	0.02	0.01	0.67
44	0.00	5.87	2.98	2.16	0.12	0.18	0.43	0.60	0.00	0.00	0.00	0.46	0.50	0.19	0.87	0.10	0.03	0.23	0.12	1.61	1.04	0.15	0.27	0.02	0.54	1.16	0.02	0.13	1.66	0.05	1.18
45	5.87	0.00	0.30	2.50	0.28	0.00	0.03	0.03	0.08	0.04	0.00	0.09	0.25	0.03	1.74	0.01	0.01	1.10	0.41	3.36	3.26	0.05	0.91	0.00	4.57	0.25	0.02	0.16	1.44	0.22	0.06
46	2.98	0.30	0.00	3.26	0.83	0.29	1.06	0.16	0.93	0.19	0.17	1.65	0.49	0.02	0.06	0.02	0.01	0.05	0.03	0.04	0.04	0.51	0.38	0.06	0.00	0.00	0.15	0.10	0.02	0.04	0.18
47	2.16	2.50	3.26	0.00	1.77	0.02	0.20	0.03	1.03	0.17	0.02	1.38	0.45	0.02	0.69	0.01	0.05	0.25	0.16	0.19	0.14	0.58	0.45	0.01	0.20	0.05	0.36	0.13	0.15	0.35	0.10
49	0.12	0.28	0.83	1.77	0.00	0.06	0.70	0.58	0.87	0.02	0.08	2.15	0.24	0.02	0.95	0.04	0.94	1.79	0.34	0.56	0.58	0.03	0.28	0.02	0.20	0.26	2.46	2.22	0.69	2.25	0.24
51	0.18	0.00	0.29	0.02	0.06	0.00	6.86	0.59	0.31	0.31	0.76	0.20	0.04	0.01	0.16	0.30	0.25	0.00	0.01	0.04	0.00	0.03	0.02	0.17	0.00	0.31	0.04	0.03	0.17	0.00	0.73
52	0.43	0.03	1.06	0.20	0.70	6.86	0.00	0.53	0.71	1.57	1.39	0.21	0.44	0.05	0.38	1.26	0.22	0.03	0.01	0.10	0.04	0.04	0.60	0.00	0.12	0.06	0.72	0.18	0.33	0.01	0.23
53	0.60	0.03	0.16	0.03	0.58	0.59	0.53	0.00	0.07	0.77	2.68	5.61	0.03	0.01	0.08	0.04	1.24	0.21	0.05	0.18	0.15	0.57	0.12	1.44	0.07	0.05	0.01	0.01	0.07	0.05	0.04
54	0.00	0.08	0.93	1.03	0.87	0.31	0.71	0.07	0.00	1.87	0.78	0.26	0.07	0.01	0.03	0.11	0.01	0.00	0.00	0.00	0.00	0.01	0.02	0.01	0.00	0.00	0.12	0.27	0.08	0.01	0.03
55	0.00	0.04	0.19	0.17	0.02	0.31	1.57	0.77	1.87	0.00	9.03	1.89	0.02	0.00	0.02	0.08	0.09	0.01	0.01	0.03	0.00	0.14	0.02	0.03	0.00	0.00	0.02	0.06	0.04	0.02	0.01
57	0.00	0.00	0.17	0.02	0.08	0.76	1.39	2.68	0.78	9.03	0.00	3.60	0.02	0.00	0.01	0.06	0.10	0.01	0.04	0.05	0.00	0.21	0.15	0.15	0.22	0.00	0.01	0.01	0.22	0.01	0.00
58	0.46	0.09	1.65	1.38	2.15	0.20	0.21	5.61	0.26	1.89	3.60	0.00	0.44	0.01	0.07	0.02	1.91	0.25	0.12	0.55	0.15	1.13	0.45	0.80	0.39	0.18	0.10	0.07	0.13	0.10	0.02
60	0.50	0.25	0.49	0.45	0.24	0.04	0.44	0.03	0.07	0.02	0.02	0.44	0.00	1.60	0.39	0.27	0.10	0.05	0.19	0.05	0.06	0.23	1.46	0.01	0.15	0.23	1.04	1.33	0.57	0.43	0.34
62	0.19	0.03	0.02	0.02	0.02	0.01	0.05	0.01	0.01	0.00	0.00	0.01	1.60	0.00	0.23	0.34	0.01	0.01	0.01	0.01	0.01	0.02	0.10	0.00	0.15	0.25	0.24	0.67	0.57	0.15	0.48
65	0.87	1.74	0.06	0.69	0.95	0.16	0.38	0.08	0.03	0.02	0.01	0.07	0.39	0.23	0.00	0.47	0.30	0.85	1.88	1.32	1.55	0.07	0.38	0.02	1.06	0.97	0.91	0.24	0.44	0.31	0.44
68	0.10	0.01	0.02	0.01	0.04	0.30	1.26	0.04	0.11	0.08	0.06	0.02	0.27	0.34	0.47	0.00	0.08	0.01	0.01	0.03	0.01	0.22	0.19	0.00	0.03	0.04	1.10	0.36	0.78	0.15	1.60
70	0.03	0.01	0.01	0.05	0.94	0.25	0.22	1.24	0.01	0.09	0.10	1.91	0.10	0.01	0.30	0.08	0.00	0.90	0.19	1.12	0.13	0.41	0.43	0.39	3.51	0.31	0.04	0.03	0.30	1.16	0.03
74	0.23	1.10	0.05	0.25	1.79	0.00	0.03	0.21	0.00	0.01	0.01	0.25	0.05	0.01	0.85	0.01	0.90	0.00	1.05	0.83	2.41	0.01	0.70	0.03	0.11	1.64	0.10	0.01	0.52	0.49	0.03
76	0.12	0.41	0.03	0.16	0.34	0.01	0.01	0.05	0.00	0.01	0.04	0.12	0.19	0.01	1.88	0.01	0.19	1.05	0.00	0.64	3.16	0.03	1.27	0.04	4.07	6.10	0.03	0.01	0.39	0.15	0.02
78	1.61	3.36	0.04	0.19	0.56	0.04	0.10	0.18	0.00	0.03	0.05	0.55	0.05	0.01	1.32	0.03	1.12	0.83	0.64	0.00	1.76	0.41	0.73	0.30	2.18	2.51	0.06	0.01	0.83	0.12	0.47
80	1.04	3.26	0.04	0.14	0.58	0.00	0.04	0.15	0.00	0.00	0.00	0.15	0.06	0.01	1.55	0.01	0.13	2.41	3.16	1.76	0.00	0.03	1.50	0.06	2.66	2.33	0.03	0.06	1.14	0.15	0.09
81	0.15	0.05	0.51	0.58	0.03	0.03	0.04	0.57	0.01	0.14	0.21	1.13	0.23	0.02	0.07	0.22	0.41	0.01	0.03	0.41	0.03	0.00	1.20	3.20	0.03	0.00	0.01	0.05	0.09	0.03	0.44
82	0.27	0.91	0.38	0.45	0.28	0.02	0.60	0.12	0.02	0.02	0.15	0.45	1.46	0.10	0.38	0.19	0.43	0.70	1.27	0.73	1.50	1.20	0.00	0.25	2.87	0.30	0.12	0.24	1.42	0.06	0.78
83	0.02	0.00	0.06	0.01	0.02	0.17	0.00	1.44	0.01	0.03	0.15	0.80	0.01	0.00	0.02	0.00	0.39	0.03	0.04	0.30	0.06	3.20	0.25	0.00	1.57	0.00	0.00	0.00	0.00	0.00	0.02
85	0.54	4.57	0.00	0.20	0.20	0.00	0.12	0.07	0.00	0.00	0.22	0.39	0.15	0.15	1.06	0.03	3.51	0.11	4.07	2.18	2.66	0.03	2.87	1.57	0.00	7.99	0.02	0.00	0.24	0.00	0.09
86	1.16	0.25	0.00	0.05	0.26	0.31	0.06	0.05	0.00	0.00	0.00	0.18	0.23	0.25	0.97	0.04	0.31	1.64	6.10	2.51	2.33	0.00	0.30	0.00	7.99	0.00	0.04	0.00	0.27	0.10	0.22
90	0.02	0.02	0.15	0.36	2.46	0.04	0.72	0.01	0.12	0.02	0.01	0.10	1.04	0.24	0.91	1.10	0.04	0.10	0.03	0.06	0.03	0.01	0.12	0.00	0.02	0.04	0.00	1.39	0.28	0.74	0.30
91	0.13	0.16	0.10	0.13	2.22	0.03	0.18	0.01	0.27	0.06	0.01	0.07	1.33	0.67	0.24	0.36	0.03	0.01	0.01	0.01	0.06	0.05	0.24	0.00	0.00	0.00	1.39	0.00	0.66	0.52	0.25
92	1.66	1.44	0.02	0.15	0.69	0.17	0.33	0.07	0.08	0.04	0.22	0.13	0.57	0.57	0.44	0.78	0.30	0.52	0.39	0.83	1.14	0.09	1.42	0.00	0.24	0.27	0.28	0.66	0.00	0.41	0.64
93	0.05	0.22	0.04	0.35	2.25	0.00	0.01	0.05	0.01	0.02	0.01	0.10	0.43	0.15	0.31	0.15	1.16	0.49	0.15	0.12	0.15	0.03	0.06	0.00	0.00	0.10	0.74	0.52	0.41	0.00	0.37
94	1.18	0.06	0.18	0.10	0.24	0.73	0.23	0.04	0.03	0.01	0.00	0.02	0.34	0.48	0.44	1.60	0.03	0.03	0.02	0.47	0.09	0.44	0.78	0.02	0.09	0.22	0.30	0.25	0.64	0.37	0.00

Table 8: Undirected overlap scores in 2000–2004, cont.

	00	**01**	**03**	**05**	**06**	**08**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**22**	**26**	**28**	**30**	**31**	**32**	**33**	**34**	**35**	**37**	**39**	**40**	**41**	**42**	**43**
00	0.00	8.80	2.32	0.49	0.67	0.82	0.28	1.46	0.99	0.33	0.48	0.47	0.43	1.13	0.81	0.48	0.85	1.03	0.98	0.36	0.17	0.39	0.53	0.22	0.22	0.36	0.29	0.33	0.33	0.38	0.15
01	8.80	0.00	1.44	0.15	0.10	0.08	0.34	0.66	0.14	0.32	0.13	0.15	0.12	0.20	0.19	0.19	0.28	0.84	0.43	0.22	0.17	0.21	0.25	0.07	0.03	0.06	0.08	0.54	0.20	0.19	0.17
03	2.32	1.44	0.00	0.24	4.47	3.79	0.13	1.53	0.27	0.14	0.18	0.23	0.03	1.40	0.02	0.73	0.15	0.62	1.31	0.02	0.01	0.09	0.01	0.03	0.00	0.05	0.05	0.08	0.02	0.03	0.05
05	0.49	0.15	0.24	0.00	1.27	0.44	0.85	0.25	0.34	0.23	1.07	0.19	0.39	0.14	0.05	1.19	0.17	0.12	0.10	0.06	0.16	0.03	0.99	0.01	0.01	0.09	0.14	0.08	0.04	0.05	0.14
06	0.67	0.10	4.47	1.27	0.00	19.44	0.05	1.37	1.53	0.10	1.06	1.22	0.20	5.66	0.38	2.16	0.55	0.20	1.58	0.01	0.05	0.02	0.02	0.01	0.00	0.02	0.02	0.00	0.00	0.03	0.00
08	0.82	0.08	3.79	0.44	19.44	0.00	0.01	1.38	0.49	0.10	0.26	1.38	0.31	10.66	0.00	2.79	0.36	0.04	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.05	0.00	0.00	0.00	0.00
11	0.28	0.34	0.13	0.85	0.05	0.01	0.00	2.94	0.45	2.17	0.32	0.22	0.26	0.16	2.30	0.66	1.57	0.18	0.55	0.31	0.08	0.21	1.59	0.03	0.01	0.42	0.24	0.63	0.09	0.18	0.25
12	1.46	0.66	1.53	0.25	1.37	1.38	2.94	0.00	7.30	2.50	0.58	2.00	0.12	0.59	4.36	1.09	0.07	1.63	0.29	1.06	0.13	0.47	0.76	0.60	0.05	0.17	1.15	0.00	0.16	0.09	0.39
13	0.99	0.14	0.27	0.34	1.53	0.49	0.45	7.30	0.00	3.43	0.83	1.82	0.50	1.32	1.36	1.00	0.13	0.13	0.05	0.09	0.00	0.69	0.27	0.04	0.02	0.06	0.13	0.06	0.18	0.03	0.00
14	0.33	0.32	0.14	0.23	0.10	0.10	2.17	2.50	3.43	0.00	0.24	0.90	1.02	1.66	3.82	1.01	0.63	0.11	0.01	0.54	0.05	4.57	0.38	0.08	0.02	0.31	0.12	0.02	0.06	0.01	0.04
15	0.48	0.13	0.18	1.07	1.06	0.26	0.32	0.58	0.83	0.24	0.00	1.13	0.90	0.27	0.15	0.53	0.37	0.66	0.27	0.56	0.13	0.11	1.16	0.21	0.03	0.14	1.15	0.51	0.59	0.71	0.48
16	0.47	0.15	0.23	0.19	1.22	1.38	0.22	2.00	1.82	0.90	1.13	0.00	3.98	5.47	3.03	2.40	0.47	0.03	0.00	0.05	0.00	0.26	0.23	0.02	0.01	0.04	0.08	0.00	0.00	0.00	0.13
17	0.43	0.12	0.03	0.39	0.20	0.31	0.26	0.12	0.50	1.02	0.90	3.98	0.00	1.79	0.48	1.66	5.23	0.00	0.04	0.09	0.00	1.04	2.55	0.06	0.07	0.58	0.86	0.05	0.01	0.04	0.30
18	1.13	0.20	1.40	0.14	5.66	10.66	0.16	0.59	1.32	1.66	0.27	5.47	1.79	0.00	6.15	1.59	1.13	0.05	0.23	0.01	0.00	0.63	0.08	0.01	0.01	0.02	0.00	0.00	0.00	0.00	0.16
19	0.81	0.19	0.02	0.05	0.38	0.00	2.30	4.36	1.36	3.82	0.15	3.03	0.48	6.15	0.00	1.62	3.23	0.00	0.00	0.06	0.00	0.48	0.41	0.01	0.01	0.20	0.00	0.00	0.00	0.00	0.20
20	0.48	0.19	0.73	1.19	2.16	2.79	0.66	1.09	1.00	1.01	0.53	2.40	1.66	1.59	1.62	0.00	2.10	0.03	0.09	0.55	0.07	0.26	0.27	0.02	0.00	0.14	0.14	0.04	0.01	0.03	0.79
22	0.85	0.28	0.15	0.17	0.55	0.36	1.57	0.07	0.13	0.63	0.37	0.47	5.23	1.13	3.23	2.10	0.00	0.38	1.68	0.27	0.85	2.07	2.15	0.11	0.19	0.70	0.33	0.32	0.19	0.79	31.53
26	1.03	0.84	0.62	0.12	0.20	0.04	0.18	1.63	0.13	0.11	0.66	0.03	0.00	0.05	0.00	0.03	0.38	0.00	7.30	2.03	2.48	0.27	5.30	0.58	0.26	0.22	4.70	3.47	4.05	4.22	0.80
28	0.98	0.43	1.31	0.10	1.58	0.16	0.55	0.29	0.05	0.01	0.27	0.00	0.04	0.23	0.00	0.09	1.68	7.30	0.00	0.75	4.11	0.05	0.23	0.09	0.12	2.29	1.00	0.78	0.74	2.23	2.77
30	0.36	0.22	0.02	0.06	0.01	0.00	0.31	1.06	0.09	0.54	0.56	0.05	0.09	0.01	0.06	0.55	0.27	2.03	0.75	0.00	7.53	2.77	1.81	0.37	0.31	0.63	0.96	2.40	2.44	2.07	0.62
31	0.17	0.17	0.01	0.16	0.05	0.00	0.08	0.13	0.00	0.05	0.13	0.00	0.00	0.00	0.00	0.07	0.85	2.48	4.11	7.53	0.00	1.87	0.52	0.07	1.17	0.09	0.44	0.14	1.13	3.12	3.67
32	0.39	0.21	0.09	0.03	0.02	0.00	0.21	0.47	0.69	4.57	0.11	0.26	1.04	0.63	0.48	0.26	2.07	0.27	0.05	2.77	1.87	0.00	0.88	0.19	0.15	0.63	0.33	0.07	0.43	0.69	1.46
33	0.53	0.25	0.01	0.99	0.02	0.00	1.59	0.76	0.27	0.38	1.16	0.23	2.55	0.08	0.41	0.27	2.15	5.30	0.23	1.81	0.52	0.88	0.00	0.66	0.16	0.33	5.72	2.56	2.86	5.55	4.14
34	0.22	0.07	0.03	0.01	0.01	0.00	0.03	0.60	0.04	0.08	0.21	0.02	0.06	0.01	0.01	0.02	0.11	0.58	0.09	0.37	0.07	0.19	0.66	0.00	0.46	2.32	1.29	0.11	0.11	0.14	0.07
35	0.22	0.03	0.00	0.01	0.00	0.00	0.01	0.05	0.02	0.02	0.03	0.01	0.07	0.01	0.01	0.00	0.19	0.26	0.12	0.31	1.17	0.15	0.16	0.46	0.00	0.76	0.20	0.01	0.05	0.23	0.22
37	0.36	0.06	0.05	0.09	0.02	0.02	0.42	0.17	0.06	0.31	0.14	0.04	0.58	0.02	0.20	0.14	0.70	0.22	2.29	0.63	0.09	0.63	0.33	2.32	0.76	0.00	1.68	0.11	0.03	0.09	0.25
39	0.29	0.08	0.05	0.14	0.02	0.05	0.24	1.15	0.13	0.12	1.15	0.08	0.86	0.00	0.00	0.14	0.33	4.70	1.00	0.96	0.44	0.33	5.72	1.29	0.20	1.68	0.00	1.17	0.41	0.81	0.81
40	0.33	0.54	0.08	0.08	0.00	0.00	0.63	0.00	0.06	0.02	0.51	0.00	0.05	0.00	0.00	0.04	0.32	3.47	0.78	2.40	0.14	0.07	2.56	0.11	0.01	0.11	1.17	0.00	2.33	4.18	0.84
41	0.33	0.20	0.02	0.04	0.00	0.00	0.09	0.16	0.18	0.06	0.59	0.00	0.01	0.00	0.00	0.01	0.19	4.05	0.74	2.44	1.13	0.43	2.86	0.11	0.05	0.03	0.41	2.33	0.00	10.20	0.80
42	0.38	0.19	0.03	0.05	0.03	0.00	0.18	0.09	0.03	0.01	0.71	0.00	0.04	0.00	0.00	0.03	0.79	4.22	2.23	2.07	3.12	0.69	5.55	0.14	0.23	0.09	0.81	4.18	10.20	0.00	7.90
43	0.15	0.17	0.05	0.14	0.00	0.00	0.25	0.39	0.00	0.04	0.48	0.13	0.30	0.16	0.20	0.79	31.53	0.80	2.77	0.62	3.67	1.46	4.14	0.07	0.22	0.25	0.81	0.84	0.80	7.90	0.00
44	0.38	0.15	0.00	0.12	0.00	0.00	0.13	0.47	0.00	0.14	0.41	0.03	0.10	0.00	0.00	0.05	0.99	4.12	0.98	2.42	2.95	0.46	8.89	0.49	0.47	0.04	0.59	4.79	1.44	7.57	16.12
45	0.18	0.06	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.07	0.00	0.00	0.00	0.00	2.69	0.06	1.54	2.58	0.10	1.57	2.00	0.82	0.09	0.92	0.19	0.64	0.85	0.45
46	0.31	0.10	0.31	0.06	0.45	0.04	0.09	0.30	0.05	0.03	0.29	0.47	0.54	0.45	3.72	0.19	1.75	2.20	2.40	1.74	2.01	1.21	0.29	0.13	0.22	0.17	0.45	3.42	1.68	2.80	3.43
47	0.23	0.04	0.06	0.03	0.11	0.00	0.04	0.04	0.01	0.01	1.12	0.10	0.16	0.01	0.22	0.03	0.32	0.70	0.69	1.06	1.14	0.47	0.24	2.01	0.82	0.51	0.92	0.72	0.53	1.76	1.16
49	0.46	0.15	0.02	0.01	0.06	0.00	0.00	0.05	0.00	0.01	0.15	0.00	0.01	0.01	0.00	0.01	0.10	1.30	0.95	0.19	0.36	0.02	0.01	0.69	0.77	0.18	0.16	0.06	0.50	0.11	0.10
51	2.03	1.94	0.47	2.08	1.01	0.25	0.23	1.87	0.26	0.46	1.22	0.05	0.49	0.18	0.17	1.86	0.65	0.45	0.22	0.27	0.32	0.09	0.11	0.00	0.01	0.07	0.58	0.00	0.07	0.07	0.15
52	1.31	0.28	0.12	2.19	1.97	0.05	0.46	0.00	1.52	0.62	0.68	0.13	0.31	0.41	0.54	0.62	0.14	1.83	1.70	0.24	0.39	0.68	0.41	0.03	0.02	0.25	0.45	0.11	0.53	0.61	0.30
53	0.45	0.15	0.02	0.04	0.01	0.00	0.04	0.11	0.03	0.87	0.23	0.18	1.23	0.27	0.46	0.25	2.02	0.11	0.19	0.31	0.52	2.06	0.07	0.13	0.26	1.05	0.10	0.00	0.03	0.04	0.45
54	0.28	0.19	1.26	0.11	3.01	0.62	0.02	0.17	0.09	0.01	0.05	0.19	0.00	3.10	0.28	0.24	2.29	1.69	1.71	0.14	0.10	0.04	0.01	0.06	0.00	0.67	0.23	0.28	0.38	0.04	0.21
55	0.40	0.23	0.03	0.16	0.68	0.32	0.15	0.17	1.57	0.99	0.12	1.05	0.82	16.27	11.48	1.24	1.37	0.05	0.03	0.05	0.00	0.85	0.02	0.07	0.00	0.28	0.02	0.00	0.03	0.00	0.00
57	0.56	0.34	0.04	0.44	0.18	0.00	0.19	0.16	0.11	0.83	0.10	0.58	0.78	1.50	3.69	2.79	1.74	0.04	0.14	1.03	0.00	2.14	0.14	0.03	0.01	0.59	0.03	0.00	0.02	0.03	0.12
58	0.73	0.18	0.03	0.05	0.02	0.00	0.22	0.27	0.10	0.65	0.29	0.80	1.50	0.59	4.87	0.18	3.00	0.84	0.73	0.60	1.81	2.51	0.30	0.57	1.14	1.00	0.20	0.06	0.14	0.35	1.42
60	0.30	0.19	0.15	0.47	0.07	0.03	0.13	0.05	0.01	0.01	0.40	0.01	0.04	0.02	0.01	0.08	0.24	0.35	2.01	0.11	1.29	0.01	0.26	0.34	0.23	0.43	0.16	0.19	0.11	0.28	0.65
62	0.24	0.21	0.06	0.11	0.02	0.01	0.01	0.01	0.03	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.01	0.05	0.20	0.01	0.01	0.00	0.10	0.02	0.01	0.06	0.02	0.01	0.05	0.11	0.06
65	0.35	0.07	0.02	0.05	0.01	0.01	0.10	0.21	0.12	0.06	1.42	0.01	0.01	0.00	0.00	0.01	0.04	0.32	0.08	0.20	0.20	0.00	0.42	0.59	0.47	0.35	0.38	0.20	2.12	0.80	0.06
68	0.39	0.12	2.33	1.66	0.62	0.50	0.20	0.49	0.38	0.11	0.20	0.08	0.04	0.66	0.00	0.27	0.02	0.04	0.21	0.02	0.00	0.01	0.09	0.05	0.02	0.19	0.07	0.01	0.08	0.05	0.03
70	0.55	0.80	0.03	0.02	0.00	0.00	0.01	0.18	0.02	0.11	0.35	0.02	0.37	0.00	0.00	0.01	0.36	0.11	0.06	0.05	0.07	0.02	0.12	1.25	0.07	2.75	0.22	0.03	0.02	0.04	0.10
74	0.48	0.07	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.01	0.00	0.00	0.00	0.14	0.09	0.21	0.18	0.00	0.03	0.23	0.78	0.13	0.02	0.02	0.05	0.03	0.01
76	0.28	0.09	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.02	0.03	0.03	0.11	0.09	0.00	0.04	0.21	1.18	0.87	0.02	0.02	0.03	0.06	0.01
78	0.63	0.39	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.01	0.21	0.00	0.17	0.07	0.00	0.01	0.31	0.13	0.09	0.37	1.04	0.00	1.31	0.21	1.30	0.52	0.36	0.13	0.06	0.38	0.00
80	0.51	0.19	0.01	0.01	0.05	0.00	0.01	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.13	0.07	0.12	0.00	0.25	0.47	1.92	0.37	0.00	0.00	0.08	0.00	0.00
81	0.47	0.24	0.12	0.07	0.29	0.08	0.14	0.04	0.01	0.30	0.25	0.26	1.74	0.29	0.54	0.11	0.71	0.05	0.16	0.05	0.04	0.32	0.87	0.23	0.23	0.44	0.36	0.04	0.03	0.09	0.32
82	0.45	0.18	0.02	0.41	0.04	0.00	0.16	0.01	0.01	0.08	0.67	0.06	0.63	0.01	0.05	0.17	0.09	0.09	0.60	0.11	0.20	0.04	0.74	0.31	0.53	1.18	0.66	0.02	0.05	0.13	0.19
83	0.39	0.25	0.01	0.01	0.01	0.00	0.03	0.00	0.00	0.16	0.15	0.02	0.21	0.04	0.10	0.02	0.09	0.00	0.02	0.02	0.02	0.19	0.13	0.03	0.05	0.11	0.02	0.00	0.00	0.00	0.05
85	0.57	1.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.08	0.58	0.29	0.61	0.60	0.11	0.00	0.09	0.00	0.00
86	0.23	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.11	0.05	0.45	0.00	0.15	0.13	0.63	0.60	0.09	0.00	0.06	0.32	0.20
90	0.23	0.10	0.09	0.97	0.09	0.00	0.01	0.02	0.03	0.01	0.26	0.01	0.02	0.00	0.00	0.01	0.00	0.31	0.08	0.00	0.02	0.01	0.01	0.06	0.02	0.06	0.03	0.00	0.17	0.01	0.00
91	0.42	0.25	0.49	0.36	0.40	0.07	0.01	0.05	0.00	0.01	0.11	0.00	0.01	0.05	0.00	0.01	0.02	0.12	0.35	0.01	0.02	0.00	0.02	0.16	0.04	0.18	0.17	0.02	0.05	0.03	0.00
92	0.61	0.23	0.05	0.56	0.13	0.02	0.02	0.06	0.03	0.01	0.18	0.02	0.07	0.01	0.00	0.08	0.06	0.07	0.21	0.06	0.11	0.01	0.11	2.47	0.65	1.28	1.62	0.00	0.12	0.15	0.02
93	0.22	0.04	0.08	0.02	0.02	0.01	0.00	0.07	0.05	0.02	0.59	0.03	0.03	0.00	0.01	0.01	0.07	0.06	0.03	0.10	0.03	0.02	0.01	1.14	0.22	0.54	0.38	0.01	0.13	0.07	0.01
94	0.41	0.23	0.26	0.83	1.45	0.05	1.05	0.36	0.35	0.97	0.47	0.09	0.05	0.05	0.00	0.38	0.13	0.32	0.49	0.14	0.10	0.02	0.34	0.12	0.04	0.30	0.35	0.08	0.51	2.58	0.67

Table 9: Undirected overlap scores in 2005–2009

	44	**45**	**46**	**47**	**49**	**51**	**52**	**53**	**54**	**55**	**57**	**58**	**60**	**62**	**65**	**68**	**70**	**74**	**76**	**78**	**80**	**81**	**82**	**83**	**85**	**86**	**90**	**91**	**92**	**93**	**94**
00	0.69	0.31	0.29	0.23	0.27	4.08	1.33	0.26	0.30	0.79	0.51	0.39	0.47	0.39	0.25	0.41	0.72	0.26	0.20	1.21	0.59	0.66	0.74	0.56	1.34	0.34	0.14	0.33	0.51	0.17	0.22
01	0.00	0.15	0.16	0.03	0.15	2.77	0.54	0.26	0.23	0.29	0.31	0.13	0.29	0.36	0.09	0.12	1.00	0.13	0.10	0.79	0.25	0.23	0.29	0.56	1.40	0.22	0.15	0.20	0.15	0.10	0.13
03	0.06	0.01	0.37	0.06	0.01	0.29	0.12	0.01	1.87	0.08	0.06	0.04	0.18	0.10	0.04	2.34	0.02	0.00	0.01	0.00	0.01	0.13	0.01	0.03	0.00	0.01	0.09	0.58	0.07	0.07	0.24
05	0.06	0.00	0.09	0.04	0.01	1.81	2.08	0.03	0.12	0.29	0.51	0.04	0.52	0.12	0.06	1.84	0.02	0.01	0.00	0.01	0.02	0.12	0.33	0.01	0.00	0.00	0.80	0.34	0.61	0.04	0.88
06	0.23	0.00	0.50	0.17	0.04	0.53	1.80	0.01	3.36	1.50	0.26	0.00	0.10	0.04	0.00	0.57	0.00	0.00	0.00	0.00	0.00	0.24	0.03	0.04	0.00	0.00	0.04	0.25	0.08	0.01	0.87
08	0.00	0.00	0.07	0.06	0.00	0.26	0.24	0.03	0.99	0.35	0.00	0.00	0.02	0.03	0.00	0.55	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.10
11	0.18	0.01	0.10	0.03	0.01	0.27	0.53	0.03	0.02	0.11	0.21	0.30	0.13	0.01	0.11	0.21	0.01	0.00	0.00	0.00	0.01	0.14	0.11	0.04	0.00	0.00	0.02	0.02	0.01	0.00	1.00
12	0.91	0.14	0.41	0.04	0.00	2.28	0.28	0.00	0.12	0.10	0.00	0.17	0.03	0.00	0.21	0.49	0.04	0.00	0.00	0.00	0.00	0.03	0.00	0.04	0.00	0.00	0.10	0.03	0.07	0.11	0.46
13	0.16	0.00	0.07	0.01	0.00	0.28	1.17	0.05	0.08	1.71	0.13	0.09	0.01	0.03	0.07	0.32	0.04	0.00	0.00	0.00	0.05	0.01	0.01	0.00	0.00	0.04	0.04	0.00	0.04	0.07	0.25
14	0.24	0.00	0.05	0.02	0.01	0.44	0.85	1.05	0.01	1.09	0.95	0.59	0.01	0.01	0.08	0.13	0.09	0.00	0.00	0.00	0.02	0.27	0.08	0.07	0.00	0.00	0.03	0.00	0.03	0.01	0.69
15	0.55	0.08	0.49	0.90	0.17	1.19	0.97	0.16	0.05	0.13	0.08	0.21	0.45	0.26	1.17	0.24	0.22	0.12	0.01	0.25	0.09	0.33	0.78	0.06	0.00	0.00	0.24	0.08	0.20	0.60	0.52
16	0.00	0.00	0.49	0.14	0.01	0.12	0.14	0.18	0.23	1.23	0.45	0.46	0.01	0.00	0.01	0.08	0.01	0.00	0.00	0.00	0.00	0.24	0.06	0.01	0.00	0.00	0.00	0.00	0.00	0.03	0.09
17	0.00	0.04	0.37	0.10	0.03	0.71	0.29	1.26	0.01	0.75	0.68	1.38	0.03	0.01	0.01	0.04	0.34	0.00	0.00	0.00	0.00	1.30	0.60	0.30	0.00	0.00	0.02	0.01	0.02	0.02	0.01
18	0.00	0.00	0.41	0.00	0.00	0.15	0.24	0.29	2.39	19.08	1.60	0.52	0.05	0.00	0.00	0.63	0.02	0.00	0.00	0.00	0.00	0.39	0.01	0.09	0.00	0.00	0.00	0.03	0.03	0.02	0.02
19	0.00	0.00	3.83	0.28	0.03	0.12	0.29	0.49	0.00	13.25	4.34	5.26	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.09	0.04	0.00	0.00	0.00	0.00	0.00	0.03	0.00
20	0.00	0.00	0.27	0.02	0.00	1.94	0.71	0.28	0.25	1.35	2.80	0.16	0.08	0.01	0.01	0.20	0.02	0.01	0.00	0.02	0.00	0.09	0.13	0.02	0.00	0.00	0.00	0.01	0.07	0.01	0.36
22	0.97	0.00	1.53	0.25	0.16	1.37	0.16	1.76	2.19	1.43	1.73	2.71	0.24	0.00	0.00	0.03	0.21	0.02	0.02	0.10	0.00	0.58	0.07	0.10	0.00	0.00	0.00	0.01	0.01	0.04	0.06
26	5.08	2.96	2.46	0.63	1.57	0.89	2.24	0.13	1.51	0.05	0.05	1.35	0.33	0.06	0.46	0.05	0.30	0.12	0.05	0.22	0.14	0.05	0.06	0.03	0.20	0.12	0.30	0.14	0.07	0.17	0.22
28	1.31	0.54	2.53	0.68	0.82	0.51	2.10	0.19	2.33	0.22	0.18	0.84	1.56	0.17	0.12	0.21	0.03	0.05	0.06	0.14	0.00	0.19	0.55	0.00	0.00	0.06	0.09	0.44	0.09	0.06	0.45
30	2.97	1.56	1.99	1.01	0.13	0.49	0.36	0.30	0.22	0.08	1.17	0.52	0.11	0.01	0.16	0.02	0.06	0.11	0.08	0.17	0.15	0.06	0.08	0.01	0.26	0.07	0.00	0.00	0.01	0.06	0.11
31	4.13	2.43	2.19	1.03	0.54	0.00	0.27	0.43	0.11	0.00	0.03	1.50	1.17	0.00	0.20	0.01	0.13	0.08	0.08	1.06	0.17	0.05	0.19	0.00	0.41	0.63	0.01	0.02	0.01	0.02	0.11
32	0.65	0.06	1.40	0.64	0.05	0.14	0.79	2.06	0.03	0.89	2.32	2.62	0.03	0.00	0.01	0.02	0.03	0.00	0.00	0.00	0.00	0.34	0.04	0.17	0.00	0.00	0.00	0.00	0.00	0.01	0.03
33	9.85	1.28	0.26	0.22	0.04	0.22	0.25	0.10	0.03	0.03	0.24	0.37	0.31	0.22	0.46	0.10	0.14	0.04	0.05	0.98	0.15	0.75	0.77	0.12	0.99	0.16	0.00	0.03	0.06	0.01	0.35
34	0.33	1.82	0.12	1.86	0.52	0.00	0.01	0.09	0.05	0.05	0.02	0.53	0.39	0.04	0.68	0.05	0.96	0.17	0.16	0.21	0.38	0.25	0.32	0.02	0.11	0.09	0.07	0.17	2.52	1.12	0.11
35	0.58	0.98	0.22	0.83	0.78	0.01	0.03	0.28	0.01	0.01	0.01	1.25	0.23	0.01	0.66	0.02	0.06	0.65	1.11	1.15	1.61	0.22	0.56	0.05	0.61	0.68	0.03	0.08	0.58	0.22	0.06
37	0.04	0.20	0.20	0.46	0.23	0.09	0.23	0.75	0.60	0.29	0.48	0.95	0.42	0.09	0.39	0.23	2.15	0.18	0.58	0.49	0.36	0.44	1.23	0.06	0.40	0.49	0.06	0.25	1.63	0.95	0.37
39	0.51	1.03	0.87	1.00	0.34	0.46	0.35	0.03	0.25	0.03	0.02	0.28	0.17	0.03	0.24	0.04	0.10	0.02	0.02	0.14	0.07	0.16	0.24	0.01	0.00	0.00	0.05	0.32	1.36	0.49	0.21
40	3.61	0.31	3.38	0.60	0.12	0.38	0.00	0.03	0.57	0.00	0.00	0.00	0.32	0.07	0.24	0.05	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.05	0.07	0.02	0.00	0.07
41	1.32	0.80	1.89	0.59	0.32	0.11	0.69	0.05	0.41	0.00	0.02	0.19	0.12	0.09	2.21	0.11	0.06	0.04	0.05	0.19	0.04	0.02	0.06	0.00	0.00	0.12	0.13	0.03	0.03	0.09	0.51
42	8.94	1.30	3.50	1.45	0.10	0.00	0.40	0.02	0.03	0.00	0.02	0.24	0.24	0.11	0.96	0.11	0.02	0.04	0.05	0.40	0.00	0.17	0.19	0.01	0.37	0.34	0.01	0.03	0.12	0.09	2.40
43	17.77	0.82	3.98	1.22	0.08	0.28	0.27	0.40	0.51	0.00	0.21	1.60	0.66	0.03	0.17	0.08	0.05	0.00	0.01	0.07	0.00	0.34	0.22	0.05	0.84	0.25	0.00	0.00	0.03	0.02	0.67
44	0.00	7.82	2.60	1.47	0.15	0.13	0.97	0.33	0.00	0.00	0.05	0.41	0.51	0.17	1.12	0.11	0.04	0.29	0.18	2.45	1.94	0.16	0.13	0.00	0.77	1.71	0.17	0.20	1.35	0.08	1.67
45	7.82	0.00	0.33	2.56	0.53	0.00	0.04	0.02	0.06	0.06	0.00	0.07	0.34	0.06	1.60	0.01	0.04	0.95	0.29	3.84	3.44	0.07	0.68	0.00	3.27	0.52	0.05	0.31	1.16	0.21	0.07
46	2.60	0.33	0.00	3.02	0.93	0.36	1.12	0.23	1.22	0.27	0.19	1.69	0.50	0.03	0.09	0.03	0.01	0.04	0.02	0.03	0.02	0.53	0.42	0.05	0.00	0.00	0.11	0.11	0.02	0.04	0.27
47	1.47	2.56	3.02	0.00	1.91	0.03	0.20	0.05	1.31	0.25	0.01	1.79	0.38	0.01	0.63	0.01	0.03	0.17	0.13	0.16	0.08	0.68	0.44	0.00	0.09	0.05	0.31	0.15	0.14	0.26	0.12
49	0.15	0.53	0.93	1.91	0.00	0.04	0.97	0.83	0.74	0.05	0.04	2.24	0.29	0.03	1.14	0.08	1.12	1.47	0.37	0.46	0.78	0.07	0.45	0.02	0.37	0.38	2.04	1.76	0.70	1.94	0.33
51	0.13	0.00	0.36	0.03	0.04	0.00	7.74	0.63	0.44	0.43	0.96	0.23	0.03	0.06	0.12	0.26	0.21	0.04	0.00	0.10	0.00	0.08	0.09	0.23	0.00	0.08	0.06	0.00	0.09	0.00	1.09
52	0.97	0.04	1.12	0.20	0.97	7.74	0.00	0.53	0.77	2.21	1.74	0.30	0.43	0.06	0.31	1.11	0.19	0.05	0.00	0.07	0.00	0.04	0.55	0.01	0.00	0.08	0.76	0.14	0.34	0.03	0.27
53	0.33	0.02	0.23	0.05	0.83	0.63	0.53	0.00	0.09	0.92	3.03	5.77	0.03	0.02	0.13	0.05	1.14	0.18	0.07	0.14	0.07	0.62	0.11	1.53	0.04	0.06	0.01	0.01	0.05	0.04	0.06
54	0.00	0.06	1.22	1.31	0.74	0.44	0.77	0.09	0.00	2.15	0.83	0.13	0.06	0.01	0.03	0.10	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.10	0.22	0.05	0.01	0.03
55	0.00	0.06	0.27	0.25	0.05	0.43	2.21	0.92	2.15	0.00	9.84	1.80	0.01	0.01	0.01	0.16	0.18	0.01	0.00	0.05	0.00	0.14	0.01	0.03	0.00	0.00	0.02	0.04	0.04	0.03	0.07
57	0.05	0.00	0.19	0.01	0.04	0.96	1.74	3.03	0.83	9.84	0.00	4.32	0.04	0.01	0.02	0.10	0.10	0.02	0.02	0.02	0.00	0.20	0.19	0.09	0.00	0.00	0.02	0.00	0.21	0.01	0.03
58	0.41	0.07	1.69	1.79	2.24	0.23	0.30	5.77	0.13	1.80	4.32	0.00	0.38	0.00	0.12	0.04	1.39	0.20	0.10	0.49	0.06	1.01	0.52	0.71	0.09	0.00	0.09	0.05	0.08	0.08	0.06
60	0.51	0.34	0.50	0.38	0.29	0.03	0.43	0.03	0.06	0.01	0.04	0.38	0.00	1.70	0.49	0.36	0.07	0.04	0.19	0.06	0.07	0.24	1.37	0.01	0.08	0.20	0.97	1.68	0.71	0.60	0.31
62	0.17	0.06	0.03	0.01	0.03	0.06	0.06	0.02	0.01	0.01	0.01	0.00	1.70	0.00	0.27	0.61	0.01	0.01	0.02	0.03	0.02	0.03	0.13	0.00	0.16	0.26	0.30	0.82	0.78	0.24	0.56
65	1.12	1.60	0.09	0.63	1.14	0.12	0.31	0.13	0.03	0.01	0.02	0.12	0.49	0.27	0.00	0.60	0.42	1.07	2.30	1.89	1.92	0.16	0.49	0.01	1.17	1.36	0.93	0.30	0.55	0.37	0.57
68	0.11	0.01	0.03	0.01	0.08	0.26	1.11	0.05	0.10	0.16	0.10	0.04	0.36	0.61	0.60	0.00	0.12	0.01	0.01	0.04	0.03	0.23	0.19	0.00	0.02	0.03	1.21	0.45	0.95	0.23	1.93
70	0.04	0.04	0.01	0.03	1.12	0.21	0.19	1.14	0.01	0.18	0.10	1.39	0.07	0.01	0.42	0.12	0.00	0.91	0.14	0.75	0.11	0.42	0.57	0.37	3.74	0.16	0.06	0.03	0.24	1.45	0.06
74	0.29	0.95	0.04	0.17	1.47	0.04	0.05	0.18	0.00	0.01	0.02	0.20	0.04	0.01	1.07	0.01	0.91	0.00	1.11	0.78	1.79	0.02	0.71	0.02	0.07	1.34	0.10	0.01	0.74	0.43	0.04
76	0.18	0.29	0.02	0.13	0.37	0.00	0.00	0.07	0.00	0.00	0.02	0.10	0.19	0.02	2.30	0.01	0.14	1.11	0.00	0.49	3.79	0.03	1.19	0.03	3.60	5.85	0.03	0.01	0.45	0.17	0.03
78	2.45	3.84	0.03	0.16	0.46	0.10	0.07	0.14	0.00	0.05	0.02	0.49	0.06	0.03	1.89	0.04	0.75	0.78	0.49	0.00	1.17	0.41	1.13	0.31	3.04	1.63	0.06	0.01	0.75	0.16	0.45
80	1.94	3.44	0.02	0.08	0.78	0.00	0.00	0.07	0.00	0.00	0.00	0.06	0.07	0.02	1.92	0.03	0.11	1.79	3.79	1.17	0.00	0.03	1.65	0.10	1.31	2.71	0.04	0.07	1.17	0.13	0.12
81	0.16	0.07	0.53	0.68	0.07	0.08	0.04	0.62	0.01	0.14	0.20	1.01	0.24	0.03	0.16	0.23	0.42	0.02	0.03	0.41	0.03	0.00	1.49	3.63	0.21	0.01	0.02	0.05	0.11	0.06	0.54
82	0.13	0.68	0.42	0.44	0.45	0.09	0.55	0.11	0.01	0.01	0.19	0.52	1.37	0.13	0.49	0.19	0.57	0.71	1.19	1.13	1.65	1.49	0.00	0.33	2.10	0.22	0.09	0.25	1.18	0.10	0.93
83	0.00	0.00	0.05	0.00	0.02	0.23	0.01	1.53	0.00	0.03	0.09	0.71	0.01	0.00	0.01	0.00	0.37	0.02	0.03	0.31	0.10	3.63	0.33	0.00	1.60	0.02	0.00	0.00	0.00	0.00	0.03
85	0.77	3.27	0.00	0.09	0.37	0.00	0.00	0.04	0.00	0.00	0.00	0.09	0.08	0.16	1.17	0.02	3.74	0.07	3.60	3.04	1.31	0.21	2.10	1.60	0.00	8.02	0.00	0.00	0.14	0.05	0.26
86	1.71	0.52	0.00	0.05	0.38	0.08	0.08	0.06	0.00	0.00	0.00	0.00	0.20	0.26	1.36	0.03	0.16	1.34	5.85	1.63	2.71	0.01	0.22	0.02	8.02	0.00	0.08	0.03	0.22	0.11	0.16
90	0.17	0.05	0.11	0.31	2.04	0.06	0.76	0.01	0.10	0.02	0.02	0.09	0.97	0.30	0.93	1.21	0.06	0.10	0.03	0.06	0.04	0.02	0.09	0.00	0.00	0.08	0.00	1.35	0.36	0.65	0.36
91	0.20	0.31	0.11	0.15	1.76	0.00	0.14	0.01	0.22	0.04	0.00	0.05	1.68	0.82	0.30	0.45	0.03	0.01	0.01	0.01	0.07	0.05	0.25	0.00	0.00	0.03	1.35	0.00	0.58	0.75	0.20
92	1.35	1.16	0.02	0.14	0.70	0.09	0.34	0.05	0.05	0.04	0.21	0.08	0.71	0.78	0.55	0.95	0.24	0.74	0.45	0.75	1.17	0.11	1.18	0.00	0.14	0.22	0.36	0.58	0.00	0.70	0.82
93	0.08	0.21	0.04	0.26	1.94	0.00	0.03	0.04	0.01	0.03	0.01	0.08	0.60	0.24	0.37	0.23	1.45	0.43	0.17	0.16	0.13	0.06	0.10	0.00	0.05	0.11	0.65	0.75	0.70	0.00	0.43
94	1.67	0.07	0.27	0.12	0.33	1.09	0.27	0.06	0.03	0.07	0.03	0.06	0.31	0.56	0.57	1.93	0.06	0.04	0.03	0.45	0.12	0.54	0.93	0.03	0.26	0.16	0.36	0.20	0.82	0.43	0.00

Table 10: Undirected overlap scores in 2005–2009, cont.

	00	**01**	**03**	**05**	**06**	**08**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**22**	**26**	**28**	**30**	**31**	**32**	**33**	**34**	**35**	**37**	**39**	**40**	**41**	**42**	**43**
00	0.00	11.94	2.94	0.33	0.32	0.34	0.38	4.10	0.88	0.33	0.32	0.33	0.38	2.41	0.00	0.59	1.06	0.74	1.22	0.31	0.25	0.19	0.23	0.11	0.14	0.33	0.09	0.00	0.09	0.34	0.64
01	11.94	0.00	1.28	0.16	0.10	0.06	0.49	0.77	0.29	0.23	0.31	0.23	0.20	0.33	0.00	0.12	0.22	1.16	0.43	0.22	0.00	0.13	0.63	0.10	0.05	0.11	0.11	1.20	0.35	0.23	0.09
03	2.94	1.28	0.00	0.22	5.09	3.68	0.13	1.48	0.21	0.17	0.23	0.31	0.03	1.64	0.04	0.71	0.21	0.63	1.27	0.04	0.04	0.08	0.01	0.02	0.01	0.09	0.09	0.29	0.07	0.01	0.07
05	0.33	0.16	0.22	0.00	1.01	0.18	0.89	0.21	0.45	0.21	1.24	0.34	0.40	0.18	0.14	1.05	0.17	0.13	0.15	0.04	0.10	0.03	0.98	0.03	0.01	0.12	0.09	0.19	0.06	0.08	0.29
06	0.32	0.10	5.09	1.01	0.00	21.97	0.10	1.37	1.29	0.11	0.97	1.43	0.18	8.03	0.41	2.17	0.81	0.24	1.38	0.03	0.00	0.00	0.03	0.01	0.00	0.03	0.05	0.11	0.02	0.14	0.24
08	0.34	0.06	3.68	0.18	21.97	0.00	0.02	0.46	0.16	0.03	0.27	1.44	0.49	8.80	0.00	3.11	0.16	0.12	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.13	0.00	0.00	0.00	0.00
11	0.38	0.49	0.13	0.89	0.10	0.02	0.00	3.23	0.48	1.83	0.46	0.22	0.24	0.12	2.02	0.62	1.97	0.18	0.67	0.26	0.08	0.18	1.94	0.02	0.01	0.40	0.19	0.85	0.09	0.20	0.35
12	4.10	0.77	1.48	0.21	1.37	0.46	3.23	0.00	6.87	3.00	0.84	1.65	0.56	0.40	5.81	1.35	0.00	2.07	0.48	1.38	0.25	0.39	0.96	0.27	0.01	0.12	1.04	0.00	0.16	0.09	0.26
13	0.88	0.29	0.21	0.45	1.29	0.16	0.48	6.87	0.00	3.39	0.63	2.32	0.83	1.63	1.57	0.96	0.08	0.08	0.07	0.05	0.00	0.85	0.27	0.03	0.01	0.03	0.22	0.08	0.24	0.05	0.11
14	0.33	0.23	0.17	0.21	0.11	0.03	1.83	3.00	3.39	0.00	0.28	1.14	1.06	2.00	3.87	1.08	0.84	0.11	0.03	0.46	0.04	4.38	0.45	0.06	0.02	0.24	0.08	0.00	0.06	0.00	0.02
15	0.32	0.31	0.23	1.24	0.97	0.27	0.46	0.84	0.63	0.28	0.00	1.50	0.60	0.22	0.25	0.57	0.44	0.70	0.18	0.50	0.11	0.10	1.29	0.22	0.03	0.13	0.84	0.21	0.47	0.91	0.58
16	0.33	0.23	0.31	0.34	1.43	1.44	0.22	1.65	2.32	1.14	1.50	0.00	4.08	6.51	3.30	2.54	0.44	0.01	0.02	0.03	0.03	0.26	0.21	0.01	0.00	0.03	0.16	0.00	0.01	0.02	0.20
17	0.38	0.20	0.03	0.40	0.18	0.49	0.24	0.56	0.83	1.06	0.60	4.08	0.00	2.07	0.67	1.85	6.68	0.00	0.00	0.07	0.00	1.24	1.69	0.09	0.05	0.54	0.33	0.00	0.02	0.03	0.72
18	2.41	0.33	1.64	0.18	8.03	8.80	0.12	0.40	1.63	2.00	0.22	6.51	2.07	0.00	8.44	1.39	1.72	0.06	0.59	0.00	0.00	0.51	0.03	0.01	0.00	0.05	0.00	0.30	0.00	0.00	0.33
19	0.00	0.00	0.04	0.14	0.41	0.00	2.02	5.81	1.57	3.87	0.25	3.30	0.67	8.44	0.00	1.97	2.25	0.00	0.00	0.03	0.26	0.41	0.24	0.00	0.01	0.14	0.00	0.00	0.00	0.00	0.54
20	0.59	0.12	0.71	1.05	2.17	3.11	0.62	1.35	0.96	1.08	0.57	2.54	1.85	1.39	1.97	0.00	2.43	0.04	0.13	0.52	0.10	0.27	0.26	0.01	0.00	0.18	0.14	0.00	0.01	0.06	1.24
22	1.06	0.22	0.21	0.17	0.81	0.16	1.97	0.00	0.08	0.84	0.44	0.44	6.68	1.72	2.25	2.43	0.00	0.34	2.87	0.28	0.59	1.80	1.58	0.04	0.14	0.75	0.31	0.16	0.09	0.71	36.50
26	0.74	1.16	0.63	0.13	0.24	0.12	0.18	2.07	0.08	0.11	0.70	0.01	0.00	0.06	0.00	0.04	0.34	0.00	5.50	1.77	2.27	0.33	6.23	0.62	0.35	0.20	4.30	4.15	3.44	3.57	1.24
28	1.22	0.43	1.27	0.15	1.38	0.22	0.67	0.48	0.07	0.03	0.18	0.02	0.00	0.59	0.00	0.13	2.87	5.50	0.00	0.76	5.47	0.15	0.13	0.10	0.15	2.39	0.45	0.86	0.93	2.28	3.59
30	0.31	0.22	0.04	0.04	0.03	0.00	0.26	1.38	0.05	0.46	0.50	0.03	0.07	0.00	0.03	0.52	0.28	1.77	0.76	0.00	7.88	3.14	2.51	0.34	0.25	0.59	0.70	2.04	2.39	2.21	0.48
31	0.25	0.00	0.04	0.10	0.00	0.00	0.08	0.25	0.00	0.04	0.11	0.03	0.00	0.00	0.26	0.10	0.59	2.27	5.47	7.88	0.00	2.57	0.90	0.11	1.14	0.06	0.21	0.27	0.98	2.79	4.66
32	0.19	0.13	0.08	0.03	0.00	0.00	0.18	0.39	0.85	4.38	0.10	0.26	1.24	0.51	0.41	0.27	1.80	0.33	0.15	3.14	2.57	0.00	1.11	0.20	0.12	0.62	0.09	0.00	0.29	0.50	1.51
33	0.23	0.63	0.01	0.98	0.03	0.00	1.94	0.96	0.27	0.45	1.29	0.21	1.69	0.03	0.24	0.26	1.58	6.23	0.13	2.51	0.90	1.11	0.00	0.51	0.20	0.30	3.23	2.44	4.01	6.69	3.68
34	0.11	0.10	0.02	0.03	0.01	0.00	0.02	0.27	0.03	0.06	0.22	0.01	0.09	0.01	0.00	0.01	0.04	0.62	0.10	0.34	0.11	0.20	0.51	0.00	0.42	2.45	1.83	0.08	0.12	0.14	0.17
35	0.14	0.05	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.02	0.03	0.00	0.05	0.00	0.01	0.00	0.14	0.35	0.15	0.25	1.14	0.12	0.20	0.42	0.00	0.72	0.14	0.03	0.07	0.25	0.29
37	0.33	0.11	0.09	0.12	0.03	0.01	0.40	0.12	0.03	0.24	0.13	0.03	0.54	0.05	0.14	0.18	0.75	0.20	2.39	0.59	0.06	0.62	0.30	2.45	0.72	0.00	1.46	0.09	0.05	0.15	0.41
39	0.09	0.11	0.09	0.09	0.05	0.13	0.19	1.04	0.22	0.08	0.84	0.16	0.33	0.00	0.00	0.14	0.31	4.30	0.45	0.70	0.21	0.09	3.23	1.83	0.14	1.46	0.00	0.94	0.64	0.79	1.06
40	0.00	1.20	0.29	0.19	0.11	0.00	0.85	0.00	0.08	0.00	0.21	0.00	0.00	0.30	0.00	0.00	0.16	4.15	0.86	2.04	0.27	0.00	2.44	0.08	0.03	0.09	0.94	0.00	2.22	4.29	0.57
41	0.09	0.35	0.07	0.06	0.02	0.00	0.09	0.16	0.24	0.06	0.47	0.01	0.02	0.00	0.00	0.01	0.09	3.44	0.93	2.39	0.98	0.29	4.01	0.12	0.07	0.05	0.64	2.22	0.00	8.34	0.88
42	0.34	0.23	0.01	0.08	0.14	0.00	0.20	0.09	0.05	0.00	0.91	0.02	0.03	0.00	0.00	0.06	0.71	3.57	2.28	2.21	2.79	0.50	6.69	0.14	0.25	0.15	0.79	4.29	8.34	0.00	9.17
43	0.64	0.09	0.07	0.29	0.24	0.00	0.35	0.26	0.11	0.02	0.58	0.20	0.72	0.33	0.54	1.24	36.50	1.24	3.59	0.48	4.66	1.51	3.68	0.17	0.29	0.41	1.06	0.57	0.88	9.17	0.00
44	0.69	0.00	0.06	0.06	0.23	0.00	0.18	0.91	0.16	0.24	0.55	0.00	0.00	0.00	0.00	0.00	0.97	5.08	1.31	2.97	4.13	0.65	9.85	0.33	0.58	0.04	0.51	3.61	1.32	8.94	17.77
45	0.31	0.15	0.01	0.00	0.00	0.00	0.01	0.14	0.00	0.00	0.08	0.00	0.04	0.00	0.00	0.00	0.00	2.96	0.54	1.56	2.43	0.06	1.28	1.82	0.98	0.20	1.03	0.31	0.80	1.30	0.82
46	0.29	0.16	0.37	0.09	0.50	0.07	0.10	0.41	0.07	0.05	0.49	0.49	0.37	0.41	3.83	0.27	1.53	2.46	2.53	1.99	2.19	1.40	0.26	0.12	0.22	0.20	0.87	3.38	1.89	3.50	3.98
47	0.23	0.03	0.06	0.04	0.17	0.06	0.03	0.04	0.01	0.02	0.90	0.14	0.10	0.00	0.28	0.02	0.25	0.63	0.68	1.01	1.03	0.64	0.22	1.86	0.83	0.46	1.00	0.60	0.59	1.45	1.22
49	0.27	0.15	0.01	0.01	0.04	0.00	0.01	0.00	0.00	0.01	0.17	0.01	0.03	0.00	0.03	0.00	0.16	1.57	0.82	0.13	0.54	0.05	0.04	0.52	0.78	0.23	0.34	0.12	0.32	0.10	0.08
51	4.08	2.77	0.29	1.81	0.53	0.26	0.27	2.28	0.28	0.44	1.19	0.12	0.71	0.15	0.12	1.94	1.37	0.89	0.51	0.49	0.00	0.14	0.22	0.00	0.01	0.09	0.46	0.38	0.11	0.00	0.28
52	1.33	0.54	0.12	2.08	1.80	0.24	0.53	0.28	1.17	0.85	0.97	0.14	0.29	0.24	0.29	0.71	0.16	2.24	2.10	0.36	0.27	0.79	0.25	0.01	0.03	0.23	0.35	0.00	0.69	0.40	0.27
53	0.26	0.26	0.01	0.03	0.01	0.03	0.03	0.00	0.05	1.05	0.16	0.18	1.26	0.29	0.49	0.28	1.76	0.13	0.19	0.30	0.43	2.06	0.10	0.09	0.28	0.75	0.03	0.03	0.05	0.02	0.40
54	0.30	0.23	1.87	0.12	3.36	0.99	0.02	0.12	0.08	0.01	0.05	0.23	0.01	2.39	0.00	0.25	2.19	1.51	2.33	0.22	0.11	0.03	0.03	0.05	0.01	0.60	0.25	0.57	0.41	0.03	0.51
55	0.79	0.29	0.08	0.29	1.50	0.35	0.11	0.10	1.71	1.09	0.13	1.23	0.75	19.08	13.25	1.35	1.43	0.05	0.22	0.08	0.00	0.89	0.03	0.05	0.01	0.29	0.03	0.00	0.00	0.00	0.00
57	0.51	0.31	0.06	0.51	0.26	0.00	0.21	0.00	0.13	0.95	0.08	0.45	0.68	1.60	4.34	2.80	1.73	0.05	0.18	1.17	0.03	2.32	0.24	0.02	0.01	0.48	0.02	0.00	0.02	0.02	0.21
58	0.39	0.13	0.04	0.04	0.00	0.00	0.30	0.17	0.09	0.59	0.21	0.46	1.38	0.52	5.26	0.16	2.71	1.35	0.84	0.52	1.50	2.62	0.37	0.53	1.25	0.95	0.28	0.00	0.19	0.24	1.60
60	0.47	0.29	0.18	0.52	0.10	0.02	0.13	0.03	0.01	0.01	0.45	0.01	0.03	0.05	0.02	0.08	0.24	0.33	1.56	0.11	1.17	0.03	0.31	0.39	0.23	0.42	0.17	0.32	0.12	0.24	0.66
62	0.39	0.36	0.10	0.12	0.04	0.03	0.01	0.00	0.03	0.01	0.26	0.00	0.01	0.00	0.00	0.01	0.00	0.06	0.17	0.01	0.00	0.00	0.22	0.04	0.01	0.09	0.03	0.07	0.09	0.11	0.03
65	0.25	0.09	0.04	0.06	0.00	0.00	0.11	0.21	0.07	0.08	1.17	0.01	0.01	0.00	0.00	0.01	0.00	0.46	0.12	0.16	0.20	0.01	0.46	0.68	0.66	0.39	0.24	0.24	2.21	0.96	0.17
68	0.41	0.12	2.34	1.84	0.57	0.55	0.21	0.49	0.32	0.13	0.24	0.08	0.04	0.63	0.00	0.20	0.03	0.05	0.21	0.02	0.01	0.02	0.10	0.05	0.02	0.23	0.04	0.05	0.11	0.11	0.08
70	0.72	1.00	0.02	0.02	0.00	0.00	0.01	0.04	0.04	0.09	0.22	0.01	0.34	0.02	0.00	0.02	0.21	0.30	0.03	0.06	0.13	0.03	0.14	0.96	0.06	2.15	0.10	0.04	0.06	0.02	0.05
74	0.26	0.13	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.01	0.02	0.12	0.05	0.11	0.08	0.00	0.04	0.17	0.65	0.18	0.02	0.02	0.04	0.04	0.00
76	0.20	0.10	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.05	0.06	0.08	0.08	0.00	0.05	0.16	1.11	0.58	0.02	0.00	0.05	0.05	0.01
78	1.21	0.79	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.02	0.10	0.22	0.14	0.17	1.06	0.00	0.98	0.21	1.15	0.49	0.14	0.00	0.19	0.40	0.07
80	0.59	0.25	0.01	0.02	0.00	0.00	0.01	0.00	0.05	0.02	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.15	0.17	0.00	0.15	0.38	1.61	0.36	0.07	0.00	0.04	0.00	0.00
81	0.66	0.23	0.13	0.12	0.24	0.04	0.14	0.03	0.01	0.27	0.33	0.24	1.30	0.39	0.34	0.09	0.58	0.05	0.19	0.06	0.05	0.34	0.75	0.25	0.22	0.44	0.16	0.00	0.02	0.17	0.34
82	0.74	0.29	0.01	0.33	0.03	0.00	0.11	0.00	0.01	0.08	0.78	0.06	0.60	0.01	0.09	0.13	0.07	0.06	0.55	0.08	0.19	0.04	0.77	0.32	0.56	1.23	0.24	0.00	0.06	0.19	0.22
83	0.56	0.56	0.03	0.01	0.04	0.00	0.04	0.04	0.00	0.07	0.06	0.01	0.30	0.09	0.04	0.02	0.10	0.03	0.00	0.01	0.00	0.17	0.12	0.02	0.05	0.06	0.01	0.00	0.00	0.01	0.05
85	1.34	1.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.26	0.41	0.00	0.99	0.11	0.61	0.40	0.00	0.75	0.00	0.37	0.84
86	0.34	0.22	0.01	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.06	0.07	0.63	0.00	0.16	0.09	0.68	0.49	0.00	0.00	0.12	0.34	0.25
90	0.14	0.15	0.09	0.80	0.04	0.00	0.02	0.10	0.04	0.03	0.24	0.00	0.02	0.00	0.00	0.00	0.00	0.30	0.09	0.00	0.01	0.00	0.00	0.07	0.03	0.06	0.05	0.05	0.13	0.01	0.00
91	0.33	0.20	0.58	0.34	0.25	0.00	0.02	0.03	0.00	0.00	0.08	0.00	0.01	0.03	0.00	0.01	0.01	0.14	0.44	0.00	0.02	0.00	0.03	0.17	0.08	0.25	0.32	0.07	0.03	0.03	0.00
92	0.51	0.15	0.07	0.61	0.08	0.00	0.01	0.07	0.04	0.03	0.20	0.00	0.02	0.03	0.00	0.07	0.01	0.07	0.09	0.01	0.01	0.00	0.06	2.52	0.58	1.63	1.36	0.02	0.03	0.12	0.03
93	0.17	0.10	0.07	0.04	0.01	0.01	0.00	0.11	0.07	0.01	0.60	0.03	0.02	0.02	0.03	0.01	0.04	0.17	0.06	0.06	0.02	0.01	0.01	1.12	0.22	0.95	0.49	0.00	0.09	0.09	0.02
94	0.22	0.13	0.24	0.88	0.87	0.10	1.00	0.46	0.25	0.69	0.52	0.09	0.01	0.02	0.00	0.36	0.06	0.22	0.45	0.11	0.11	0.03	0.35	0.11	0.06	0.37	0.21	0.07	0.51	2.40	0.67

Table 11: Directed overlap scores in 1985–1989

	44	**45**	**46**	**47**	**49**	**51**	**52**	**53**	**54**	**55**	**57**	**58**	**60**	**62**	**65**	**68**	**70**	**74**	**76**	**78**	**80**	**81**	**82**	**83**	**85**	**86**	**90**	**91**	**92**	**93**	**94**
00	0.08	0.06	0.01	0.02	0.03	-0.00	0.00	-0.03	0.03	-0.11	0.00	0.01	0.02	0.00	0.01	0.01	0.00	-0.02	0.01	0.04	0.07	0.00	0.02	-0.02	0.01	-0.01	-0.01	0.01	-0.01	0.01	0.02
01	0.11	0.11	0.02	-0.06	0.00	0.01	-0.03	0.02	-0.03	0.03	0.03	-0.01	0.00	-0.00	-0.02	0.01	0.01	0.03	-0.03	-0.02	0.04	0.00	-0.02	0.01	0.02	0.25	-0.01	0.01	-0.02	-0.00	0.03
03	-1.00	1.00	-0.01	0.00	0.00	0.00	-0.06	0.02	-0.00	-0.00	0.04	-0.05	0.01	0.01	0.00	-0.00	-0.08	-0.11	0.00	-0.50	-0.50	0.00	-0.05	0.01	0.00	-0.32	-0.00	-0.00	-0.00	-0.01	-0.00
05	0.48	0.00	0.07	0.16	-0.04	0.00	0.00	-0.01	-0.00	-0.04	-0.01	-0.00	0.00	-0.00	-0.02	0.00	-0.09	-0.08	-0.07	0.00	-0.05	-0.02	-0.01	-0.25	0.00	-1.00	-0.00	-0.00	0.00	-0.03	-0.00
06	0.00	0.00	0.01	0.03	-0.22	-0.03	-0.03	0.00	0.00	-0.00	0.09	0.00	-0.04	-0.11	-0.00	-0.00	0.00	0.00	0.00	0.00	0.00	-0.01	-0.25	0.00	0.00	0.00	-0.02	-0.01	-0.08	-0.25	-0.01
08	0.00	0.00	0.00	-0.00	0.00	0.06	-0.30	0.00	-0.01	0.00	0.00	0.00	-0.07	0.00	0.00	-0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	-0.27	0.00
11	0.00	-0.00	-0.03	-0.00	-0.25	0.01	-0.01	-0.00	-0.04	0.02	-0.02	0.01	-0.01	-0.01	-0.01	-0.00	0.25	0.00	0.00	0.00	-1.00	-0.01	-0.01	-0.19	-1.00	0.00	0.02	0.02	0.09	-0.14	0.00
12	-0.32	0.00	0.11	0.00	-0.50	-0.03	-0.02	0.00	-0.01	0.25	0.00	0.00	0.00	-1.00	0.00	-0.00	-0.08	0.00	-0.02	0.00	0.00	-0.03	-1.00	1.00	0.00	0.00	0.00	0.00	1.00	-0.04	-0.11
13	0.00	0.00	0.07	0.00	0.00	-0.00	-0.11	0.00	-0.12	-0.00	0.12	0.02	0.50	0.00	0.11	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	-0.05	-0.19
14	0.00	1.00	-0.03	0.01	0.00	-0.01	0.05	0.00	0.19	0.01	0.01	0.00	0.00	0.00	0.10	0.03	0.00	0.00	-1.00	0.00	0.00	-0.00	-0.00	-0.02	0.00	0.00	0.00	0.00	0.00	-0.11	0.03
15	-0.25	-0.13	-0.00	-0.00	-0.04	-0.02	-0.07	-0.01	-0.09	0.08	-0.00	-0.00	-0.00	0.01	0.00	-0.02	-0.00	0.01	0.00	-0.13	-0.44	0.01	-0.00	-0.00	0.00	0.00	0.00	-0.03	-0.00	0.00	-0.02
16	0.00	0.00	-0.01	-0.06	0.00	0.04	0.00	-0.01	-0.00	-0.00	-0.03	0.03	0.00	0.00	0.00	-0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.33	0.00	0.00	-0.16	-0.25
17	1.00	-0.25	-0.00	-0.02	-0.04	-0.03	0.25	0.00	0.00	-0.03	-0.00	0.00	0.11	1.00	-1.00	0.12	0.00	0.00	-0.24	-0.14	0.00	0.00	-0.00	0.00	0.00	0.00	0.00	0.00	-0.04	0.00	0.00
18	0.00	0.00	-0.01	-0.01	0.00	0.13	1.00	-0.01	-0.00	0.00	-0.01	0.01	0.00	-1.00	1.00	-0.01	0.00	-0.25	0.00	0.00	-1.00	0.00	0.00	0.00	0.00	0.00	-0.75	-0.03	-0.25	0.17	0.00
19	0.00	0.00	-0.00	-0.03	0.00	0.00	0.22	0.00	0.00	-0.00	-0.01	-0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	-1.00	0.00	-0.03	-0.00	0.00	-0.00	0.01	-0.00	-0.01	0.00	0.00	-0.02	-0.00	-0.01	-0.01	0.00	-0.25	0.00	0.00	0.00	-1.00	0.01	-0.00	0.00	0.00	0.00	0.16	-0.01	0.00	-0.12	-0.02
22	-0.00	-0.23	0.00	0.00	0.00	0.04	0.00	0.00	0.00	-0.00	0.00	-0.00	-0.02	-0.01	-0.33	-0.10	-0.01	-0.21	-0.10	-0.00	0.00	-0.00	-0.00	-0.01	-0.75	0.00	0.00	-0.48	0.00	-0.06	0.01
26	-0.00	0.00	-0.00	-0.00	0.00	0.04	-0.00	-0.12	0.01	1.00	-0.33	-0.01	0.01	0.10	-0.01	-0.10	0.00	-0.25	0.00	0.00	0.00	-0.25	-0.00	0.00	0.00	0.00	0.01	0.00	0.14	-0.05	-0.08
28	-0.20	0.00	-0.00	0.00	0.01	-0.10	0.03	-0.02	0.00	0.22	0.00	-0.01	-0.00	0.05	0.04	-0.04	0.25	1.00	-0.01	0.00	0.00	-0.01	-0.01	-0.27	0.00	0.44	0.00	-0.02	0.02	0.12	0.02
30	0.02	0.01	-0.00	-0.00	-0.07	0.06	0.09	0.02	-0.00	0.15	-0.01	-0.00	0.02	0.41	0.01	0.01	-0.07	0.04	0.05	0.06	-0.50	-0.02	-0.00	0.00	0.00	-0.75	0.00	0.00	-0.11	-0.01	-0.00
31	0.20	-0.05	-0.01	0.03	0.09	0.00	0.02	-0.06	0.20	0.00	1.00	-0.00	0.01	0.00	-0.04	0.00	-0.21	0.04	0.08	-0.07	1.00	-0.14	-0.25	-1.00	0.00	-0.04	0.00	0.00	1.00	-1.00	0.00
32	0.00	0.14	-0.00	0.00	0.14	0.01	0.09	-0.00	0.11	0.00	0.00	-0.00	-0.05	0.00	-0.17	-0.20	-0.13	0.00	-0.19	0.01	0.25	-0.00	-0.00	-0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.44
33	-0.01	-0.03	-0.04	-0.00	-0.15	0.27	0.00	0.00	0.00	0.00	0.25	-0.03	-0.04	-0.03	-0.01	0.00	-0.11	0.12	-0.11	0.04	0.07	-0.00	-0.00	-0.25	-0.14	-0.20	-0.25	-0.11	0.00	-0.33	-0.06
34	-0.02	0.00	-0.00	0.00	-0.00	-0.25	-0.17	-0.00	0.00	0.07	0.03	0.00	-0.00	0.06	0.00	0.02	-0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.03	0.02	0.01	-0.01	-0.01	0.00	-0.00	0.01
35	-0.00	0.00	0.00	0.00	-0.00	0.00	-0.50	-0.00	0.00	0.25	0.00	-0.00	0.00	0.00	0.00	0.00	0.00	-0.00	-0.00	0.00	0.00	0.00	-0.00	0.02	-0.00	0.01	-0.05	0.04	0.00	-0.00	0.04
37	-0.25	0.00	0.02	0.01	0.01	-0.02	-0.13	0.00	-0.00	0.02	0.00	-0.00	0.01	1.00	-0.00	-0.01	-0.00	-0.02	-0.00	-0.01	0.02	-0.00	-0.00	-0.00	0.04	-0.03	-0.04	-0.02	0.00	-0.00	-0.01
39	0.00	-0.03	-0.02	-0.01	0.00	0.02	-0.25	0.07	0.00	0.00	0.00	-0.00	0.03	0.01	0.00	-0.00	0.13	0.00	-0.00	0.20	1.00	0.04	-0.00	0.00	0.00	0.00	0.00	-0.04	-0.00	-0.01	-0.02
40	0.00	-0.50	0.01	0.03	-1.00	0.00	0.00	0.00	-0.20	0.00	0.00	0.00	-0.00	-0.25	-0.02	1.00	-1.00	0.00	0.00	0.00	0.00	-0.10	-0.33	0.00	0.00	0.00	0.25	0.00	0.00	-0.25	-0.00
41	0.00	-0.05	0.00	-0.01	-0.00	0.00	-0.00	0.25	0.04	0.00	0.00	-0.02	-0.00	-0.00	0.00	0.00	-0.15	0.01	0.41	-0.12	0.00	-0.06	-0.75	0.00	0.00	-0.25	0.01	0.00	0.20	0.01	-0.04
42	0.00	0.00	0.00	0.00	-0.25	0.25	-0.14	0.12	0.00	0.00	0.00	0.04	-0.01	0.00	-0.01	-0.14	0.00	0.75	0.19	-0.09	0.00	-0.06	-0.08	0.00	1.00	-0.50	-0.17	1.00	0.00	-0.00	-0.00
43	0.05	-0.23	-0.00	0.01	-0.75	1.00	-0.75	0.00	0.10	0.00	0.00	0.00	-0.01	-0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.00	-0.11	0.00	0.00	0.00	-1.00	1.00	0.00	0.00	0.13
44	0.00	0.03	-0.01	0.01	0.30	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	-0.03	-0.02	-0.01	-0.03	0.00	-0.14	0.16	0.08	0.19	-0.01	-0.44	0.00	0.00	-0.20	0.19	-0.15	0.00	0.08	-0.05
45	-0.03	0.00	-0.02	-0.00	-0.03	0.00	0.00	0.00	0.19	1.00	1.00	-0.03	-0.00	-0.16	0.00	0.50	0.02	-0.01	-0.00	-0.00	-0.06	-0.00	-0.01	-1.00	0.03	0.06	-0.00	0.26	-0.01	-0.00	-0.09
46	0.01	0.02	0.00	0.00	0.01	-0.09	0.01	0.00	-0.00	0.03	-0.00	-0.00	-0.00	0.11	0.02	-0.04	-0.01	0.06	-0.00	0.15	0.00	-0.00	-0.01	0.00	0.00	-0.11	-0.01	-0.02	-0.01	-0.02	0.04
47	-0.01	0.00	-0.00	0.00	0.00	-0.05	0.06	-0.00	-0.00	0.02	0.00	-0.00	0.00	-0.01	0.00	0.00	0.05	0.01	-0.01	0.03	0.00	-0.00	-0.01	0.00	0.01	0.00	-0.01	-0.03	0.02	-0.00	-0.03
49	-0.30	0.03	-0.01	-0.00	0.00	0.75	0.03	-0.00	0.00	0.00	0.08	0.00	-0.01	-0.08	0.00	-0.02	-0.01	0.00	-0.00	-0.04	-0.00	-0.02	0.00	-0.01	0.00	-0.02	-0.00	-0.00	0.02	0.00	0.03
51	0.00	0.00	0.09	0.05	-0.75	0.00	0.00	-0.01	-0.00	-0.01	-0.02	-0.00	-0.41	0.11	-0.06	-0.01	0.05	0.17	0.00	0.00	0.00	0.04	-0.03	0.00	1.00	1.00	-0.07	0.08	-0.09	0.00	-0.02
52	0.00	0.00	-0.01	-0.06	-0.03	-0.00	0.00	0.02	-0.03	-0.06	0.02	0.05	-0.01	-0.04	0.05	-0.00	0.00	-0.02	0.00	1.00	0.41	0.22	0.01	0.00	0.00	1.00	0.01	-0.03	-0.03	-0.33	-0.00
53	-0.00	0.00	-0.00	0.00	0.00	0.01	-0.02	0.00	0.06	0.00	-0.00	0.00	-0.04	-0.04	-0.03	-0.13	0.01	-0.02	0.00	0.00	0.08	0.00	0.00	0.00	1.00	0.14	-0.75	-0.19	-0.07	-0.00	0.31
54	0.00	-0.19	0.00	0.00	-0.00	0.00	0.03	-0.06	0.00	-0.00	-0.00	-0.01	-0.00	-0.25	0.00	-0.02	-0.00	0.00	0.11	0.00	-0.00	-0.14	-0.00	-0.08	0.00	0.00	-0.02	-0.00	-0.03	-0.05	0.06
55	0.00	-1.00	-0.03	-0.02	0.00	0.01	0.06	-0.00	0.00	0.00	-0.00	-0.00	0.00	0.00	-0.09	0.06	0.00	-0.50	0.50	0.00	0.00	-0.00	-0.10	-0.03	0.00	0.00	0.00	-0.14	-0.75	-0.07	0.00
57	0.00	-1.00	0.00	-0.00	-0.08	0.02	-0.02	0.00	0.00	0.00	0.00	-0.00	0.00	0.00	-0.17	-0.14	-0.02	-0.17	0.04	-0.14	0.00	-0.01	-0.02	-0.02	0.00	0.00	0.25	-0.20	-0.04	-0.08	-1.00
58	0.01	0.03	0.00	0.00	-0.00	0.00	-0.05	-0.00	0.01	0.00	0.00	0.00	0.00	-0.07	-0.00	0.00	-0.00	-0.00	-0.00	-0.01	-0.02	-0.00	0.00	-0.00	-0.08	-0.06	-0.00	-0.03	-0.01	0.01	-0.00
60	0.03	0.00	0.00	-0.00	0.01	0.41	0.01	0.04	0.00	0.00	0.00	-0.00	0.00	0.00	-0.01	0.00	0.03	0.06	-0.02	0.02	0.06	-0.00	-0.00	-0.48	0.01	-0.00	0.00	-0.00	0.00	0.00	0.01
62	0.02	0.16	-0.11	0.01	0.08	-0.11	0.04	0.04	0.25	0.00	0.00	0.07	-0.00	0.00	0.00	-0.01	-1.00	-0.25	-1.00	0.00	0.00	-0.13	0.00	0.00	-0.00	0.03	-0.00	-0.00	0.00	-0.00	-0.00
65	0.01	-0.00	-0.02	-0.00	-0.00	0.06	-0.05	0.03	-0.00	0.09	0.17	0.00	0.01	-0.00	0.00	-0.00	-0.01	-0.00	-0.00	0.01	0.01	0.01	-0.00	-0.24	0.00	0.01	0.00	0.03	0.01	-0.00	0.01
68	0.03	-0.50	0.04	0.00	0.02	0.01	0.00	0.13	0.02	-0.06	0.14	-0.00	-0.00	0.01	0.00	0.00	-0.05	0.11	0.04	-0.00	0.00	-0.06	-0.01	0.00	-0.25	0.00	-0.00	-0.00	0.00	-0.01	0.00
70	0.00	-0.02	0.01	-0.05	0.01	-0.05	-0.00	-0.01	0.00	0.00	0.02	0.00	-0.03	1.00	0.01	0.05	0.00	-0.00	0.01	-0.02	-0.01	0.00	-0.01	0.02	-0.03	0.12	0.07	-0.06	0.05	0.00	-0.00
74	0.14	0.01	-0.06	-0.01	-0.00	-0.17	0.02	0.02	0.00	0.50	0.17	0.00	-0.06	0.25	0.00	-0.11	0.00	0.00	-0.00	0.01	-0.01	0.12	-0.00	-0.07	0.00	0.01	0.01	0.29	-0.02	-0.01	0.27
76	-0.16	0.00	0.00	0.01	0.00	0.00	0.00	-0.00	-0.11	-0.50	-0.04	0.00	0.02	1.00	0.00	-0.04	-0.01	0.00	0.00	-0.00	0.00	-0.00	-0.00	-0.02	0.01	-0.00	0.01	0.07	-0.01	-0.03	0.10
78	-0.08	0.00	-0.15	-0.03	0.04	0.00	-1.00	-0.00	0.00	0.00	0.14	0.01	-0.02	0.00	-0.01	0.00	0.02	-0.01	0.00	0.00	0.04	0.01	0.01	0.02	-0.07	-0.03	-0.48	-0.17	0.03	-0.08	0.04
80	-0.19	0.06	0.00	0.00	0.00	0.00	-0.41	-0.08	0.00	0.00	0.00	0.02	-0.06	0.00	-0.01	0.00	0.01	0.01	-0.00	-0.04	0.00	-0.10	0.00	-0.08	0.75	0.07	0.21	-0.44	0.00	0.00	-0.20
81	0.01	0.00	0.00	0.00	0.02	-0.04	-0.22	-0.00	0.14	0.00	0.01	0.00	0.00	0.13	-0.01	0.06	-0.00	-0.12	0.00	-0.01	0.10	0.00	-0.00	0.00	0.06	-0.02	-0.19	-0.12	0.01	-0.04	-0.02
82	0.44	0.01	0.01	0.01	-0.00	0.03	-0.01	-0.00	0.00	0.10	0.02	-0.00	0.00	-0.00	0.00	0.01	0.01	0.00	0.00	-0.01	-0.00	0.00	0.00	0.03	0.00	0.08	-0.00	0.03	0.00	0.05	-0.02
83	0.00	1.00	0.00	0.00	0.01	-0.00	0.00	-0.00	0.08	0.03	0.02	0.00	0.48	0.00	0.24	0.00	-0.02	0.07	0.02	-0.02	0.08	-0.00	-0.03	0.00	0.02	0.00	0.00	-0.50	-0.25	0.04	-0.07
85	0.00	-0.03	0.00	-0.01	0.00	-1.00	0.00	-1.00	0.00	0.00	0.00	0.08	-0.01	0.00	-0.00	0.25	0.03	0.00	-0.01	0.07	-0.75	-0.06	-0.00	-0.02	0.00	-0.07	-0.75	0.00	-0.00	0.00	0.00
86	0.20	-0.06	0.11	0.00	0.02	-1.00	-1.00	-0.14	0.00	0.00	0.00	0.06	0.00	-0.03	-0.01	0.00	-0.12	-0.01	0.00	0.03	-0.07	0.02	-0.08	0.00	0.07	0.00	-0.20	0.30	0.03	-0.00	-0.10
90	-0.19	0.00	0.01	0.01	0.00	0.07	-0.01	0.75	0.02	-0.00	-0.25	0.00	-0.00	0.00	-0.00	0.00	-0.07	-0.01	-0.01	0.48	-0.21	0.19	0.00	0.00	0.75	0.20	0.00	-0.00	0.01	-0.00	-0.00
91	0.15	-0.26	0.02	0.03	0.00	-0.08	0.03	0.19	0.00	0.14	0.20	0.03	0.00	0.00	-0.03	0.00	0.06	-0.29	-0.07	0.17	0.44	0.12	-0.03	0.50	0.00	-0.30	0.00	0.00	0.00	-0.00	0.01
92	-0.00	0.01	0.01	-0.02	-0.02	0.09	0.03	0.07	0.03	0.75	0.04	0.01	-0.00	-0.00	-0.01	-0.00	-0.05	0.02	0.01	-0.03	-0.00	-0.01	-0.00	0.25	0.00	-0.03	-0.01	-0.00	0.00	-0.00	-0.01
93	-0.08	0.00	0.02	0.00	-0.00	0.00	0.33	0.00	0.05	0.07	0.08	-0.01	-0.00	0.00	0.00	0.01	-0.00	0.01	0.03	0.08	-0.00	0.04	-0.05	-0.04	0.00	0.00	0.00	0.00	0.00	0.00	-0.00
94	0.05	0.09	-0.04	0.03	-0.03	0.02	0.00	-0.31	-0.06	0.00	1.00	0.00	-0.01	0.00	-0.01	-0.00	0.00	-0.27	-0.10	-0.04	0.20	0.02	0.02	0.07	0.00	0.10	0.00	-0.01	0.01	0.00	0.00

Table 12: Directed overlap scores in 1985–1989, cont.

	00	**01**	**03**	**05**	**06**	**08**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**22**	**26**	**28**	**30**	**31**	**32**	**33**	**34**	**35**	**37**	**39**	**40**	**41**	**42**	**43**
00	0.00	-0.00	-0.00	-0.01	0.08	0.11	0.00	0.06	0.05	-0.01	0.04	0.05	-0.14	0.05	0.02	0.00	-0.00	0.01	0.03	0.03	0.08	-0.05	0.08	0.01	0.01	0.02	0.09	0.25	0.03	0.05	-0.18
01	0.00	0.00	-0.00	0.01	0.20	0.75	0.01	0.03	-0.08	0.02	0.04	0.00	-0.07	-0.07	0.00	0.02	0.04	0.01	0.03	-0.01	0.07	0.04	0.04	0.00	0.03	-0.06	0.17	0.05	0.04	0.03	0.14
03	0.00	0.00	0.00	-0.00	-0.00	-0.00	-0.01	0.01	0.02	-0.03	0.02	-0.01	-0.05	-0.00	0.20	0.00	-0.00	-0.01	-0.00	0.07	0.50	0.00	-0.25	-0.02	-0.25	-0.01	-0.01	-0.09	-0.11	0.07	0.06
05	0.01	-0.01	0.00	0.00	-0.00	-0.03	0.00	0.06	0.05	-0.00	0.01	-0.00	-0.02	0.05	0.00	0.00	0.00	0.05	0.06	0.09	-0.02	-0.07	-0.01	-0.10	-0.17	0.04	-0.00	0.17	0.00	0.03	-0.07
06	-0.08	-0.20	0.00	0.00	0.00	-0.00	0.05	0.08	-0.02	0.19	0.00	0.00	-0.07	0.01	0.00	0.00	0.05	0.09	0.02	0.00	-1.00	-0.50	-1.00	0.00	0.00	0.00	0.26	1.00	-0.75	0.00	0.00
08	-0.11	-0.75	0.00	0.03	0.00	0.00	0.00	-0.15	0.20	0.00	0.14	-0.01	-0.03	-0.00	1.00	-0.00	0.02	0.00	0.00	-0.75	0.00	0.00	0.00	0.00	0.00	0.00	-0.44	0.00	0.00	0.00	0.00
11	-0.00	-0.01	0.01	-0.00	-0.05	0.00	0.00	-0.00	0.01	0.00	0.01	0.01	-0.00	0.00	0.00	0.00	0.00	-0.02	-0.01	-0.01	0.08	-0.00	0.01	-0.00	0.00	0.01	0.05	-0.00	-0.03	-0.02	-0.04
12	-0.06	-0.03	-0.01	-0.06	-0.08	0.15	0.00	0.00	-0.01	0.01	0.00	-0.01	0.00	0.00	0.00	0.01	0.00	0.03	-1.00	0.00	0.00	0.00	0.06	-0.02	0.02	0.02	-0.00	0.00	0.07	-0.50	0.00
13	-0.05	0.08	-0.02	-0.05	0.02	-0.20	-0.01	0.01	0.00	-0.00	0.00	0.01	0.00	-0.01	0.01	0.00	0.00	0.07	0.00	0.30	1.00	0.00	0.00	1.00	0.50	0.11	0.10	0.00	-0.25	0.00	0.00
14	0.01	-0.02	0.03	0.00	-0.19	0.00	-0.00	-0.01	0.00	0.00	0.01	-0.01	0.01	-0.01	0.01	-0.00	0.00	-0.14	0.00	0.01	0.44	-0.00	-0.05	0.00	0.00	-0.01	-0.11	0.00	0.25	0.00	0.00
15	-0.04	-0.04	-0.02	-0.01	-0.00	-0.14	-0.01	-0.00	-0.00	-0.01	0.00	-0.01	-0.02	0.00	0.00	-0.01	0.04	0.04	-0.07	-0.02	0.00	-0.07	-0.14	0.01	-0.01	-0.03	0.00	-0.13	-0.04	0.07	0.00
16	-0.05	-0.00	0.01	0.00	-0.00	0.01	-0.01	0.01	-0.01	0.01	0.01	0.00	-0.00	0.00	-0.01	-0.00	-0.02	-1.00	0.25	-0.20	0.00	0.03	-0.00	0.00	0.20	-0.00	0.00	0.00	0.00	0.00	0.00
17	0.14	0.07	0.05	0.02	0.07	0.03	0.00	-0.00	-0.00	-0.01	0.02	0.00	0.00	-0.02	0.00	-0.00	-0.00	1.00	0.00	0.19	0.00	0.00	0.02	-0.00	-0.00	-0.00	0.17	0.00	0.00	0.00	0.01
18	-0.05	0.07	0.00	-0.05	-0.01	0.00	-0.00	-0.00	0.01	0.01	-0.00	-0.00	0.02	0.00	0.00	0.00	0.02	0.25	-0.33	0.00	-1.00	0.04	0.00	0.00	0.00	-0.12	-0.75	0.00	0.00	0.00	-0.11
19	-0.02	0.00	-0.20	0.00	-0.00	-1.00	-0.00	-0.00	-0.01	-0.01	0.00	0.01	-0.00	-0.00	0.00	-0.00	-0.02	0.00	-0.25	0.00	0.00	-0.00	-0.15	0.00	0.00	-0.00	0.00	0.00	0.00	0.00	0.00
20	-0.00	-0.02	-0.00	-0.00	-0.00	0.00	-0.00	-0.01	-0.00	0.00	0.01	0.00	0.00	-0.00	0.00	0.00	-0.00	0.01	-0.00	0.00	0.00	-0.00	-0.01	-0.00	-0.20	-0.02	-0.06	0.00	0.00	0.00	-0.01
22	0.00	-0.04	0.00	-0.00	-0.05	-0.02	-0.00	-0.00	0.00	-0.00	-0.04	0.02	0.00	-0.02	0.02	0.00	0.00	-0.02	-0.01	0.02	0.06	-0.00	-0.01	-0.00	0.01	-0.01	-0.10	-0.50	-0.29	0.00	-0.00
26	-0.01	-0.01	0.01	-0.05	-0.09	0.00	0.02	-0.03	-0.07	0.14	-0.04	1.00	-1.00	-0.25	0.00	-0.01	0.02	0.00	-0.00	-0.01	0.00	-0.02	0.01	-0.01	-0.02	0.00	0.00	-0.03	0.01	0.01	0.01
28	-0.03	-0.03	0.00	-0.06	-0.02	0.00	0.01	1.00	0.00	0.00	0.07	-0.25	0.00	0.33	0.25	0.00	0.01	0.00	0.00	-0.03	-0.04	-0.14	-1.00	0.00	-0.00	-0.00	0.00	0.01	-0.10	0.00	-0.02
30	-0.03	0.01	-0.07	-0.09	0.00	0.75	0.01	-0.00	-0.30	-0.01	0.02	0.20	-0.19	0.00	0.00	-0.00	-0.02	0.01	0.03	0.00	0.00	-0.00	-0.01	0.01	-0.00	-0.01	0.02	0.01	0.00	0.00	0.02
31	-0.08	-0.07	-0.50	0.02	1.00	0.00	-0.08	0.00	-1.00	-0.44	0.00	0.00	0.00	1.00	0.00	0.00	-0.06	-0.00	0.04	-0.00	0.00	-0.01	0.01	0.00	-0.00	-1.00	0.30	0.00	-0.04	0.02	0.00
32	0.05	-0.04	-0.00	0.07	0.50	0.00	0.00	-0.00	-0.00	0.00	0.07	-0.03	-0.00	-0.04	0.00	0.00	0.00	0.02	0.14	0.00	0.01	0.00	-0.00	-0.00	-0.00	-0.00	0.00	0.14	0.04	-0.00	0.03
33	-0.08	-0.04	0.25	0.01	1.00	0.00	-0.01	-0.06	0.00	0.05	0.14	0.00	-0.02	0.00	0.15	0.01	0.01	-0.01	1.00	0.01	-0.01	0.00	0.00	0.01	-0.02	-0.00	0.02	-0.02	0.01	-0.01	-0.00
34	-0.01	-0.00	0.02	0.10	0.00	0.00	0.00	0.02	-1.00	-0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	-0.00	-0.01	0.00	0.00	-0.01	0.00	0.00	0.00	-0.00	-0.09	0.03	-0.03	-0.25
35	-0.01	-0.03	0.25	0.17	0.00	0.00	-0.00	-0.02	-0.50	-0.00	0.01	-0.20	0.00	0.00	0.00	0.20	-0.01	0.02	0.00	0.00	0.00	0.00	0.02	-0.00	0.00	-0.00	0.01	1.00	0.04	-0.01	-0.07
37	-0.02	0.06	0.01	-0.04	0.00	0.00	-0.01	-0.02	-0.11	0.01	0.03	0.00	0.00	0.12	0.00	0.02	0.01	-0.00	0.00	0.01	1.00	0.00	0.00	-0.00	0.00	0.00	0.01	0.00	0.02	0.09	0.00
39	-0.09	-0.17	0.01	0.00	-0.26	0.44	-0.05	0.00	-0.10	0.11	-0.00	0.00	-0.17	0.75	0.00	0.06	0.10	-0.00	-0.00	-0.02	-0.30	-0.00	-0.02	0.00	-0.01	-0.01	0.00	-0.02	0.00	-0.01	-0.26
40	-0.25	-0.05	0.09	-0.17	-1.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.50	0.03	-0.01	-0.01	0.00	-0.14	0.02	0.09	-1.00	0.00	0.02	0.00	-0.02	-0.01	-0.32
41	-0.03	-0.04	0.11	-0.00	0.75	0.00	0.03	-0.07	0.25	-0.25	0.04	0.00	0.00	0.00	0.00	0.00	0.29	-0.01	0.10	-0.00	0.04	-0.04	-0.01	-0.03	-0.04	-0.02	-0.00	0.02	0.00	0.00	-0.12
42	-0.05	-0.03	-0.07	-0.03	0.00	0.00	0.02	0.50	0.00	0.00	-0.07	0.00	0.00	0.00	0.00	-0.00	-0.00	-0.01	-0.00	-0.00	-0.02	0.00	0.01	0.03	0.01	-0.09	0.01	0.01	-0.00	0.00	0.01
43	0.18	-0.14	-0.06	0.07	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	-0.01	0.11	0.00	0.01	0.00	-0.01	0.02	-0.02	-0.00	-0.03	0.00	0.25	0.07	0.00	0.26	0.32	0.12	-0.01	0.00
44	-0.08	-0.11	1.00	-0.48	0.00	0.00	0.00	0.32	0.00	0.00	0.25	0.00	-1.00	0.00	0.00	1.00	0.00	0.00	0.20	-0.02	-0.20	-0.00	0.01	0.02	0.00	0.25	-0.00	-0.00	-0.00	-0.00	-0.05
45	-0.06	-0.11	-1.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.00	0.13	0.00	0.25	0.00	0.00	0.00	0.23	-0.00	0.00	-0.01	0.05	-0.14	0.03	-0.00	-0.00	-0.00	0.03	0.50	0.05	-0.00	0.23
46	-0.01	-0.02	0.01	-0.07	-0.01	-0.00	0.03	-0.11	-0.07	0.03	0.00	0.01	0.00	0.01	0.00	0.03	-0.00	0.00	0.00	0.00	0.01	0.00	0.04	0.00	-0.00	-0.02	0.02	-0.01	-0.00	-0.00	0.00
47	-0.02	0.06	-0.00	-0.16	-0.03	0.00	0.00	-0.00	0.00	-0.01	0.00	0.06	0.02	0.01	0.03	0.00	-0.00	0.00	-0.00	0.00	-0.03	-0.00	0.00	-0.00	-0.00	-0.01	0.01	-0.03	0.01	-0.00	-0.01
49	-0.03	-0.00	-0.00	0.04	0.22	0.00	0.25	0.50	0.00	0.00	0.04	0.00	0.04	0.00	0.00	0.00	0.00	-0.00	-0.01	0.07	-0.09	-0.14	0.15	0.00	0.00	-0.01	-0.00	1.00	0.00	0.25	0.75
51	0.00	-0.01	-0.00	-0.00	0.03	-0.06	-0.01	0.03	0.00	0.01	0.02	-0.04	0.03	-0.13	0.00	0.00	-0.04	-0.04	0.10	-0.06	0.00	-0.01	-0.27	0.25	0.00	0.02	-0.02	0.00	0.00	-0.25	-1.00
52	-0.00	0.03	0.06	-0.00	0.03	0.30	0.01	0.02	0.11	-0.05	0.07	0.00	-0.25	-1.00	-0.22	-0.01	-0.00	0.00	-0.03	-0.09	-0.02	-0.09	0.00	0.17	0.50	0.13	0.25	0.00	0.00	0.14	0.75
53	0.03	-0.02	-0.02	0.01	0.00	0.00	0.00	0.00	0.00	-0.00	0.01	0.01	-0.00	0.01	0.00	0.00	-0.00	0.12	0.02	-0.02	0.06	0.00	0.00	0.00	0.00	-0.00	-0.07	0.00	-0.25	-0.12	-0.00
54	-0.03	0.03	0.00	0.00	-0.00	0.01	0.04	0.01	0.12	-0.19	0.09	0.00	0.00	0.00	0.00	0.01	-0.00	-0.01	-0.00	0.00	-0.20	-0.11	0.00	-0.00	-0.00	0.00	-0.00	0.20	-0.04	-0.00	-0.10
55	0.11	-0.03	0.00	0.04	0.00	0.00	-0.02	-0.25	0.00	-0.01	-0.08	0.00	0.03	-0.00	0.00	-0.00	0.00	-1.00	-0.22	-0.15	0.00	-0.00	0.00	-0.07	-0.25	-0.02	0.00	0.00	0.00	0.00	0.00
57	-0.00	-0.03	-0.04	0.01	-0.09	0.00	0.02	0.00	-0.12	-0.01	0.00	0.03	0.00	0.01	0.01	-0.00	-0.00	0.33	-0.00	0.01	-1.00	-0.00	-0.25	-0.03	-0.00	-0.00	0.00	0.00	0.00	0.00	0.00
58	-0.01	0.01	0.05	0.00	0.00	0.00	-0.01	-0.00	-0.02	-0.00	0.00	-0.03	-0.00	-0.01	0.00	0.02	0.00	0.01	0.01	0.00	0.00	0.00	0.03	-0.00	0.00	0.00	0.00	0.00	0.02	-0.04	-0.00
60	-0.02	-0.00	-0.01	-0.00	0.04	0.07	0.01	0.00	-0.50	0.00	0.00	0.00	-0.11	0.00	0.00	0.00	0.02	-0.01	0.00	-0.02	-0.01	0.05	0.04	0.00	-0.00	-0.01	-0.03	0.00	0.00	0.01	0.01
62	-0.00	0.00	-0.01	0.00	0.11	0.00	0.01	1.00	0.00	0.00	-0.01	0.00	-1.00	1.00	0.00	0.01	0.01	-0.10	-0.05	-0.41	0.00	0.00	0.03	-0.06	0.00	-1.00	-0.01	0.25	0.00	-0.00	0.25
65	-0.01	0.02	-0.00	0.02	0.00	0.00	0.01	-0.00	-0.11	-0.10	-0.00	0.00	1.00	-1.00	0.00	0.01	0.33	0.01	-0.04	-0.01	0.04	0.17	0.01	-0.00	-0.00	0.00	-0.00	0.02	-0.00	0.01	0.00
68	-0.01	-0.01	0.00	-0.00	0.00	0.00	0.00	0.00	-0.01	-0.03	0.02	0.00	-0.12	0.01	0.00	-0.00	0.10	0.10	0.04	-0.01	0.00	0.20	-0.00	-0.02	-0.00	0.01	0.00	-1.00	-0.00	0.14	0.00
70	-0.00	-0.01	0.08	0.09	0.00	0.00	-0.25	0.08	0.00	-0.00	0.00	0.00	-0.00	0.00	0.00	0.25	0.01	-0.00	-0.25	0.07	0.21	0.13	0.11	0.00	-0.00	0.00	-0.13	1.00	0.15	0.00	0.00
74	0.02	-0.03	0.11	0.08	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.25	0.00	0.00	0.21	0.25	-1.00	-0.04	-0.04	0.00	-0.12	-0.00	0.00	0.02	-0.00	0.00	-0.01	-0.75	0.00
76	-0.01	0.03	0.00	0.07	0.00	0.00	0.00	0.02	0.00	1.00	0.00	0.00	0.24	0.00	0.00	0.00	0.10	0.00	0.01	-0.05	-0.08	0.19	0.11	-0.00	0.00	0.00	0.00	0.00	-0.41	-0.19	0.00
78	-0.04	0.02	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	-0.06	0.07	-0.01	-0.04	-0.00	-0.00	0.01	-0.20	0.00	0.12	0.09	0.00
80	-0.07	-0.04	0.50	0.05	0.00	0.00	1.00	0.00	0.00	0.00	0.44	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.50	-1.00	-0.25	-0.07	-0.01	-0.00	-0.02	-1.00	0.00	0.00	0.00	0.00
81	-0.00	-0.00	-0.00	0.02	0.01	0.00	0.01	0.03	0.00	0.00	-0.01	-0.02	-0.00	-0.00	-0.00	-0.01	0.00	0.25	0.01	0.02	0.14	0.00	0.00	-0.00	-0.00	0.00	-0.04	0.10	0.06	0.06	0.00
82	-0.02	0.02	0.05	0.01	0.25	0.00	0.01	1.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.01	0.00	0.25	0.00	0.00	-0.00	0.00	0.00	0.00	0.33	0.75	0.08	0.11
83	0.02	-0.01	-0.01	0.25	0.00	0.00	0.19	-1.00	-1.00	0.02	0.00	0.00	-0.00	0.00	0.00	0.00	0.01	0.00	0.27	0.00	1.00	0.00	0.25	-0.03	-0.02	0.00	0.00	0.00	0.00	0.00	0.00
85	-0.01	-0.02	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.14	-0.02	0.00	-0.04	0.00	0.00	0.00	-1.00	0.00
86	0.01	-0.25	0.32	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.44	0.75	0.04	0.00	0.20	-0.01	-0.01	0.03	0.00	0.00	0.25	0.50	0.00
90	0.01	0.01	0.00	0.00	0.02	0.00	-0.02	-0.00	-1.00	0.00	-0.00	-0.33	0.00	0.75	0.00	-0.16	0.00	-0.01	-0.00	-0.00	0.00	0.00	0.25	0.01	0.05	0.04	-0.00	-0.25	-0.01	0.17	1.00
91	-0.01	-0.01	0.00	0.00	0.01	-0.07	-0.02	0.00	0.00	0.00	0.03	0.00	0.00	0.03	0.00	0.01	0.48	-0.00	0.02	0.00	0.00	0.00	0.11	0.01	-0.04	0.02	0.04	0.00	-0.00	-1.00	-1.00
92	0.01	0.02	0.00	-0.00	0.08	0.00	-0.09	-1.00	0.00	0.00	0.00	0.00	0.04	0.25	0.00	-0.00	-0.00	-0.14	-0.02	0.11	-1.00	0.00	0.00	-0.00	-0.00	-0.00	0.00	0.00	-0.20	-0.00	0.00
93	-0.01	0.00	0.01	0.03	0.25	0.27	0.14	0.04	0.05	0.11	-0.00	0.16	-0.00	-0.17	0.00	0.12	0.06	0.05	-0.12	0.01	1.00	-0.09	0.33	0.00	0.00	0.00	0.01	0.25	-0.01	0.00	0.00
94	-0.02	-0.03	0.00	0.00	0.01	-0.00	-0.00	0.11	0.19	-0.03	0.02	0.25	0.00	0.00	0.00	0.02	-0.01	0.08	-0.02	0.00	0.00	-0.44	0.06	-0.01	-0.04	0.01	0.02	0.00	0.04	0.00	-0.13

Table 13: Directed overlap scores in 1990–1994

	44	**45**	**46**	**47**	**49**	**51**	**52**	**53**	**54**	**55**	**57**	**58**	**60**	**62**	**65**	**68**	**70**	**74**	**76**	**78**	**80**	**81**	**82**	**83**	**85**	**86**	**90**	**91**	**92**	**93**	**94**
00	0.08	0.09	0.01	0.01	0.00	-0.01	0.02	0.01	0.03	0.10	0.04	-0.01	0.00	0.02	0.00	0.01	0.03	-0.01	0.00	-0.00	0.00	0.01	0.00	0.02	0.19	0.10	-0.00	0.00	0.01	0.02	-0.03
01	0.06	0.12	0.01	0.00	-0.04	0.01	0.04	0.01	0.02	-0.03	0.00	0.02	0.01	0.01	-0.02	0.01	0.01	0.03	0.03	0.02	0.03	0.01	0.02	0.01	0.04	-0.12	0.02	0.05	0.04	-0.07	0.06
03	0.00	-0.33	-0.01	-0.00	-0.00	-0.00	0.04	-0.08	-0.00	-0.11	0.00	-0.06	0.00	-0.01	-0.03	-0.00	0.01	-0.21	0.00	0.00	-0.02	0.00	0.06	0.00	0.00	-0.31	-0.00	-0.00	-0.03	-0.01	-0.01
05	0.14	0.00	-0.04	0.03	0.31	-0.00	-0.00	-0.11	-0.00	0.05	0.01	-0.04	-0.00	-0.01	0.02	0.00	-0.08	-0.12	0.50	0.00	0.00	-0.00	-0.01	-1.00	0.00	0.00	-0.00	0.01	-0.01	0.07	0.00
06	0.00	0.00	-0.01	0.04	-0.14	-0.03	0.02	0.00	-0.00	0.00	-0.25	0.00	-0.00	-0.02	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.01	-0.50	0.00	0.00	0.00	-0.04	0.03	-0.08	-0.04	0.01
08	0.00	0.00	-0.24	1.00	0.00	-0.20	-0.26	0.00	-0.00	1.00	0.00	0.00	1.00	0.00	0.00	-0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	-1.00	0.00	0.00	0.00	0.50	-1.00	0.25	-0.31
11	0.16	0.00	-0.03	-0.03	0.00	0.02	-0.01	0.11	0.12	-0.03	-0.00	-0.01	-0.01	-0.11	0.01	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.01	0.00	0.00	0.00	-0.05	0.12	-0.14	-0.16	0.00
12	0.19	0.00	-0.06	0.00	0.00	-0.00	0.04	-0.25	-0.08	0.00	1.00	0.01	0.00	0.00	-0.04	-0.01	0.25	0.00	0.00	0.00	0.00	-0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.04	0.12
13	0.00	0.00	-0.13	0.25	0.00	-0.14	-0.02	1.00	-0.04	0.06	0.23	-0.01	0.00	0.00	-0.11	-0.01	0.00	0.00	0.00	0.00	0.00	-1.00	0.00	-1.00	0.00	0.00	0.00	0.00	0.00	0.09	-0.17
14	-0.07	0.00	0.00	-0.17	0.00	0.03	-0.01	-0.00	0.09	-0.01	0.00	-0.00	-1.00	0.00	-0.04	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	-0.03	-0.04	0.00	0.00	0.30	-0.26	0.00	-0.07	0.02
15	-0.33	0.00	-0.00	-0.00	0.03	0.02	-0.04	-0.02	0.06	-0.11	-0.07	0.00	-0.01	0.00	-0.00	-0.02	0.08	-0.03	0.04	-0.01	-1.00	-0.01	0.02	-0.05	0.00	0.50	-0.01	-0.08	-0.07	0.00	-0.04
16	0.00	1.00	-0.01	-0.00	0.00	0.03	-0.15	-0.04	0.03	-0.00	-0.00	-0.01	0.01	0.00	-0.25	0.02	0.00	0.00	0.00	0.00	0.00	-0.00	-0.00	-0.25	0.00	0.00	0.00	0.00	0.00	-0.75	-0.00
17	0.00	0.00	-0.00	-0.00	1.00	0.05	-0.07	-0.00	0.33	-0.00	-0.00	0.00	-0.10	-0.50	0.11	0.01	-0.00	-0.25	0.00	-0.00	0.00	0.00	0.00	-0.02	0.00	0.00	0.00	0.00	0.06	-0.10	0.00
18	0.00	0.00	-0.02	0.00	0.00	0.10	-0.06	-0.00	-0.00	-0.01	0.01	-0.02	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	-0.03	0.00	0.41	0.00	0.00	-1.00	0.00	-1.00	-0.25	0.00
19	0.00	0.00	-0.00	-0.00	0.00	0.00	0.00	-0.06	0.00	0.01	-0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	-0.00	-0.08	0.00	-0.00	-0.00	0.00	-0.01	0.01	0.00	-0.03	-0.00	-0.00	-0.00	-0.00	0.00	-0.05	0.00	0.00	0.00	-0.00	0.00	-0.01	0.00	0.00	0.17	-0.05	-0.10	-0.17	-0.00
22	0.06	0.25	-0.00	0.00	-0.25	0.06	-0.01	0.00	-0.00	-0.00	0.01	-0.00	-0.02	-0.75	0.19	-0.00	-0.05	-0.33	-0.02	-0.06	0.00	0.00	-0.00	-0.02	0.00	0.00	0.00	0.19	-0.04	-0.06	-0.12
26	-0.01	-0.03	0.00	0.01	-0.00	-0.20	0.03	-0.10	-0.00	-0.20	0.00	-0.00	0.02	0.08	-0.01	-0.06	1.00	0.00	0.00	1.00	0.50	0.02	0.08	0.00	0.00	0.00	-0.00	0.00	-0.16	-0.01	-0.01
28	0.12	0.25	0.00	0.00	0.01	-0.01	0.03	-0.14	0.00	0.00	-0.00	0.01	0.00	-0.03	0.00	-0.04	0.00	-0.19	-0.00	-0.75	0.00	-0.01	-0.02	0.00	-1.00	-0.26	0.00	-0.00	0.01	0.14	-0.03
30	0.00	-0.00	0.00	-0.00	0.11	-0.00	0.03	-0.01	-0.03	-0.24	-0.00	0.01	-0.02	0.48	-0.01	0.13	0.00	-0.04	-0.03	0.10	0.00	-0.00	-0.08	-0.19	0.00	-0.50	0.11	-1.00	-0.30	-0.01	0.06
31	-0.75	0.00	-0.01	0.01	0.02	0.00	0.12	-0.03	0.01	0.00	0.00	-0.02	-0.00	0.00	-0.05	0.00	0.00	-0.00	0.09	0.00	0.11	-0.01	0.25	0.00	1.00	-0.08	0.22	0.00	-0.19	1.00	0.20
32	0.06	-0.17	-0.00	-0.00	0.20	0.07	-0.02	-0.00	0.27	0.00	-0.00	-0.00	0.05	0.00	-0.05	0.21	-0.00	-0.25	-0.17	0.00	0.00	-0.00	0.04	-0.01	0.00	0.00	1.00	0.00	-0.23	0.17	0.00
33	-0.01	-0.00	-0.00	0.00	-0.05	0.11	0.08	0.13	0.00	-0.44	0.00	-0.00	0.03	0.03	-0.00	0.05	-0.03	0.08	0.10	0.05	0.03	0.00	-0.01	-0.00	-0.10	0.20	0.00	0.00	0.25	-0.75	-0.05
34	-0.02	-0.00	0.00	0.00	0.00	0.00	0.27	-0.02	0.00	-0.06	-0.02	-0.00	0.00	-0.07	-0.00	-0.00	-0.00	0.00	0.00	0.01	-0.01	0.00	-0.00	-0.02	-0.00	0.01	-0.00	0.01	0.00	-0.00	-0.01
35	0.00	0.00	0.00	0.00	0.00	0.00	-0.03	-0.00	0.00	-0.14	0.00	-0.00	-0.00	-0.03	-0.00	0.03	-0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	-0.00	0.02	-0.00	-0.00	-0.00	-0.00	-0.00	0.08
37	-0.15	0.00	-0.03	0.00	0.02	0.10	-0.09	-0.00	0.00	-0.02	-0.00	0.00	0.01	-0.07	0.00	-0.01	0.00	-0.01	-0.00	-0.01	-0.02	-0.00	0.00	0.01	0.06	-0.03	-0.00	-0.02	-0.01	-0.01	-0.03
39	0.06	0.00	-0.01	0.01	-0.14	0.09	-0.50	-0.25	0.00	0.25	0.37	-0.05	-0.03	0.01	-0.01	-0.08	-0.07	0.01	0.00	-0.37	-1.00	0.01	-0.00	0.00	0.00	1.00	0.00	-0.06	0.02	0.02	0.00
40	-0.00	-0.11	-0.01	-0.02	0.25	-0.26	0.00	0.00	0.00	0.00	0.00	-0.07	-0.07	0.00	-0.02	0.00	0.00	1.00	0.00	0.00	0.00	-0.01	-0.50	0.00	0.00	0.00	-0.25	0.00	0.00	0.25	-0.14
41	0.02	0.10	0.00	-0.00	0.02	-0.04	-0.00	0.25	-0.04	0.00	0.25	0.03	-0.00	-0.03	0.00	-0.04	-0.22	0.18	0.09	-0.11	1.00	-0.00	-0.12	0.00	0.00	-1.00	-0.02	0.41	0.05	-0.00	-0.00
42	0.01	0.00	0.00	0.00	0.01	0.00	-0.44	0.19	0.00	0.00	0.00	0.04	0.01	0.00	-0.00	0.05	0.00	0.00	-0.09	0.14	0.11	-0.03	-0.08	-1.00	0.00	-0.17	0.00	0.00	0.01	-0.00	0.01
43	0.00	0.00	0.00	0.01	0.00	-0.04	0.00	0.00	0.10	0.00	0.00	0.02	-0.01	1.00	0.75	-1.00	0.00	0.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.04	1.00	0.11
44	0.00	0.00	0.00	-0.01	0.50	0.00	-0.02	0.02	0.00	0.00	0.00	0.00	-0.00	-0.08	-0.01	-0.21	0.00	-0.00	-0.26	-0.08	0.33	-0.08	0.21	0.00	-1.00	0.07	-0.07	0.08	0.00	0.01	0.05
45	-0.00	0.00	-0.02	-0.00	0.02	0.00	0.00	-0.25	0.00	0.00	0.00	-0.00	-0.03	0.25	0.00	-0.25	0.00	0.01	-0.01	0.00	0.00	-0.00	-0.01	0.00	-0.06	-0.12	0.00	-0.33	0.02	-0.00	-0.14
46	-0.00	0.02	0.00	0.00	-0.00	-0.08	0.01	-0.00	-0.00	0.00	-0.00	-0.00	-0.00	-0.10	-0.00	0.16	-0.11	-0.05	0.04	-0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	-0.03	-0.50	0.00	-0.04
47	0.01	0.00	-0.00	0.00	0.00	-1.00	0.07	0.05	-0.00	-0.03	0.00	0.00	-0.00	-0.09	0.00	-0.01	0.00	-0.00	0.00	-0.00	0.00	0.00	-0.00	-0.03	-0.01	0.00	-0.00	-0.00	0.01	0.00	-0.04
49	-0.50	-0.02	0.00	-0.00	0.00	0.23	-0.02	-0.00	-0.00	0.00	0.00	-0.00	0.01	0.06	0.00	0.00	-0.01	0.00	-0.01	-0.00	0.03	0.05	-0.00	-0.17	0.05	-0.00	0.00	0.00	0.02	-0.00	0.01
51	0.00	0.00	0.08	1.00	-0.23	0.00	0.01	0.01	-0.06	0.00	-0.00	-0.10	0.00	0.04	0.03	-0.00	0.07	0.75	0.00	0.20	0.00	-0.09	-0.00	0.00	0.00	-0.25	0.12	-0.19	0.19	-1.00	-0.01
52	0.02	0.00	-0.01	-0.07	0.02	-0.01	0.00	0.01	0.02	0.03	-0.01	-0.11	-0.01	0.02	-0.01	-0.00	0.07	0.20	0.00	1.00	0.00	-0.17	-0.01	0.00	0.25	0.75	0.01	-0.09	0.05	0.15	-0.00
53	-0.02	0.25	0.00	-0.05	0.00	-0.01	-0.01	0.00	0.00	-0.00	0.00	0.00	-0.00	-0.05	-0.01	-0.02	-0.01	-0.02	0.02	-0.02	-0.06	-0.00	-0.02	0.00	-0.11	-0.22	-0.24	-0.27	-0.00	-0.14	-0.04
54	0.00	0.00	0.00	0.00	0.00	0.06	-0.02	-0.00	0.00	-0.00	0.01	-0.02	-0.03	-0.27	-0.03	0.01	-0.00	0.00	-0.00	0.00	-1.00	-0.14	0.06	-0.33	0.00	-0.25	-0.02	0.02	0.03	-0.00	0.06
55	0.00	0.00	-0.00	0.03	0.00	0.00	-0.03	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	-0.20	-0.06	0.00	0.00	0.00	0.00	0.00	-0.02	-0.17	-0.04	0.00	0.00	0.15	-0.03	0.00	-0.15	0.00
57	0.00	0.00	0.00	-0.00	-0.00	0.00	0.01	-0.00	-0.01	-0.00	0.00	-0.00	0.11	0.00	-0.02	0.03	0.00	0.50	-0.01	-0.15	0.00	0.00	0.00	-0.01	1.00	0.00	-0.21	-0.15	-0.04	-0.05	-0.00
58	-0.00	0.00	0.00	-0.00	0.00	0.10	0.11	-0.00	0.02	0.01	0.00	0.00	-0.00	-0.12	-0.01	0.00	0.00	-0.01	0.01	-0.01	0.00	-0.00	0.01	0.00	-0.13	0.15	0.01	-0.00	-0.04	-0.01	0.11
60	0.00	0.03	0.00	0.00	-0.01	0.00	0.01	0.00	0.03	0.00	-0.11	0.00	0.00	0.00	0.00	0.00	0.00	-0.03	0.00	0.15	0.15	-0.00	0.00	0.19	-0.75	0.11	-0.00	-0.00	-0.01	-0.00	-0.01
62	0.08	-0.25	0.10	0.09	-0.06	-0.04	-0.02	0.05	0.27	0.00	0.00	0.12	-0.00	0.00	-0.00	-0.00	0.00	-0.03	-0.50	-0.07	0.00	-0.09	-0.00	0.00	0.00	-0.06	0.00	0.01	0.01	-0.01	0.01
65	0.01	-0.00	0.00	-0.00	-0.00	-0.03	0.01	0.01	0.03	0.20	0.02	0.01	-0.00	0.00	0.00	0.00	0.01	0.00	-0.00	-0.00	0.00	-0.01	-0.01	-0.11	0.00	0.00	-0.00	-0.02	0.01	-0.00	0.01
68	0.21	0.25	-0.16	0.01	-0.00	0.00	0.00	0.02	-0.01	0.06	-0.03	-0.00	-0.00	0.00	-0.00	0.00	0.03	0.20	0.01	0.01	0.00	0.04	-0.01	-0.16	1.00	0.00	-0.00	-0.00	0.00	-0.01	-0.00
70	0.00	0.00	0.11	-0.00	0.01	-0.07	-0.07	0.01	0.00	0.00	-0.00	-0.00	-0.00	0.00	-0.01	-0.03	0.00	-0.00	-0.00	-0.00	-0.10	0.00	-0.02	-0.01	0.02	0.01	0.06	-0.02	0.01	0.00	0.18
74	0.00	-0.01	0.05	0.00	-0.00	-0.75	-0.20	0.02	0.00	0.00	-0.50	0.01	0.03	0.03	-0.00	-0.20	0.00	0.00	0.00	0.01	0.00	-0.08	-0.01	-0.10	-0.41	0.01	0.01	0.00	0.02	-0.00	0.00
76	0.26	0.01	-0.04	-0.00	0.01	0.00	0.00	-0.02	0.00	0.00	0.01	-0.01	-0.00	0.50	0.00	-0.01	0.00	-0.00	0.00	0.00	-0.00	0.02	0.00	-0.02	-0.00	0.00	-0.10	0.04	0.01	0.00	-0.31
78	0.08	-0.00	0.00	0.00	0.00	-0.20	-1.00	0.02	0.00	0.00	0.15	0.01	-0.15	0.07	0.00	-0.01	0.00	-0.01	-0.00	0.00	-0.03	0.01	-0.01	0.02	0.00	-0.03	-0.25	-0.11	0.00	-0.08	0.04
80	-0.33	-0.00	0.00	-0.00	-0.03	0.00	0.00	0.06	1.00	0.00	0.00	-0.00	-0.15	0.00	-0.00	0.00	0.10	-0.00	0.00	0.03	0.00	0.30	-0.01	0.24	-0.17	0.06	1.00	0.00	0.00	-0.06	0.17
81	0.08	0.00	-0.00	-0.00	-0.05	0.09	0.17	0.00	0.14	0.02	-0.00	0.00	0.00	0.09	0.01	-0.04	-0.00	0.08	-0.02	-0.01	-0.30	0.00	0.00	0.00	0.11	0.00	0.24	0.20	0.03	0.05	0.02
82	-0.21	0.01	-0.00	0.00	0.00	0.00	0.01	0.02	-0.06	0.17	-0.00	-0.01	-0.00	0.00	0.01	0.01	0.02	0.01	-0.00	0.01	0.01	-0.00	0.00	0.02	-0.02	-0.07	0.07	0.03	0.00	0.06	0.03
83	0.00	0.00	-0.00	0.03	0.17	-0.00	0.00	-0.00	0.33	0.04	0.01	-0.00	-0.19	0.00	0.11	0.16	0.01	0.10	0.02	-0.02	-0.24	-0.00	-0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
85	1.00	0.06	0.00	0.01	-0.05	0.00	-0.25	0.11	0.00	0.00	-1.00	0.13	0.75	0.00	-0.00	-1.00	-0.02	0.41	0.00	-0.00	0.17	-0.11	0.02	-0.02	0.00	-0.06	0.00	-1.00	0.00	1.00	0.00
86	-0.07	0.12	0.00	-0.00	0.00	0.25	-0.75	0.22	0.25	0.00	0.00	-0.15	-0.11	0.06	-0.00	0.00	-0.01	-0.01	-0.00	0.03	-0.06	0.00	0.07	0.00	0.06	0.00	-0.14	0.30	-0.01	-0.08	-0.50
90	0.07	0.00	0.01	0.00	-0.00	-0.12	-0.01	0.24	0.02	-0.15	0.21	-0.01	0.00	-0.00	0.00	0.00	-0.06	-0.01	0.10	0.25	-1.00	-0.24	-0.07	0.00	0.00	0.14	0.00	0.00	0.01	0.00	0.01
91	-0.08	0.33	0.03	0.00	-0.00	0.19	0.09	0.27	-0.02	0.03	0.15	0.00	0.00	-0.01	0.02	0.00	0.02	0.00	-0.04	0.11	0.00	-0.20	-0.03	0.00	1.00	-0.30	-0.00	0.00	-0.00	0.00	-0.03
92	-0.00	-0.02	0.50	-0.01	-0.02	-0.19	-0.05	0.00	-0.03	0.00	0.04	0.04	0.01	-0.01	-0.01	-0.00	-0.01	-0.02	-0.01	-0.00	-0.00	-0.03	-0.00	0.00	0.00	0.01	-0.01	0.00	0.00	0.00	-0.00
93	-0.01	0.00	-0.00	-0.00	0.00	1.00	-0.15	0.14	0.00	0.15	0.05	0.01	0.00	0.01	0.00	0.01	-0.00	0.00	-0.00	0.08	0.06	-0.05	-0.06	0.00	-1.00	0.08	-0.00	-0.00	-0.00	0.00	0.01
94	-0.05	0.14	0.04	0.04	-0.01	0.01	0.00	0.04	-0.06	0.00	0.00	-0.11	0.01	-0.01	-0.01	0.00	-0.18	0.00	0.31	-0.04	-0.17	-0.02	-0.03	0.00	0.00	0.50	-0.01	0.03	0.00	-0.01	0.00

Table 14: Directed overlap scores in 1990–1994, cont.

	00	**01**	**03**	**05**	**06**	**08**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**22**	**26**	**28**	**30**	**31**	**32**	**33**	**34**	**35**	**37**	**39**	**40**	**41**	**42**	**43**
00	0.00	-0.00	-0.00	0.01	0.10	0.00	-0.01	0.03	0.03	0.04	-0.03	0.03	0.04	0.04	-0.17	0.01	0.06	0.01	0.00	0.03	0.20	0.03	0.08	0.00	0.00	0.00	-0.07	0.03	0.04	0.04	1.00
01	0.00	0.00	0.00	-0.02	-0.01	0.24	0.01	0.03	-0.07	0.02	-0.04	-0.08	-0.00	-0.01	-0.21	0.00	-0.00	0.02	0.03	0.02	-0.17	-0.05	0.00	0.01	0.00	-0.01	0.14	0.00	0.05	0.04	0.01
03	0.00	-0.00	0.00	-0.00	0.00	0.00	-0.01	-0.01	0.01	0.02	0.00	-0.01	-0.08	0.00	0.00	-0.00	-0.03	-0.00	-0.00	-0.00	-0.41	-0.12	0.14	-0.00	-0.10	-0.00	-0.16	-0.01	0.00	-0.00	-0.05
05	-0.01	0.02	0.00	0.00	-0.00	-0.04	0.00	-0.06	-0.02	-0.00	-0.00	-0.02	-0.01	0.06	-0.00	0.00	-0.03	-0.04	0.05	0.09	-0.01	-0.00	0.01	-0.10	-0.10	-0.00	0.00	0.02	-0.07	0.33	-0.00
06	-0.10	0.01	-0.00	0.00	0.00	0.00	0.09	0.05	-0.02	-0.14	-0.04	-0.01	0.10	0.01	-0.04	0.00	0.06	0.09	-0.02	0.00	-0.24	0.00	0.00	-1.00	0.00	0.00	-0.15	0.00	0.00	0.00	0.00
08	-0.00	-0.24	-0.00	0.04	-0.00	0.00	-0.75	0.44	0.19	0.00	0.25	0.03	0.00	0.00	0.00	-0.00	-0.01	0.00	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.00	0.00	-1.00	0.00	0.00
11	0.01	-0.01	0.01	-0.00	-0.09	0.75	0.00	0.00	0.01	0.00	0.00	-0.00	-0.01	0.15	0.01	0.00	0.00	-0.00	0.01	-0.00	0.01	-0.00	0.00	0.02	0.04	-0.01	0.03	-0.03	0.05	-0.03	-0.11
12	-0.03	-0.03	0.01	0.06	-0.05	-0.44	-0.00	0.00	0.00	-0.00	-0.00	-0.00	0.02	0.01	-0.06	0.00	-0.23	-0.00	-0.25	0.00	0.00	0.02	-0.06	-0.02	0.14	0.02	-0.14	0.33	0.00	0.25	-0.50
13	-0.03	0.07	-0.01	0.02	0.02	-0.19	-0.01	-0.00	0.00	0.00	-0.02	0.00	0.06	-0.02	0.02	0.01	-0.14	0.11	-1.00	-0.22	0.00	-0.00	-0.04	0.00	0.13	-0.06	-0.17	0.00	0.14	0.17	0.00
14	-0.04	-0.02	-0.02	0.00	0.14	0.00	-0.00	0.00	-0.00	0.00	-0.03	0.01	-0.01	0.00	-0.01	0.00	-0.02	-0.08	-1.00	0.01	0.00	-0.00	0.00	-0.03	-0.00	0.01	-0.00	0.00	0.04	0.00	0.00
15	0.03	0.04	-0.00	0.00	0.04	-0.25	-0.00	0.00	0.02	0.03	0.00	-0.01	-0.03	-0.10	-0.10	0.01	-0.00	-0.04	-0.05	-0.02	0.30	0.10	-0.01	0.01	-0.07	-0.03	-0.03	-0.14	-0.03	-0.04	0.00
16	-0.03	0.08	0.01	0.02	0.01	-0.03	0.00	0.00	-0.00	-0.01	0.01	0.00	0.00	0.00	-0.01	-0.00	-0.00	0.00	0.00	-0.16	0.00	-0.01	0.03	-0.19	-0.12	-0.00	0.09	0.00	0.25	0.00	0.33
17	-0.04	0.00	0.08	0.01	-0.10	-0.00	0.01	-0.02	-0.06	0.01	0.03	-0.00	0.00	-0.02	-0.00	0.00	0.00	0.00	0.44	0.01	-1.00	-0.00	0.00	-0.00	0.01	-0.00	0.00	0.00	0.00	0.00	0.00
18	-0.04	0.01	-0.00	-0.06	-0.01	-0.00	-0.15	-0.01	0.02	-0.00	0.10	-0.00	0.02	0.00	-0.01	-0.01	-0.03	0.00	-0.02	0.00	0.00	0.09	0.00	0.00	0.00	-0.02	0.00	0.00	0.00	0.00	0.00
19	0.17	0.21	0.00	0.00	0.04	0.00	-0.01	0.06	-0.02	0.01	0.10	0.01	0.00	0.01	0.00	-0.01	-0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.33	0.19	0.00	0.00	0.00	0.00	0.00
20	-0.01	-0.00	0.00	-0.00	-0.00	0.00	-0.00	-0.00	-0.01	-0.00	-0.01	0.00	-0.00	0.01	0.01	0.00	-0.00	-0.44	-0.08	0.01	0.00	0.02	0.03	-0.10	0.00	0.00	-0.06	0.00	0.00	-0.25	-0.00
22	-0.06	0.00	0.03	0.03	-0.06	0.01	-0.00	0.23	0.14	0.02	0.00	0.00	-0.00	0.03	0.00	0.00	0.00	0.19	0.01	-0.00	-0.08	0.01	0.01	-0.00	-0.01	0.00	0.06	0.00	0.19	0.00	-0.00
26	-0.01	-0.02	0.00	0.04	-0.09	0.00	0.00	0.00	-0.11	0.08	0.04	0.00	0.00	0.00	0.00	0.44	-0.19	0.00	-0.00	0.01	-0.04	-0.04	0.00	-0.00	-0.01	-0.00	-0.01	0.02	-0.01	-0.01	-0.16
28	-0.00	-0.03	0.00	-0.05	0.02	-0.37	-0.01	0.25	1.00	1.00	0.05	0.00	-0.44	0.02	0.00	0.08	-0.01	0.00	0.00	-0.02	-0.00	0.25	0.00	-0.01	-0.04	-0.00	-0.00	0.12	-0.07	0.00	-0.02
30	-0.03	-0.02	0.00	-0.09	0.00	0.00	0.00	-0.00	0.22	-0.01	0.02	0.16	-0.01	0.00	0.00	-0.01	0.00	-0.01	0.02	0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.01	-0.01	0.01	-0.00	-0.00	-0.01
31	-0.20	0.17	0.41	0.01	0.24	0.00	-0.01	0.00	0.00	0.00	-0.30	0.00	1.00	0.00	0.00	0.00	0.08	0.04	0.00	0.00	0.00	-0.01	-0.20	0.19	-0.00	-0.14	0.01	0.75	-0.02	0.02	0.05
32	-0.03	0.05	0.12	0.00	0.00	0.00	0.00	-0.02	0.00	0.00	-0.10	0.01	0.00	-0.09	-0.00	-0.02	-0.01	0.04	-0.25	0.00	0.01	0.00	0.01	-0.00	-0.00	0.00	0.00	0.09	-0.03	0.00	-0.01
33	-0.08	-0.00	-0.14	-0.01	0.00	0.00	-0.00	0.06	0.04	-0.00	0.01	-0.03	-0.00	0.00	0.01	-0.03	-0.01	-0.00	0.00	0.00	0.20	-0.01	0.00	0.00	-0.01	-0.02	-0.01	-0.00	0.01	-0.00	-0.00
34	-0.00	-0.01	0.00	0.10	1.00	0.00	-0.02	0.02	-0.00	0.03	-0.01	0.19	0.00	0.00	0.00	0.10	0.00	0.00	0.01	0.00	-0.19	0.00	-0.00	0.00	-0.00	-0.00	0.00	0.00	0.02	-0.02	0.16
35	-0.00	-0.00	0.10	0.10	0.00	0.00	-0.04	-0.14	-0.13	0.00	0.07	0.12	-0.01	0.00	-0.33	-0.00	0.01	0.01	0.04	0.00	0.00	0.00	0.01	0.00	0.00	0.00	-0.01	0.25	0.02	0.01	-0.00
37	-0.00	0.01	0.00	0.00	0.00	0.00	0.01	-0.02	0.06	-0.01	0.03	0.00	0.00	0.02	-0.19	-0.00	-0.00	0.00	0.00	0.01	0.14	-0.00	0.02	0.00	-0.00	0.00	-0.01	0.33	0.00	0.09	0.27
39	0.07	-0.14	0.16	-0.00	0.15	1.00	-0.03	0.14	0.17	0.00	0.03	-0.09	-0.00	0.00	0.00	0.06	-0.06	0.01	0.00	0.01	-0.01	-0.00	0.01	-0.00	0.01	0.01	0.00	0.05	0.00	0.00	-0.06
40	-0.03	-0.00	0.01	-0.02	0.00	0.00	0.03	-0.33	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	-0.00	-0.02	-0.12	-0.01	-0.75	-0.09	0.00	-0.00	-0.25	-0.33	-0.05	0.00	-0.00	-0.01	-0.12
41	-0.04	-0.05	-0.00	0.07	0.00	1.00	-0.05	0.00	-0.14	-0.04	0.03	-0.25	0.00	0.00	0.00	0.00	-0.19	0.01	0.07	0.00	0.02	0.03	-0.01	-0.02	-0.02	-0.00	-0.00	0.00	0.00	-0.00	-0.00
42	-0.04	-0.04	0.00	-0.33	0.00	0.00	0.03	-0.25	-0.17	0.00	0.04	0.00	0.00	0.00	0.00	0.25	-0.00	0.01	-0.00	0.00	-0.02	-0.00	0.00	0.02	-0.01	-0.09	-0.00	0.01	0.00	0.00	0.01
43	-1.00	-0.01	0.05	0.00	0.00	0.00	0.11	0.50	0.00	0.00	0.00	-0.33	-0.00	0.00	0.00	0.00	0.00	0.16	0.02	0.01	-0.05	0.01	0.00	-0.16	0.00	-0.27	0.06	0.12	0.00	-0.01	0.00
44	-0.08	-0.06	0.00	-0.14	0.00	0.00	-0.16	-0.19	0.00	0.07	0.33	0.00	0.00	0.00	0.00	0.00	-0.06	0.01	-0.12	-0.00	0.75	-0.06	0.01	0.02	-0.00	0.15	-0.06	0.00	-0.02	-0.01	-0.00
45	-0.09	-0.12	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.00	-1.00	0.00	0.00	0.00	0.00	-0.25	0.03	-0.25	0.00	-0.00	0.17	0.00	0.00	-0.00	-0.00	-0.00	0.11	-0.10	-0.00	0.00
46	-0.01	-0.01	0.01	0.04	0.01	0.24	0.03	0.06	0.13	0.00	0.00	0.01	0.00	0.02	0.00	0.00	0.00	-0.00	-0.00	-0.00	0.01	0.00	0.00	-0.00	-0.00	0.03	0.01	0.01	-0.00	-0.00	-0.00
47	-0.01	-0.00	0.00	-0.03	-0.04	-1.00	0.03	0.00	-0.25	0.17	0.00	0.00	0.00	0.00	0.00	0.08	-0.00	-0.01	-0.00	0.00	-0.01	0.00	-0.00	-0.00	-0.00	-0.00	-0.01	0.02	0.00	-0.00	-0.01
49	-0.00	0.04	0.00	-0.31	0.14	0.00	0.00	0.00	0.00	0.00	-0.03	0.00	-1.00	0.00	0.00	0.00	0.25	0.00	-0.01	-0.11	-0.02	-0.20	0.05	-0.00	-0.00	-0.02	0.14	-0.25	-0.02	-0.01	0.00
51	0.01	-0.01	0.00	0.00	0.03	0.20	-0.02	0.00	0.14	-0.03	-0.02	-0.03	-0.05	-0.10	0.00	0.00	-0.06	0.20	0.01	0.00	0.00	-0.07	-0.11	-0.00	0.00	-0.10	-0.09	0.26	0.04	0.00	0.04
52	-0.02	-0.04	-0.04	0.00	-0.02	0.26	0.01	-0.04	0.02	0.01	0.04	0.15	0.07	0.06	-0.00	0.00	0.01	-0.03	-0.03	-0.03	-0.12	0.02	-0.08	-0.27	0.03	0.09	0.50	0.00	0.00	0.44	0.00
53	-0.01	-0.01	0.08	0.11	0.00	0.00	-0.11	0.25	-1.00	0.00	0.02	0.04	0.00	0.00	0.06	-0.00	-0.00	0.10	0.14	0.01	0.03	0.00	-0.13	0.02	0.00	0.00	0.25	0.00	-0.25	-0.19	-0.00
54	-0.03	-0.02	0.00	0.00	0.00	0.00	-0.12	0.08	0.04	-0.09	-0.06	-0.03	-0.33	0.00	0.00	0.01	0.00	0.00	-0.00	0.03	-0.01	-0.27	0.00	-0.00	-0.00	-0.00	-0.00	-0.00	0.04	-0.00	-0.10
55	-0.10	0.03	0.11	-0.05	0.00	-1.00	0.03	-0.00	-0.06	0.01	0.11	0.00	0.00	0.01	-0.01	-0.01	0.00	0.20	0.00	0.24	0.00	-0.00	0.44	0.06	0.14	0.02	-0.25	0.00	0.00	0.00	0.00
57	-0.04	-0.00	-0.00	-0.01	0.25	0.00	0.00	-1.00	-0.23	-0.00	0.07	0.00	0.00	-0.01	0.00	-0.00	-0.01	0.00	0.00	0.00	0.00	0.00	-0.00	0.02	-0.00	0.00	-0.37	0.00	-0.25	0.00	0.00
58	0.01	-0.02	0.06	0.04	0.00	0.00	0.01	-0.01	0.01	0.00	-0.00	0.01	-0.00	0.02	0.01	0.03	0.00	0.00	-0.01	-0.01	0.02	0.00	0.00	0.00	0.00	-0.00	0.05	0.07	-0.03	-0.04	-0.02
60	-0.00	-0.01	-0.00	0.00	0.00	-1.00	0.01	0.00	0.00	1.00	0.01	-0.01	0.10	0.00	0.00	0.00	0.02	-0.02	-0.00	0.02	0.00	-0.05	-0.03	-0.00	0.00	-0.01	0.03	0.07	0.00	-0.01	0.01
62	-0.02	-0.01	0.01	0.01	0.02	0.00	0.11	0.00	0.00	0.00	-0.00	0.00	0.50	0.00	0.00	0.00	0.75	-0.08	0.03	-0.48	0.00	0.00	-0.03	0.07	0.03	0.07	-0.01	0.00	0.03	-0.00	-1.00
65	-0.00	0.02	0.03	-0.02	-0.06	0.00	-0.01	0.04	0.11	0.04	0.00	0.25	-0.11	0.00	0.00	0.00	-0.19	0.01	-0.00	0.01	0.05	0.05	0.00	0.00	0.00	-0.00	0.01	0.02	-0.00	0.00	-0.75
68	-0.01	-0.01	0.00	-0.00	-0.00	0.00	-0.00	0.01	0.01	0.01	0.02	-0.02	-0.01	-0.01	0.00	0.00	0.00	0.06	0.04	-0.13	0.00	-0.21	-0.05	0.00	-0.03	0.01	0.08	0.00	0.04	-0.05	1.00
70	-0.03	-0.01	-0.01	0.08	0.00	0.00	0.00	-0.25	0.00	-0.00	-0.08	0.00	0.00	0.00	0.00	0.00	0.05	-1.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	-0.00	0.07	0.00	0.22	0.00	0.00
74	0.01	-0.03	0.21	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.25	0.00	0.00	0.05	0.33	-0.00	0.19	0.04	0.00	0.25	-0.08	-0.00	0.00	0.01	-0.01	-1.00	-0.18	-0.00	0.00
76	-0.00	-0.03	0.00	-0.50	0.00	0.00	-1.00	0.00	0.00	0.00	-0.04	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.03	-0.09	0.17	-0.10	-0.00	-0.00	0.00	-0.00	0.00	-0.09	0.09	0.00
78	0.00	-0.02	0.00	0.00	0.00	0.00	-1.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.06	-1.00	0.75	-0.10	-0.00	0.00	-0.05	-0.01	-0.00	0.01	0.37	0.00	0.11	-0.14	0.00
80	-0.00	-0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.50	0.00	0.00	-0.11	0.00	-0.03	0.01	-0.00	0.02	1.00	0.00	-1.00	-0.11	0.00
81	-0.01	-0.01	-0.00	0.00	-0.01	-0.02	-0.00	0.50	1.00	-0.00	0.01	0.00	-0.00	0.03	0.00	0.00	-0.00	-0.02	0.01	0.00	0.01	0.00	-0.00	-0.00	0.00	0.00	-0.01	0.01	0.00	0.03	0.00
82	-0.00	-0.02	-0.06	0.01	0.50	0.00	-0.01	0.00	0.00	0.03	-0.02	0.00	-0.00	0.00	-0.00	-0.00	0.00	-0.08	0.02	0.08	-0.25	-0.04	0.01	0.00	-0.00	-0.00	0.00	0.50	0.12	0.08	0.00
83	-0.02	-0.01	-0.00	1.00	0.00	1.00	-0.00	0.00	1.00	0.04	0.05	0.25	0.02	-0.41	0.00	0.01	0.02	0.00	0.00	0.19	0.00	0.01	0.00	0.02	0.00	-0.01	0.00	0.00	0.00	1.00	0.00
85	-0.19	-0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	-1.00	0.00	0.10	0.00	-0.02	-0.06	0.00	0.00	0.00	0.00	0.00
86	-0.10	0.12	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.50	0.08	0.00	-0.20	-0.01	0.00	0.03	-1.00	0.00	1.00	0.17	0.00
90	0.00	-0.02	0.00	0.00	0.04	0.00	0.05	0.00	0.00	-0.30	0.01	0.00	0.00	1.00	0.00	-0.17	0.00	0.00	-0.00	-0.11	-0.22	-1.00	0.00	0.00	0.00	0.00	-0.00	0.25	0.02	0.00	0.00
91	-0.00	-0.05	0.00	-0.01	-0.03	-0.50	-0.12	0.00	0.00	0.26	0.08	0.00	0.00	0.00	0.00	0.05	-0.19	-0.00	0.00	1.00	0.00	0.00	0.00	-0.01	0.00	0.02	0.06	0.00	-0.41	0.00	0.00
92	-0.01	-0.04	0.03	0.01	0.08	1.00	0.14	0.00	0.00	0.00	0.07	0.00	-0.06	1.00	0.00	0.10	0.04	0.16	-0.01	0.30	0.19	0.23	-0.25	-0.00	0.00	0.01	-0.02	0.00	-0.05	-0.01	0.04
93	-0.02	0.07	0.01	-0.07	0.04	-0.25	0.16	0.04	-0.09	0.07	-0.00	0.75	0.10	0.25	0.00	0.17	0.06	0.01	-0.14	0.01	-1.00	-0.17	0.75	0.00	0.00	0.01	-0.02	-0.25	0.00	0.00	-1.00
94	0.03	-0.06	0.01	-0.00	-0.01	0.31	-0.00	-0.12	0.17	-0.02	0.04	0.00	0.00	0.00	0.00	0.00	0.12	0.01	0.03	-0.06	-0.20	0.00	0.05	0.01	-0.08	0.03	-0.00	0.14	0.00	-0.01	-0.11

Table 15: Directed overlap scores in 1995–1999

	44	**45**	**46**	**47**	**49**	**51**	**52**	**53**	**54**	**55**	**57**	**58**	**60**	**62**	**65**	**68**	**70**	**74**	**76**	**78**	**80**	**81**	**82**	**83**	**85**	**86**	**90**	**91**	**92**	**93**	**94**
00	0.02	0.17	0.00	0.00	0.02	0.02	0.03	-0.02	0.02	0.07	-0.02	0.00	-0.01	-0.02	-0.01	0.00	-0.00	0.01	0.01	0.03	-0.00	-0.00	0.02	0.01	-0.00	0.04	0.00	-0.00	0.00	-0.02	-0.03
01	-0.15	-0.15	0.02	0.04	0.03	-0.01	0.00	0.02	-0.01	0.02	0.01	-0.02	0.00	0.00	0.00	0.01	0.01	0.00	-0.02	0.03	0.06	0.01	0.02	0.01	-0.07	-0.11	0.03	0.00	0.08	0.08	0.07
03	0.00	-0.10	0.01	-0.00	-0.05	0.02	0.00	-0.01	-0.00	-0.11	0.00	-0.06	-0.01	-0.01	0.00	-0.00	-0.03	0.14	-0.00	-0.22	-0.15	-0.00	-0.10	-0.04	-0.75	-0.75	-0.00	-0.00	0.00	-0.00	0.01
05	0.16	0.75	-0.00	-0.07	0.17	0.00	-0.00	-0.09	0.01	0.00	-0.00	-0.03	-0.00	0.00	-0.02	0.00	0.08	-0.50	0.00	-0.75	0.75	-0.01	0.00	-0.21	0.00	1.00	-0.00	-0.01	-0.00	-0.01	-0.00
06	0.00	0.00	-0.01	-0.00	-0.05	-0.04	-0.02	0.00	-0.00	-0.09	0.03	-0.11	0.06	0.14	-0.30	-0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	-0.48	-1.00	1.00	-0.05	0.03	-0.14	-0.33	-0.01
08	0.00	0.00	1.00	0.00	0.00	0.00	0.75	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	-1.00	-1.00	-0.13
11	0.00	-0.25	0.00	0.00	0.00	0.02	0.01	0.00	0.05	-0.04	-0.01	0.01	-0.01	-0.09	-0.01	-0.00	0.50	-1.00	0.00	0.75	0.00	0.00	-0.01	-0.14	0.00	0.00	0.07	-0.14	-0.01	-1.00	-0.00
12	0.50	0.00	0.03	-0.04	1.00	0.11	1.00	0.00	-0.16	0.00	0.08	0.14	0.04	0.00	-0.04	-0.01	-0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.33	0.00	0.00	-0.08	0.00
13	0.00	0.00	-0.20	0.00	-1.00	-0.14	-0.03	0.23	0.00	-0.02	-0.00	0.08	1.00	0.05	-0.00	0.00	0.06	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	-0.02	-0.03
14	-0.33	0.00	-0.00	-0.20	0.00	-0.00	-0.01	-0.01	0.10	0.01	0.00	-0.00	-0.05	-1.00	0.03	0.00	0.05	0.00	0.00	-0.25	0.00	0.00	-0.06	-0.00	0.00	0.00	0.07	0.00	0.00	-0.08	-0.01
15	0.17	-0.00	0.02	0.00	0.00	0.00	-0.03	-0.02	0.03	0.01	-0.14	-0.03	0.01	0.01	0.00	-0.01	-0.03	0.03	0.00	-0.02	-1.00	-0.01	-0.01	-0.06	0.00	0.00	0.01	0.08	-0.06	-0.00	0.03
16	-1.00	0.00	-0.01	0.04	0.00	-0.09	0.14	0.00	-0.00	-0.01	-0.01	-0.01	-0.06	0.00	-0.06	0.02	0.06	0.00	0.00	0.00	0.00	0.00	0.04	-0.25	0.00	0.00	1.00	0.00	-1.00	-0.21	-0.12
17	0.00	0.00	-0.01	-0.03	0.00	0.05	0.12	-0.01	0.00	0.03	0.00	-0.00	-0.07	-0.50	0.14	-0.01	-0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.00	0.00	0.00	-0.75	0.00	-0.05	-0.08	0.24
18	0.00	0.00	0.00	-0.06	0.00	0.12	0.06	-0.00	-0.00	-0.00	-0.01	-0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	-0.01	-0.00	-0.37	0.00	0.00	0.00	0.33	0.00	0.00	-0.05
19	0.00	0.00	-0.00	-0.00	0.00	0.00	0.16	-0.05	0.08	0.01	0.00	-0.01	-1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00	0.00	0.00	-1.00	0.00	0.00	0.00
20	-0.50	0.00	0.01	-0.05	0.00	0.00	-0.01	-0.01	0.01	0.01	0.00	-0.03	-0.02	-0.11	-0.06	0.00	-0.06	-0.17	0.00	0.00	0.00	-0.00	0.01	0.08	0.00	0.00	0.00	-0.14	0.08	-0.75	-0.02
22	0.00	-0.25	-0.00	0.01	0.19	0.04	0.11	-0.00	-0.00	-0.03	0.01	0.00	-0.01	0.04	-0.08	-0.09	-0.04	-0.25	-0.02	-0.06	0.00	0.00	-0.05	-0.00	0.00	0.00	0.00	-1.00	-0.14	-0.05	-0.13
26	-0.02	-0.02	0.00	-0.01	-0.01	0.00	0.02	0.12	-0.00	0.00	-0.03	-0.00	-0.00	-0.11	0.00	-0.06	0.30	-0.07	-0.11	0.07	-0.25	-0.16	-0.11	0.00	0.00	0.00	-0.01	-0.14	0.00	-0.05	-0.06
28	0.16	0.00	0.00	-0.00	-0.01	-0.09	0.02	-0.00	0.00	-0.30	0.00	-0.00	0.00	0.02	-0.00	0.01	0.00	0.00	-0.09	-1.00	-1.00	-0.02	-0.02	0.00	0.00	-0.33	-0.01	-0.02	-0.32	-0.12	0.03
30	-0.00	0.01	-0.00	-0.00	-0.00	0.00	0.02	-0.01	0.03	0.05	-0.01	-0.00	0.01	-0.50	-0.01	0.00	-0.50	0.03	-0.03	-0.03	1.00	-0.00	-0.08	-0.50	-0.50	-0.50	0.00	0.00	0.00	0.00	-0.08
31	-0.16	0.04	-0.00	0.01	-0.04	0.00	-0.14	-0.03	-0.12	0.00	0.00	-0.01	0.00	0.00	-0.00	0.00	0.22	-0.05	-0.00	-0.04	0.00	0.00	-0.00	0.00	0.75	-0.09	0.00	0.00	0.00	0.00	0.20
32	0.06	0.16	-0.00	-0.01	0.03	0.24	0.03	0.00	0.01	0.00	-0.00	0.00	0.13	0.00	0.11	0.04	0.00	-0.27	0.15	1.00	0.00	-0.00	0.11	-0.01	0.00	-1.00	0.00	0.00	1.00	-0.14	0.00
33	0.01	-0.00	-0.00	-0.01	-0.50	-0.01	-0.01	-0.06	0.00	0.75	-0.00	-0.00	-0.02	-0.04	-0.01	0.05	-0.08	-0.12	0.20	-0.03	0.09	0.00	-0.00	0.00	0.75	-0.41	-1.00	-0.50	-0.09	-0.15	0.06
34	-0.02	0.00	-0.00	-0.00	-0.00	-0.19	-1.00	-0.01	0.00	0.03	0.00	0.00	0.00	-0.04	-0.00	-0.00	-0.00	-0.00	0.00	-0.01	-0.00	0.00	-0.00	-0.02	-0.00	-0.01	-0.00	-0.00	-0.00	-0.00	-0.01
35	0.00	0.00	-0.00	0.00	-0.00	1.00	0.01	0.00	0.02	0.00	-0.02	-0.00	-0.00	-0.09	0.00	0.02	0.00	-0.00	0.00	-0.00	0.00	0.00	0.00	-0.01	-0.02	-0.00	0.00	-0.02	0.00	-0.00	-0.03
37	0.25	0.01	-0.02	0.00	0.00	-0.08	0.05	0.00	0.00	-0.00	0.00	-0.00	0.01	-0.03	0.00	0.01	0.00	-0.00	-0.00	0.01	-0.04	0.00	0.00	-0.01	-0.04	-0.02	-0.07	-0.02	-0.00	-0.01	-0.02
39	-0.03	-0.04	-0.02	-0.00	0.09	0.13	0.00	-0.07	-0.02	0.00	0.32	0.00	-0.03	-0.15	0.00	0.00	-0.07	0.02	0.11	0.21	0.00	0.00	0.00	-0.25	0.00	0.00	-0.23	0.03	0.01	-0.00	-0.04
40	0.08	0.25	0.01	0.02	0.00	0.00	0.00	0.00	-0.15	0.00	0.00	0.00	0.05	1.00	-0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00	-0.50	0.00	-0.27
41	0.00	0.00	0.00	-0.00	-0.02	-0.25	-0.04	-0.32	0.03	0.00	1.00	-0.07	-0.02	-0.03	-0.00	0.00	0.25	-0.12	-0.01	0.01	0.00	-0.08	0.03	0.00	0.00	0.25	-0.02	1.00	0.04	-0.03	-0.02
42	0.01	0.00	-0.00	0.00	-0.08	0.25	0.05	-0.19	0.25	0.00	0.00	-0.05	-0.01	-0.02	0.00	-0.06	-0.19	-0.20	-0.06	-0.00	0.00	0.02	0.06	0.00	0.00	-0.02	-0.50	-0.48	0.06	-0.00	-0.00
43	0.03	0.41	-0.00	0.00	0.00	0.25	-0.50	-0.06	0.05	0.00	0.02	-0.00	-0.01	-0.20	0.16	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00	-0.25	-0.25	-0.75	-0.01
44	0.00	0.00	-0.01	-0.00	-0.17	-1.00	0.06	-0.04	0.00	0.00	0.00	0.06	-0.00	0.11	-0.01	0.00	-0.50	-0.07	-0.14	-0.04	0.25	-0.10	0.17	0.00	-1.00	-0.01	-0.16	0.00	0.01	0.19	-0.03
45	-0.00	0.00	0.02	-0.00	-0.04	0.00	0.00	-0.41	-0.16	0.00	0.00	-0.00	-0.00	0.75	0.00	0.04	-0.11	-0.00	-0.00	0.01	0.00	-0.00	-0.00	0.00	0.00	-0.00	-0.11	-0.16	-0.01	-0.02	0.00
46	0.01	-0.02	0.00	0.00	-0.00	0.05	0.01	-0.00	-0.00	0.00	0.00	0.00	-0.00	0.06	-0.00	0.09	0.00	-0.06	-0.00	0.05	0.00	-0.00	0.01	-0.02	0.00	0.00	-0.00	-0.03	-0.03	-0.00	-0.00
47	0.00	0.00	-0.00	0.00	-0.00	0.00	0.04	0.00	0.00	0.02	0.01	-0.00	0.00	0.00	0.00	-0.00	-0.00	-0.00	-0.00	-0.00	0.00	-0.00	-0.00	-0.00	0.01	-0.00	-0.00	-0.01	0.01	-0.00	-0.00
49	0.17	0.04	0.00	0.00	0.00	-0.15	-0.01	-0.00	0.01	0.00	0.15	0.00	-0.01	0.10	0.00	-0.03	0.01	-0.00	0.00	-0.03	0.03	-0.04	-0.00	-0.33	-1.00	0.08	0.00	0.00	0.02	-0.00	-0.17
51	1.00	0.00	-0.05	0.00	0.15	0.00	-0.01	-0.01	0.04	-0.22	0.00	-0.08	0.12	0.19	-0.03	-0.02	-0.01	-1.00	0.00	0.05	0.00	-0.00	0.02	-0.03	0.25	1.00	-0.01	-1.00	-0.10	0.00	0.01
52	-0.06	0.00	-0.01	-0.04	0.01	0.01	0.00	0.00	-0.00	0.00	0.01	-0.05	0.01	-0.00	0.01	0.00	0.05	-0.02	0.00	-0.33	0.11	-0.01	0.01	0.00	0.00	0.00	-0.01	-0.06	0.05	0.11	-0.05
53	0.04	0.41	0.00	-0.00	0.00	0.01	-0.00	0.00	0.10	0.01	0.00	-0.00	-0.00	0.05	-0.01	-0.02	-0.00	-0.01	-0.02	-0.02	-0.08	-0.00	-0.03	0.00	0.00	-0.14	-0.11	-0.23	0.04	0.04	-0.14
54	0.00	0.16	0.00	-0.00	-0.01	-0.04	0.00	-0.10	0.00	-0.00	0.01	-0.01	0.02	-0.12	0.00	0.01	-0.02	-0.25	-0.05	0.00	-0.11	-0.16	-0.00	-0.11	0.00	0.00	-0.00	-0.01	-0.00	-0.00	0.00
55	0.00	0.00	-0.00	-0.02	0.00	0.22	-0.00	-0.01	0.00	0.00	-0.00	0.00	-0.50	0.00	0.14	0.00	0.00	-0.04	-1.00	0.00	0.00	0.00	-0.37	-0.32	0.00	0.00	-0.33	0.25	0.00	-0.75	0.50
57	0.00	0.00	-0.00	-0.01	-0.15	-0.00	-0.01	-0.00	-0.01	0.00	0.00	0.00	0.00	0.00	-0.02	-0.00	0.08	0.00	-0.02	-0.03	-1.00	-0.00	0.01	-0.01	0.00	0.00	-0.48	-0.75	-0.05	-0.13	0.75
58	-0.06	0.00	-0.00	0.00	-0.00	0.08	0.05	0.00	0.01	-0.00	-0.00	0.00	0.00	0.02	-0.01	0.05	0.00	-0.00	0.00	0.01	0.00	0.00	-0.01	0.00	-0.09	0.08	-0.00	-0.07	-0.05	-0.01	-0.11
60	0.00	0.00	0.00	-0.00	0.01	-0.12	-0.01	0.00	-0.02	0.50	-0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	-0.02	-0.01	0.22	0.50	-0.00	0.00	0.00	0.26	-0.06	0.00	-0.00	-0.00	0.00	0.01
62	-0.11	-0.75	-0.06	-0.00	-0.10	-0.19	0.00	-0.05	0.12	0.00	0.00	-0.02	-0.00	0.00	0.00	-0.01	0.00	0.25	0.11	0.50	0.00	-0.00	0.04	0.00	-1.00	-0.03	0.00	0.00	-0.01	-0.01	0.01
65	0.01	-0.00	0.00	-0.00	-0.00	0.03	-0.01	0.01	-0.00	-0.14	0.02	0.01	-0.00	-0.00	0.00	0.00	-0.00	0.00	0.00	0.00	-0.00	0.01	-0.00	-0.01	0.04	0.01	-0.00	-0.01	-0.01	0.00	0.00
68	-0.00	-0.04	-0.09	0.00	0.03	0.02	-0.00	0.02	-0.01	-0.00	0.00	-0.05	0.00	0.01	-0.00	0.00	-0.02	0.13	-0.08	-0.06	-0.24	-0.00	0.01	0.12	0.33	0.00	0.00	-0.00	0.00	-0.00	-0.00
70	0.50	0.11	-0.00	0.00	-0.01	0.01	-0.05	0.00	0.02	0.00	-0.08	-0.00	-0.00	0.00	0.00	0.02	0.00	0.00	-0.01	-0.00	-0.00	-0.00	0.00	-0.01	0.02	0.09	-0.05	-0.12	-0.07	-0.00	0.01
74	0.07	0.00	0.06	0.00	0.00	1.00	0.02	0.01	0.25	0.04	0.00	0.00	0.02	-0.25	-0.00	-0.13	-0.00	0.00	-0.00	0.01	-0.00	-0.09	0.01	-0.01	-1.00	-0.01	-0.01	0.00	0.02	0.00	0.50
76	0.14	0.00	0.00	0.00	-0.00	0.00	0.00	0.02	0.05	1.00	0.02	-0.00	0.01	-0.11	-0.00	0.08	0.01	0.00	0.00	0.00	-0.00	0.00	-0.00	-0.02	-0.00	-0.00	0.06	0.00	0.01	-0.00	-0.00
78	0.04	-0.01	-0.05	0.00	0.03	-0.05	0.33	0.02	0.00	0.00	0.03	-0.01	-0.22	-0.50	-0.00	0.06	0.00	-0.01	-0.00	0.00	0.02	-0.00	0.01	0.01	0.06	0.02	0.00	1.00	-0.00	-0.00	-0.03
80	-0.25	-0.00	0.00	-0.00	-0.03	0.00	-0.11	0.08	0.11	0.00	1.00	-0.00	-0.50	0.00	0.00	0.24	0.00	0.00	0.00	-0.02	0.00	-0.32	0.00	-0.06	0.16	-0.04	-0.19	-0.75	-0.02	-0.06	0.44
81	0.10	0.00	0.00	0.00	0.04	0.00	0.01	0.00	0.16	-0.00	0.00	-0.00	0.00	0.00	-0.01	0.00	0.00	0.09	-0.00	0.00	0.32	0.00	0.00	0.00	-0.12	0.00	0.15	0.10	-0.02	0.07	0.01
82	-0.17	0.00	-0.01	0.00	0.00	-0.02	-0.01	0.03	0.00	0.37	-0.01	0.01	-0.00	-0.04	0.00	-0.01	-0.00	-0.01	0.00	-0.01	-0.00	-0.00	0.00	0.00	0.00	-0.10	0.02	0.00	-0.00	-0.07	-0.02
83	0.00	0.00	0.02	0.00	0.33	0.03	0.00	-0.00	0.11	0.32	0.01	-0.00	0.00	0.00	0.01	-0.12	0.01	0.01	0.02	-0.01	0.06	-0.00	-0.00	0.00	0.03	-0.33	0.00	0.00	0.00	-1.00	0.00
85	1.00	-0.00	0.00	-0.01	1.00	-0.25	0.00	0.00	0.00	0.00	0.00	0.09	-0.26	1.00	-0.04	-0.33	-0.02	1.00	0.00	-0.06	-0.16	0.12	-0.00	-0.03	0.00	-0.00	0.00	0.00	0.50	0.00	1.00
86	0.01	0.00	0.00	0.00	-0.08	-1.00	0.00	0.14	0.00	0.00	0.00	-0.08	0.06	0.03	-0.01	0.00	-0.09	0.01	0.00	-0.02	0.04	0.00	0.10	0.33	0.00	0.00	0.15	0.50	0.15	0.00	0.00
90	0.16	0.11	0.00	0.00	-0.00	0.01	0.01	0.11	0.00	0.33	0.48	0.00	-0.00	-0.00	0.00	-0.00	0.05	0.01	-0.06	-0.00	0.19	-0.15	-0.02	0.00	0.00	-0.15	0.00	0.00	-0.01	-0.00	-0.00
91	0.00	0.16	0.03	0.01	-0.00	1.00	0.06	0.23	0.01	-0.25	0.75	0.07	0.00	-0.00	0.01	0.00	0.12	0.00	0.00	-1.00	0.75	-0.10	-0.00	0.00	0.00	-0.50	-0.00	0.00	-0.01	0.00	0.04
92	-0.01	0.01	0.03	-0.01	-0.02	0.10	-0.05	-0.04	0.00	0.00	0.05	0.05	0.00	0.01	0.01	-0.00	0.07	-0.02	-0.01	0.00	0.02	0.02	0.00	0.00	-0.50	-0.15	0.01	0.01	0.00	0.01	0.02
93	-0.19	0.02	0.00	0.00	0.00	0.00	-0.11	-0.04	0.00	0.75	0.13	0.01	-0.00	0.01	-0.00	0.00	0.00	-0.00	0.00	0.00	0.06	-0.07	0.07	1.00	0.00	-0.00	0.00	-0.00	-0.01	0.00	-0.01
94	0.03	-0.00	0.00	0.00	0.17	-0.01	0.05	0.14	0.00	-0.50	-0.75	0.11	-0.01	-0.01	-0.00	0.00	-0.01	-0.50	0.00	0.03	-0.44	-0.01	0.02	0.00	-1.00	0.00	0.00	-0.04	-0.02	0.01	0.00

Table 16: Directed overlap scores in 1995–1999, cont.

	00	**01**	**03**	**05**	**06**	**08**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**22**	**26**	**28**	**30**	**31**	**32**	**33**	**34**	**35**	**37**	**39**	**40**	**41**	**42**	**43**
00	0.00	-0.00	0.00	-0.01	0.10	0.24	0.00	0.07	0.05	-0.03	-0.03	0.03	0.00	0.05	0.19	0.01	0.06	-0.00	-0.00	0.02	0.12	-0.03	0.00	0.01	-0.00	0.02	0.09	0.32	-0.03	-0.00	0.14
01	0.00	0.00	-0.00	-0.01	0.07	0.14	-0.01	0.03	0.05	0.00	-0.03	0.04	0.08	-0.01	0.15	0.02	0.05	0.01	-0.04	0.01	0.14	0.00	-0.04	-0.02	0.02	0.00	0.10	0.09	0.05	-0.04	-0.19
03	-0.00	0.00	0.00	0.00	-0.00	-0.00	0.01	0.01	-0.02	-0.02	-0.02	-0.01	0.14	0.00	0.11	-0.00	0.00	0.01	0.00	0.08	0.25	0.07	1.00	-0.00	-0.04	0.00	-0.06	0.08	-0.08	-0.08	-0.07
05	0.01	0.01	-0.00	0.00	-0.00	-0.05	0.00	0.05	-0.00	-0.00	-0.00	-0.02	-0.00	-0.00	-0.19	0.00	0.00	0.08	-0.04	0.05	0.06	-0.15	-0.00	-0.00	0.10	0.00	0.00	-0.14	-0.06	0.07	-0.07
06	-0.10	-0.07	0.00	0.00	0.00	0.00	0.06	-0.10	-0.02	0.09	-0.04	-0.01	-0.01	-0.01	0.02	-0.00	-0.10	0.07	0.02	-0.15	0.41	0.00	0.00	-0.07	0.00	0.19	0.00	0.00	0.00	0.00	0.00
08	-0.24	-0.14	0.00	0.05	-0.00	0.00	0.00	0.00	0.30	0.08	0.15	-0.03	0.02	-0.01	-1.00	-0.01	-0.15	0.00	-0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	-0.00	0.01	-0.01	-0.00	-0.06	0.00	0.00	0.00	0.01	-0.00	-0.01	0.00	0.01	-0.00	0.00	0.00	0.00	0.00	-0.01	-0.01	0.07	-0.01	0.00	0.00	-0.00	-0.01	0.02	0.04	0.03	-0.01	0.00
12	-0.07	-0.03	-0.01	-0.05	0.10	0.00	-0.00	0.00	-0.01	-0.01	0.06	0.01	0.44	-0.25	0.00	0.01	1.00	0.03	0.00	0.02	0.00	0.00	-0.06	-0.01	-0.07	-0.08	-0.06	0.00	0.20	-0.04	-0.25
13	-0.05	-0.05	0.02	0.00	0.02	-0.30	-0.01	0.01	0.00	0.00	0.00	0.01	0.04	0.00	0.00	-0.00	0.20	-0.11	0.00	0.11	0.00	0.03	-0.01	-0.01	-0.08	-0.16	0.12	0.00	-0.09	0.00	0.00
14	0.03	-0.00	0.02	0.00	-0.09	-0.08	0.00	0.01	-0.00	0.00	0.03	0.01	-0.01	-0.01	0.01	-0.00	0.01	-0.04	0.00	-0.01	-0.50	-0.00	0.00	-0.02	0.02	-0.00	0.01	0.00	-0.25	0.00	0.00
15	0.03	0.03	0.02	0.00	0.04	-0.15	0.01	-0.06	-0.00	-0.03	0.00	-0.01	-0.02	-0.09	-0.50	-0.01	0.04	0.02	0.15	0.02	-0.33	-0.02	0.03	0.00	-0.05	-0.04	-0.00	0.16	0.03	-0.03	0.00
16	-0.03	-0.04	0.01	0.02	0.01	0.03	-0.00	-0.01	-0.01	-0.01	0.01	0.00	-0.00	0.00	0.01	0.00	0.00	0.02	0.00	-0.05	0.00	-0.00	-0.00	-0.09	0.01	-0.04	0.23	0.00	-1.00	0.00	-0.04
17	-0.00	-0.08	-0.14	0.00	0.01	-0.02	-0.01	-0.44	-0.04	0.01	0.02	0.00	0.00	-0.01	-0.06	-0.00	-0.00	-0.50	0.00	0.30	1.00	-0.01	-0.01	-0.02	0.01	-0.00	0.02	0.00	0.25	0.00	0.06
18	-0.05	0.01	-0.00	0.00	0.01	0.01	0.00	0.25	-0.00	0.01	0.09	-0.00	0.01	0.00	-0.01	-0.01	-0.00	0.00	0.11	0.00	0.00	-0.11	0.00	-0.25	0.00	0.02	-1.00	0.00	0.00	-1.00	0.37
19	-0.19	-0.15	-0.11	0.19	-0.02	1.00	-0.00	-0.00	-0.00	-0.01	0.50	-0.01	0.06	0.01	0.00	0.01	0.02	0.00	0.20	0.00	0.00	-0.13	0.17	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
20	-0.01	-0.02	0.00	-0.00	0.00	0.01	-0.00	-0.01	0.00	0.00	0.01	-0.00	0.00	0.01	-0.01	0.00	-0.00	0.19	0.06	-0.01	-0.12	-0.00	-0.03	-0.09	0.03	0.02	-0.05	0.00	0.00	-0.14	-0.02
22	-0.06	-0.05	-0.00	-0.00	0.10	0.15	-0.00	-1.00	-0.20	-0.01	-0.04	-0.00	0.00	0.00	-0.02	0.00	0.00	-0.14	0.00	-0.00	-0.05	-0.01	0.00	-0.03	0.01	-0.01	0.00	-0.14	0.01	-0.00	-0.00
26	0.00	-0.01	-0.01	-0.08	-0.07	0.00	-0.00	-0.03	0.11	0.04	-0.02	-0.02	0.50	0.00	0.00	-0.19	0.14	0.00	0.00	-0.01	0.03	-0.00	0.00	-0.00	0.01	-0.02	-0.00	-0.02	-0.01	-0.01	0.07
28	0.00	0.04	-0.00	0.04	-0.02	0.04	0.01	0.00	0.00	0.00	-0.15	0.00	0.00	-0.11	-0.20	-0.06	-0.00	-0.00	0.00	-0.00	0.02	-0.50	-0.02	-0.00	-0.02	-0.00	0.03	-0.00	-0.05	0.01	0.00
30	-0.02	-0.01	-0.08	-0.05	0.15	0.00	0.01	-0.02	-0.11	0.01	-0.02	0.05	-0.30	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	-0.00	-0.01	-0.01	0.00	-0.01	-0.01	-0.02	0.00	-0.00	0.00
31	-0.12	-0.14	-0.25	-0.06	-0.41	0.00	-0.07	0.00	0.00	0.50	0.33	0.00	-1.00	0.00	0.00	0.12	0.05	-0.03	-0.02	-0.00	0.00	-0.01	-0.00	-0.17	0.00	-0.11	0.07	1.00	-0.00	0.01	0.03
32	0.03	-0.00	-0.07	0.15	0.00	0.00	0.01	-0.00	-0.03	0.00	0.02	0.00	0.01	0.11	0.13	0.00	0.01	0.00	0.50	0.00	0.01	0.00	0.00	-0.00	-0.00	0.01	0.05	-0.14	0.04	0.03	0.04
33	-0.00	0.04	-1.00	0.00	0.00	0.00	-0.00	0.06	0.01	-0.00	-0.03	0.00	0.01	0.00	-0.17	0.03	-0.00	-0.00	0.02	0.01	0.00	-0.00	0.00	-0.00	-0.01	0.00	0.00	0.02	0.01	-0.00	-0.00
34	-0.01	0.02	0.00	0.00	0.07	0.00	-0.00	0.01	0.01	0.02	-0.00	0.09	0.02	0.25	0.00	0.09	0.03	0.00	0.00	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	-0.09	-0.02	0.00	0.14
35	0.00	-0.02	0.04	-0.10	0.00	0.00	0.00	0.07	0.08	-0.02	0.05	-0.01	-0.01	0.00	0.00	-0.03	-0.01	-0.01	0.02	-0.00	-0.00	0.00	0.01	-0.00	0.00	-0.00	0.01	-0.11	0.02	0.01	0.02
37	-0.02	-0.00	-0.00	-0.00	-0.19	0.00	0.01	0.08	0.16	0.00	0.04	0.04	0.00	-0.02	-0.01	-0.02	0.01	0.02	0.00	0.01	0.11	-0.01	-0.00	-0.00	0.00	0.00	-0.00	0.50	-0.02	0.00	0.14
39	-0.09	-0.10	0.06	-0.00	0.00	0.00	-0.02	0.06	-0.12	-0.01	0.00	-0.23	-0.02	1.00	0.00	0.05	-0.00	0.00	-0.03	0.01	-0.07	-0.05	-0.00	-0.00	-0.01	0.00	0.00	0.06	-0.02	0.00	0.06
40	-0.32	-0.09	-0.08	0.14	0.00	0.00	-0.04	0.00	0.00	0.00	-0.16	0.00	0.00	0.00	0.00	0.00	0.14	0.02	0.00	0.02	-1.00	0.14	-0.02	0.09	0.11	-0.50	-0.06	0.00	-0.03	0.01	0.14
41	0.03	-0.05	0.08	0.06	0.00	0.00	-0.03	-0.20	0.09	0.25	-0.03	1.00	-0.25	0.00	0.00	0.00	-0.01	0.01	0.05	-0.00	0.00	-0.04	-0.01	0.02	-0.02	0.02	0.02	0.03	0.00	-0.00	0.00
42	0.00	0.04	0.08	-0.07	0.00	0.00	0.01	0.04	0.00	0.00	0.03	0.00	0.00	1.00	0.00	0.14	0.00	0.01	-0.01	0.00	-0.01	-0.03	0.00	-0.00	-0.01	-0.00	-0.00	-0.01	0.00	0.00	0.00
43	-0.14	0.19	0.07	0.07	0.00	0.00	-0.00	0.25	0.00	0.00	0.00	0.04	-0.06	-0.37	0.00	0.02	0.00	-0.07	-0.00	-0.00	-0.03	-0.04	0.00	-0.14	-0.02	-0.14	-0.06	-0.14	-0.00	-0.00	0.00
44	-0.02	0.15	0.00	-0.16	0.00	0.00	-0.00	-0.50	0.00	0.33	-0.17	1.00	0.00	0.00	0.00	0.50	-0.00	0.02	-0.16	0.00	0.16	-0.06	-0.01	0.02	-0.00	-0.25	0.03	-0.08	-0.00	-0.01	-0.03
45	-0.17	0.15	0.10	-0.75	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.02	-0.00	-0.01	-0.04	-0.16	0.00	-0.00	-0.00	-0.01	0.04	-0.25	-0.00	-0.00	-0.41
46	-0.00	-0.02	-0.01	0.00	0.01	-1.00	-0.00	-0.03	0.20	0.00	-0.02	0.01	0.01	-0.00	0.00	-0.01	0.00	-0.00	-0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	-0.01	-0.00	0.00	0.00
47	-0.00	-0.04	0.00	0.07	0.00	0.00	-0.00	0.04	0.00	0.20	-0.00	-0.04	0.03	0.06	0.00	0.05	-0.01	0.01	0.00	0.00	-0.01	0.01	0.01	0.00	-0.00	-0.00	0.00	-0.02	0.00	-0.00	-0.00
49	-0.02	-0.03	0.05	-0.17	0.05	0.00	0.00	-1.00	1.00	0.00	-0.00	0.00	0.00	0.00	0.00	0.00	-0.19	0.01	0.01	0.00	0.04	-0.03	0.50	0.00	0.00	-0.00	-0.09	0.00	0.02	0.08	0.00
51	-0.02	0.01	-0.02	-0.00	0.04	0.00	-0.02	-0.11	0.14	0.00	-0.00	0.09	-0.05	-0.12	0.00	-0.00	-0.04	-0.00	0.09	-0.00	0.00	-0.24	0.01	0.19	-1.00	0.08	-0.13	0.00	0.25	-0.25	-0.25
52	-0.03	-0.00	-0.00	0.00	0.02	-0.75	-0.01	-1.00	0.03	0.01	0.03	-0.14	-0.12	-0.06	-0.16	0.01	-0.11	-0.02	-0.02	-0.02	0.14	-0.03	0.01	1.00	-0.01	-0.05	-0.00	0.00	0.04	-0.05	0.50
53	0.02	-0.02	0.01	0.09	0.00	0.00	-0.00	0.00	-0.23	0.01	0.02	-0.00	0.01	0.00	0.05	0.01	0.00	-0.12	0.00	0.01	0.03	-0.00	0.06	0.01	-0.00	-0.00	0.07	0.00	0.32	0.19	0.06
54	-0.02	0.01	0.00	-0.01	0.00	-0.00	-0.05	0.16	-0.00	-0.10	-0.03	0.00	0.00	0.00	-0.08	-0.01	0.00	0.00	-0.00	-0.03	0.12	-0.01	0.00	-0.00	-0.02	-0.00	0.02	0.15	-0.03	-0.25	-0.05
55	-0.07	-0.02	0.11	-0.00	0.09	-0.75	0.04	0.00	0.02	-0.01	-0.01	0.01	-0.03	0.00	-0.01	-0.01	0.03	0.00	0.30	-0.05	0.00	-0.00	-0.75	-0.03	0.00	0.00	0.00	0.00	-0.00	0.00	0.00
57	0.02	-0.01	-0.00	0.00	-0.03	0.00	0.01	-0.08	0.00	-0.00	0.14	0.01	-0.00	0.01	-0.00	-0.00	-0.01	0.03	-0.00	0.01	0.00	0.00	0.00	-0.00	0.02	-0.00	-0.32	0.00	-1.00	0.00	-0.02
58	-0.00	0.02	0.06	0.03	0.11	0.00	-0.01	-0.14	-0.08	0.00	0.03	0.01	0.00	0.00	0.01	0.03	-0.00	0.00	0.00	0.00	0.01	-0.00	0.00	-0.00	0.00	0.00	-0.00	0.00	0.07	0.05	0.00
60	0.01	-0.00	0.01	0.00	-0.06	0.00	0.01	-0.04	-1.00	0.05	-0.01	0.06	0.07	0.00	1.00	0.02	0.01	0.00	-0.00	-0.01	-0.00	-0.13	0.02	-0.00	0.00	-0.01	0.03	-0.05	0.02	0.01	0.01
62	0.02	-0.00	0.01	-0.00	-0.14	0.00	0.09	0.00	-0.05	1.00	-0.01	0.00	0.50	0.00	0.00	0.11	-0.04	0.11	-0.02	0.50	0.00	0.00	0.04	0.04	0.09	0.03	0.15	-1.00	0.03	0.02	0.20
65	0.01	-0.00	-0.00	0.02	0.30	0.00	0.01	0.04	0.00	-0.03	-0.00	0.06	-0.14	0.00	0.00	0.06	0.08	-0.00	0.00	0.01	0.00	-0.11	0.01	0.00	-0.00	-0.00	-0.00	0.04	0.00	-0.00	-0.16
68	-0.00	-0.01	0.00	-0.00	0.00	0.00	0.00	0.01	-0.00	-0.00	0.01	-0.02	0.01	0.01	0.00	-0.00	0.09	0.06	-0.01	-0.00	0.00	-0.04	-0.05	0.00	-0.02	-0.01	-0.00	0.00	-0.00	0.06	-0.50
70	0.00	-0.01	0.03	-0.08	0.00	0.00	-0.50	0.00	-0.06	-0.05	0.03	-0.06	0.00	0.00	0.00	0.06	0.04	-0.30	0.00	0.50	-0.22	-0.00	0.08	0.00	-0.00	-0.00	0.07	0.00	-0.25	0.19	0.00
74	-0.01	-0.00	-0.14	0.50	0.00	0.00	1.00	0.00	0.00	0.00	-0.03	0.00	0.00	0.00	0.00	0.17	0.25	0.07	-0.00	-0.03	0.05	0.27	0.12	0.00	0.00	0.00	-0.02	0.00	0.12	0.20	0.00
76	-0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.11	0.09	0.03	0.00	-0.15	-0.20	-0.00	-0.00	0.00	-0.11	0.00	0.01	0.06	0.00
78	-0.03	-0.03	0.22	0.75	0.00	0.00	-0.75	0.00	0.00	0.25	0.02	0.00	0.00	0.00	0.00	0.00	0.06	-0.07	1.00	0.03	0.04	-1.00	0.03	0.01	0.00	-0.01	-0.21	0.00	-0.01	0.00	0.00
80	0.00	-0.06	0.15	-0.75	0.00	0.00	0.00	0.00	-1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	1.00	-1.00	0.00	0.00	-0.09	0.00	-0.00	0.04	0.00	0.00	0.00	0.00	0.00
81	0.00	-0.01	0.00	0.01	0.01	-0.01	-0.00	-0.25	0.00	-0.00	0.01	-0.00	-0.00	0.01	0.00	0.00	-0.00	0.16	0.02	0.00	-0.00	0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.23	0.08	-0.02	-0.00
82	-0.02	-0.02	0.10	-0.00	0.00	0.00	0.01	0.00	0.00	0.06	0.01	-0.04	-0.00	0.00	0.00	-0.01	0.05	0.11	0.02	0.08	0.00	-0.11	0.00	0.00	-0.00	-0.00	-0.00	0.00	-0.03	-0.06	-0.44
83	-0.01	-0.01	0.04	0.21	0.48	0.00	0.14	0.00	0.00	0.00	0.06	0.25	0.00	0.37	0.00	-0.08	0.00	0.00	0.00	0.50	0.00	0.01	-0.00	0.02	0.01	0.01	0.25	0.00	0.00	0.00	0.00
85	0.00	0.07	0.75	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	-0.75	0.00	-0.75	0.00	0.02	0.04	0.00	0.00	0.00	0.00	0.00
86	-0.04	0.11	0.75	-1.00	-1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.50	0.09	1.00	0.41	0.01	0.00	0.02	0.00	0.00	-0.25	0.02	0.00
90	-0.00	-0.03	0.00	0.00	0.05	0.00	-0.07	-0.33	-0.08	-0.07	-0.01	-1.00	0.75	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	1.00	0.00	-0.00	0.07	0.23	0.00	0.02	0.50	0.00
91	0.00	-0.00	0.00	0.01	-0.03	0.00	0.14	0.00	0.00	0.00	-0.08	0.00	0.00	-0.33	1.00	0.14	1.00	0.14	0.02	0.00	0.00	0.00	0.50	0.00	0.02	0.02	-0.03	0.00	-1.00	0.48	0.25
92	-0.00	-0.08	-0.00	0.00	0.14	1.00	0.01	0.00	0.00	0.00	0.06	1.00	0.05	0.00	0.00	-0.08	0.14	0.00	0.32	0.00	0.00	-1.00	0.09	0.00	-0.00	0.00	-0.01	0.50	-0.04	-0.06	0.25
93	0.02	-0.08	0.00	0.01	0.33	1.00	1.00	0.08	0.02	0.08	0.00	0.21	0.08	0.00	0.00	0.75	0.05	0.05	0.12	-0.00	0.00	0.14	0.15	0.00	0.00	0.01	0.00	0.00	0.03	0.00	0.75
94	0.03	-0.07	-0.01	0.00	0.01	0.13	0.00	-0.00	0.03	0.01	-0.03	0.12	-0.24	0.05	0.00	0.02	0.13	0.06	-0.03	0.08	-0.20	0.00	-0.06	0.01	0.03	0.02	0.04	0.27	0.02	0.00	0.01

Table 17: Directed overlap scores in 2000–2004

	44	**45**	**46**	**47**	**49**	**51**	**52**	**53**	**54**	**55**	**57**	**58**	**60**	**62**	**65**	**68**	**70**	**74**	**76**	**78**	**80**	**81**	**82**	**83**	**85**	**86**	**90**	**91**	**92**	**93**	**94**
00	0.20	0.04	0.01	0.01	-0.02	0.02	0.02	0.00	-0.03	0.09	0.02	0.01	0.01	-0.01	-0.01	-0.00	0.00	-0.01	0.01	0.06	0.10	-0.00	-0.01	0.01	0.20	-0.14	-0.00	0.01	-0.00	0.00	0.00
01	0.25	0.29	0.03	0.04	-0.00	0.01	-0.04	0.02	0.03	-0.06	0.03	0.04	0.01	0.01	-0.02	0.01	0.01	-0.04	0.02	0.03	0.12	0.00	-0.02	-0.01	0.06	0.14	-0.02	-0.01	0.03	0.05	-0.02
03	0.00	-0.50	0.01	-0.00	0.08	0.01	0.03	0.10	-0.00	0.03	-0.00	0.07	-0.01	0.01	0.00	-0.00	-0.00	-0.33	-0.11	1.00	-1.00	-0.00	-0.01	-0.12	0.00	0.00	0.01	0.00	-0.05	-0.01	0.01
05	-0.09	-0.22	-0.02	-0.00	0.00	-0.00	0.00	0.03	0.01	0.02	-0.00	0.00	-0.00	-0.00	-0.01	-0.00	-0.01	-0.33	0.00	0.00	0.00	-0.01	-0.00	0.11	0.00	0.00	-0.00	-0.00	-0.00	-0.00	-0.00
06	0.00	0.00	-0.01	0.03	0.02	0.00	0.01	1.00	-0.00	0.00	-0.00	-0.25	0.04	-0.12	-0.25	-0.00	0.00	0.00	0.00	0.00	1.00	-0.01	-0.02	-0.75	0.00	0.00	-0.04	0.01	-0.07	-0.21	-0.01
08	0.00	0.00	-0.11	0.00	0.00	0.04	-1.00	0.00	0.00	0.04	0.00	0.00	-0.07	0.50	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	-0.07	0.00	0.00	0.00	0.00	0.00	-0.19	-1.00	0.00	0.22
11	0.08	0.00	0.01	0.02	0.50	0.02	-0.00	-0.00	-0.01	-0.00	-0.01	-0.01	0.01	0.04	0.01	0.00	0.01	0.00	0.04	-0.19	-1.00	-0.00	-0.01	-0.00	0.00	0.00	0.06	0.09	-0.00	-0.75	-0.00
12	0.00	0.00	0.04	0.14	-0.37	0.04	0.00	-0.11	-0.12	-0.33	-0.14	0.01	-0.02	0.00	0.00	-0.01	-0.13	0.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00	0.00	-0.04	-0.32	0.22	-0.12	0.04
13	0.00	0.00	-0.00	-0.41	0.00	-0.00	0.00	-0.17	-0.09	0.02	-0.09	-0.09	-0.05	-0.07	0.02	0.00	-0.25	0.00	0.00	0.00	0.00	0.13	1.00	0.00	0.00	0.00	-0.00	0.00	-0.33	-0.06	0.02
14	0.13	0.00	0.00	-0.12	0.50	-0.02	-0.00	0.00	-0.75	-0.01	0.00	-0.00	0.03	-0.25	-0.01	0.00	0.00	0.00	-0.15	-1.00	0.00	-0.00	-0.00	-0.00	0.00	-1.00	0.12	0.17	-0.25	-0.07	-0.00
15	-0.10	0.00	0.01	0.00	0.00	0.00	-0.02	0.00	0.13	0.02	0.01	-0.03	-0.00	-0.01	-0.00	-0.01	-0.02	-0.04	0.00	-0.09	0.00	-0.01	-0.01	-0.03	0.00	-0.25	-0.00	-0.00	0.04	0.00	-0.01
16	-1.00	0.00	-0.01	-0.02	0.00	0.27	-0.08	-0.00	-0.03	0.01	0.01	-0.01	-0.13	0.00	0.19	0.01	-0.33	0.00	0.00	0.00	0.00	-0.00	-0.00	-0.03	0.00	0.00	-0.02	0.00	-0.11	-0.08	-0.05
17	-0.50	0.00	-0.00	-0.00	-0.25	-0.05	0.07	-0.00	0.00	0.03	-0.01	0.01	-0.00	-1.00	-0.20	-0.04	-0.00	0.00	-0.01	0.11	0.00	-0.00	0.01	-0.00	0.00	0.00	0.02	-0.25	0.12	-0.09	0.00
18	0.00	0.00	-0.01	0.75	0.00	-0.22	0.07	-0.00	-0.00	-0.00	-0.00	-0.02	-0.17	0.00	-1.00	0.00	0.00	1.00	0.00	-0.25	0.00	-0.01	-1.00	-0.16	0.00	0.00	-1.00	-0.00	0.00	-1.00	-0.05
19	0.00	0.00	-0.00	0.00	0.00	0.50	0.09	-0.00	0.00	0.01	0.01	-0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	-0.04	0.00	0.00	0.00	0.00	0.00	0.00	-1.00	0.00
20	-0.11	0.00	-0.01	-0.03	-0.04	-0.00	0.01	-0.01	0.01	-0.00	-0.00	-0.02	-0.01	0.12	0.11	0.00	-0.75	-0.75	0.00	-1.00	0.00	-0.01	0.02	0.11	0.00	0.00	0.16	-0.03	-0.04	-0.13	-0.01
22	-0.01	0.00	0.00	-0.01	-0.00	0.00	0.21	-0.00	0.00	-0.00	-0.00	0.00	-0.01	0.00	-0.07	-0.10	-0.03	0.00	-0.25	-0.11	0.00	-0.00	0.00	-0.08	0.00	0.00	0.00	-0.05	0.03	-0.06	-0.06
26	0.01	-0.01	0.00	0.00	0.00	0.06	-0.01	-0.04	0.00	0.75	0.25	-0.00	-0.01	-0.03	0.01	0.04	-0.09	-0.00	0.07	0.14	-0.02	-0.00	-0.00	0.00	0.00	-0.26	-0.00	-0.03	0.11	-0.05	0.02
28	-0.06	-0.25	-0.00	-0.00	0.01	-0.14	-0.02	0.03	-0.00	1.00	-0.08	0.01	-0.00	-0.01	0.03	-0.01	0.00	-0.06	-0.07	-0.48	-0.04	-0.00	-0.01	-0.25	0.00	-0.07	0.00	-0.01	0.00	0.01	-0.01
30	0.01	-0.00	0.00	0.00	0.02	0.04	0.03	-0.01	-0.00	0.21	0.01	-0.01	-0.01	-0.09	0.00	-0.00	0.00	-0.00	-0.00	0.00	-0.07	0.02	-0.03	-0.12	0.00	-0.25	-0.11	-0.75	0.00	0.00	-0.00
31	-0.05	-0.00	0.00	-0.00	-0.03	0.21	0.00	-0.02	0.14	0.00	0.00	-0.00	-0.00	-0.41	-0.00	-1.00	-0.08	-0.05	0.00	0.00	1.00	0.08	-0.00	-0.25	0.00	0.20	-0.41	0.00	-0.00	0.16	0.11
32	-0.07	0.20	-0.00	-0.00	-0.17	0.20	0.02	0.00	0.03	0.02	0.00	-0.00	0.11	0.00	0.37	0.00	0.00	0.00	0.00	0.00	0.00	-0.00	0.08	-0.02	-1.00	0.00	-0.44	0.00	0.00	0.01	0.27
33	0.01	0.02	0.01	0.00	0.00	0.33	-0.06	0.00	1.00	0.00	-0.00	-0.00	-0.01	-0.02	0.00	0.02	-0.08	0.02	-0.00	-0.02	-0.12	0.00	-0.00	-0.04	-0.16	0.17	-0.00	-0.04	-0.00	0.00	-0.02
34	-0.02	0.00	-0.01	-0.00	-0.00	0.00	0.01	-0.00	0.02	0.00	0.05	0.00	-0.00	-0.00	-0.00	0.01	-0.00	0.00	-0.00	-0.01	0.01	0.00	-0.00	-0.03	-0.07	0.03	-0.01	-0.00	0.00	-0.00	-0.01
35	0.01	0.00	0.00	-0.00	0.00	0.00	-0.04	-0.00	-0.00	0.44	-0.00	0.00	-0.00	-0.00	-0.00	0.01	0.01	-0.00	0.00	0.00	-0.00	-0.00	-0.00	-0.01	-0.02	-0.00	-0.01	0.00	0.00	-0.00	0.01
37	0.25	0.04	0.00	0.00	-0.01	-0.00	0.00	-0.00	0.00	0.01	0.00	0.00	-0.00	-0.01	-0.00	0.00	0.00	-0.01	0.00	0.00	-0.02	-0.00	-0.00	-0.01	-0.04	-0.01	0.00	0.01	-0.00	0.00	-0.00
39	0.08	-0.03	0.01	-0.00	-0.04	-0.04	0.05	-0.05	-0.00	0.00	-0.19	0.04	-0.00	0.09	-0.00	0.00	-0.04	0.01	-0.00	-0.07	0.00	-0.00	-0.01	-0.24	1.00	0.26	-0.01	-0.00	-0.00	-0.01	0.00
40	-0.07	0.25	0.00	-0.00	-0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.04	0.50	0.04	-0.25	0.00	-1.00	-0.25	-0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.00	0.00	1.00	-0.27
41	0.03	-0.03	0.00	-0.00	0.01	-0.27	0.03	0.01	0.00	0.25	0.50	0.05	-0.02	-0.00	0.00	0.00	-0.37	-0.00	-0.01	0.00	0.33	-0.04	-0.09	0.00	0.00	0.15	0.01	-0.07	0.06	-0.00	0.01
42	-0.00	0.02	0.00	0.00	-0.05	0.33	0.02	-0.00	0.03	0.00	0.48	-0.02	-0.01	-0.01	-0.00	0.00	-0.24	-0.12	-0.00	0.04	0.00	0.01	0.00	1.00	0.00	-0.06	-0.11	-0.00	-0.05	-0.00	0.00
43	0.00	0.17	-0.00	-0.01	-0.19	0.75	0.02	-0.03	0.08	0.00	0.20	0.00	-0.01	-0.08	0.09	0.03	-0.03	-1.00	1.00	0.00	0.00	-0.01	-0.00	-0.27	0.00	0.25	0.00	0.00	0.00	-0.25	-0.00
44	0.00	0.02	-0.00	-0.00	0.14	-0.25	-0.02	-0.03	0.00	0.00	0.00	-0.00	-0.00	-0.03	-0.01	0.06	0.00	-0.00	0.01	0.00	-0.16	-0.04	-0.07	-1.00	-1.00	0.00	0.00	-0.10	-0.00	0.15	-0.02
45	-0.02	0.00	0.00	0.00	-0.00	0.00	1.00	-0.33	0.00	0.00	0.00	-0.00	-0.01	0.01	-0.00	0.26	0.00	-0.01	-0.00	-0.01	-0.00	0.06	-0.01	0.00	0.04	-0.33	0.00	-0.00	-0.01	-0.02	-0.12
46	0.00	-0.00	0.00	-0.00	0.00	0.00	0.00	0.01	-0.00	-0.00	0.02	0.00	0.00	-0.03	-0.01	-0.03	-0.32	0.00	0.04	-0.00	-0.07	-0.00	0.00	0.00	0.00	0.00	-0.00	-0.02	-0.00	-0.03	-0.00
47	0.00	-0.00	0.00	0.00	-0.00	0.33	0.01	-0.03	-0.00	-0.02	-0.00	-0.00	0.00	-0.03	-0.00	-0.00	-0.03	0.00	-0.00	0.00	-0.00	-0.00	-0.00	-0.02	-0.00	-0.00	0.00	-0.00	-0.00	-0.00	-0.00
49	-0.14	0.00	-0.00	0.00	0.00	-0.14	0.00	0.00	0.01	0.00	0.07	0.00	0.00	-0.03	0.00	-0.02	0.00	0.00	0.00	-0.01	-0.00	-0.02	-0.01	-0.02	-0.04	-0.04	-0.00	-0.00	0.01	0.00	0.00
51	0.25	0.00	-0.00	-0.33	0.14	0.00	-0.00	-0.01	0.00	-0.00	-0.02	-0.06	-0.09	-0.20	-0.02	-0.01	-0.05	0.00	0.25	0.00	0.00	-0.01	0.00	-0.00	0.00	-0.25	-0.01	-0.33	0.06	0.00	-0.00
52	0.02	-1.00	-0.00	-0.01	-0.00	0.00	0.00	0.01	0.00	0.02	-0.01	-0.00	-0.01	-0.03	-0.01	-0.00	0.04	-0.19	0.00	0.07	1.00	-0.05	-0.01	0.00	-1.00	-0.75	-0.00	-0.00	-0.03	-0.25	-0.00
53	0.03	0.33	-0.01	0.03	-0.00	0.01	-0.01	0.00	0.04	0.00	0.00	-0.00	0.00	-0.04	0.01	-0.02	0.00	0.01	-0.02	0.00	-0.07	-0.00	-0.02	0.00	-0.50	0.19	0.01	-0.08	0.00	-0.02	-0.06
54	0.00	-0.00	0.00	0.00	-0.01	-0.00	-0.00	-0.04	0.00	0.00	0.01	-0.02	-0.00	-0.07	-0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.00	-0.01	0.00	0.06	-0.24	0.02
55	0.00	0.00	0.00	0.02	0.00	0.00	-0.02	-0.00	-0.00	0.00	0.00	-0.01	0.00	-1.00	-0.14	0.03	0.14	-1.00	0.22	0.00	0.00	-0.02	0.11	0.00	0.00	0.00	-0.03	0.08	0.17	0.16	0.75
57	0.00	0.00	-0.02	0.00	-0.07	0.02	0.01	-0.00	-0.01	-0.00	0.00	-0.00	-0.00	0.00	0.14	0.02	-0.00	-0.02	0.00	-0.32	0.00	-0.00	0.02	-0.02	-0.33	0.00	-0.05	-0.25	-0.03	0.00	0.00
58	0.00	0.00	-0.00	0.00	-0.00	0.06	0.00	0.00	0.02	0.01	0.00	0.00	0.00	-0.13	-0.02	0.00	-0.00	-0.01	0.01	0.00	-0.11	0.00	0.01	0.00	0.20	-0.08	-0.00	0.04	0.00	0.02	-0.19
60	0.00	0.01	-0.00	-0.00	-0.00	0.09	0.01	-0.00	0.00	0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00	-0.00	-0.00	-0.00	0.05	0.10	-0.00	0.00	0.02	0.00	-0.02	-0.00	-0.00	0.00	-0.00	-0.00
62	0.03	-0.01	0.03	0.03	0.03	0.20	0.03	0.04	0.07	1.00	0.00	0.13	0.00	0.00	0.00	0.00	0.11	0.08	-0.05	-0.20	0.50	-0.02	0.01	-1.00	0.11	0.01	-0.00	0.00	-0.00	0.00	0.00
65	0.01	0.00	0.01	0.00	-0.00	0.02	0.01	-0.01	0.04	0.14	-0.14	0.02	-0.00	-0.00	0.00	-0.00	-0.00	-0.00	0.00	-0.00	-0.00	0.01	0.00	-0.04	0.02	0.00	-0.00	-0.00	0.00	-0.00	0.00
68	-0.06	-0.26	0.03	0.00	0.02	0.01	0.00	0.02	-0.01	-0.03	-0.02	-0.00	0.00	-0.00	0.00	0.00	-0.00	-0.09	-0.00	0.08	0.26	-0.00	-0.00	-0.32	-0.75	-0.01	-0.00	-0.00	0.00	0.00	-0.00
70	0.00	0.00	0.32	0.03	-0.00	0.05	-0.04	-0.00	0.00	-0.14	0.00	0.00	0.00	-0.11	0.00	0.00	0.00	-0.00	-0.01	0.01	0.16	0.00	-0.00	-0.00	0.02	0.00	0.03	0.10	-0.02	-0.00	-0.12
74	0.00	0.01	-0.00	-0.00	-0.00	0.00	0.19	-0.01	0.00	1.00	0.02	0.01	0.00	-0.08	0.00	0.09	0.00	0.00	0.00	0.01	0.00	-0.00	0.00	-0.08	0.33	0.00	-0.01	0.25	0.01	0.00	0.01
76	-0.01	0.00	-0.04	0.00	-0.00	-0.25	0.00	0.02	0.00	-0.22	-0.00	-0.01	0.00	0.05	-0.00	0.00	0.01	-0.00	0.00	0.00	0.00	-0.02	0.00	0.02	0.01	-0.00	-0.03	-0.19	0.00	0.01	0.07
78	-0.00	0.01	0.00	-0.00	0.01	0.00	-0.07	-0.00	0.00	0.00	0.32	-0.00	-0.05	0.20	0.00	-0.08	-0.01	-0.01	-0.00	0.00	0.00	0.00	0.00	0.02	0.07	0.00	-0.05	0.00	0.01	0.00	-0.00
80	0.16	0.00	0.07	0.00	0.00	0.00	-1.00	0.07	0.00	0.00	0.00	0.11	-0.10	-0.50	0.00	-0.26	-0.16	-0.00	-0.00	-0.00	0.00	-0.15	0.00	-0.16	-0.00	-0.00	-0.00	-0.03	-0.02	0.05	-0.00
81	0.04	-0.06	0.00	0.00	0.02	0.01	0.05	0.00	-0.00	0.02	0.00	-0.00	0.00	0.02	-0.01	0.00	-0.00	0.00	0.02	-0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.05	0.01	0.01	-0.02	0.00
82	0.07	0.01	-0.00	0.00	0.01	0.00	0.01	0.02	0.00	-0.11	-0.02	-0.01	-0.00	-0.01	-0.00	0.00	0.00	-0.00	-0.00	-0.00	-0.00	-0.00	0.00	0.01	-0.01	-0.03	-0.00	-0.01	-0.00	0.02	-0.00
83	1.00	0.00	-0.00	0.02	0.02	0.00	0.00	-0.00	-0.50	0.00	0.02	-0.00	-0.02	1.00	0.04	0.32	0.00	0.08	-0.02	-0.02	0.16	-0.00	-0.01	0.00	0.02	0.00	0.00	0.00	1.00	0.41	0.14
85	1.00	-0.04	0.00	0.00	0.04	0.00	1.00	0.50	0.00	0.00	0.33	-0.20	-0.00	-0.11	-0.02	0.75	-0.02	-0.33	-0.01	-0.07	0.00	0.00	0.01	-0.02	0.00	0.00	1.00	0.00	0.00	0.00	-0.50
86	-0.00	0.33	0.00	0.00	0.04	0.25	0.75	-0.19	0.00	0.00	0.00	0.08	0.02	-0.01	-0.00	0.01	-0.00	-0.00	0.00	-0.00	0.00	0.00	0.03	0.00	-0.00	0.00	-0.10	0.00	0.00	0.05	0.05
90	0.00	-0.00	0.00	-0.00	0.00	0.01	0.00	-0.01	0.01	0.03	0.05	0.00	0.00	0.00	0.00	0.00	-0.03	0.01	0.03	0.05	0.00	-0.05	0.00	0.00	-1.00	0.10	0.00	-0.00	0.00	0.00	0.00
91	0.10	0.00	0.02	0.00	0.00	0.33	0.00	0.08	-0.00	-0.08	0.25	-0.04	0.00	-0.00	0.00	0.00	-0.10	-0.25	0.19	0.00	0.03	-0.01	0.01	0.00	0.00	0.00	0.00	0.00	-0.00	-0.00	0.01
92	0.00	0.01	0.00	0.00	-0.01	-0.06	0.03	-0.00	-0.06	-0.17	0.03	-0.00	-0.00	0.00	-0.00	-0.00	0.02	-0.01	-0.00	-0.01	0.02	-0.01	0.00	-1.00	0.00	-0.00	-0.00	0.00	0.00	-0.00	-0.01
93	-0.15	0.02	0.03	0.00	-0.00	0.00	0.25	0.02	0.24	-0.16	-0.00	-0.02	0.00	-0.00	0.00	-0.00	0.00	-0.00	-0.01	-0.00	-0.05	0.02	-0.02	-0.41	0.00	-0.05	-0.00	0.00	0.00	0.00	0.00
94	0.02	0.12	0.00	0.00	-0.00	0.00	0.00	0.06	-0.02	-0.75	0.00	0.19	0.00	-0.00	-0.00	0.00	0.12	-0.01	-0.07	0.00	0.00	-0.00	0.00	-0.14	0.50	-0.05	-0.00	-0.01	0.01	-0.00	0.00

Table 18: Directed overlap scores in 2000–2004, cont.

	00	**01**	**03**	**05**	**06**	**08**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**22**	**26**	**28**	**30**	**31**	**32**	**33**	**34**	**35**	**37**	**39**	**40**	**41**	**42**	**43**
00	0.00	0.00	0.00	0.01	0.05	0.08	0.01	0.04	0.00	0.02	0.04	0.00	-0.05	-0.00	0.08	-0.00	0.04	0.02	0.03	0.00	0.07	-0.04	0.04	-0.01	0.01	0.01	0.01	0.25	0.05	0.04	-0.30
01	-0.00	0.00	-0.00	0.01	-0.11	0.48	-0.01	0.04	-0.07	0.00	-0.08	0.06	0.01	-0.08	-0.14	0.02	0.00	-0.01	0.03	0.03	0.12	-0.04	-0.04	0.02	0.02	0.03	0.14	-0.06	0.05	0.05	-0.16
03	-0.00	0.00	0.00	0.00	-0.00	0.00	-0.01	0.01	-0.01	-0.01	-0.02	0.01	-0.00	0.00	0.00	-0.00	0.03	0.01	-0.00	0.08	0.00	-0.03	0.25	0.03	0.01	0.02	0.07	0.14	-0.12	0.11	0.05
05	-0.01	-0.01	-0.00	0.00	0.00	0.00	-0.00	-0.03	-0.01	-0.01	0.00	-0.01	-0.01	-0.00	-0.19	-0.00	-0.00	0.00	0.00	0.03	-0.04	0.06	-0.00	-0.06	0.00	-0.01	-0.02	-0.13	-0.06	-0.00	0.06
06	-0.05	0.11	0.00	-0.00	0.00	0.00	-0.08	-0.05	0.00	0.07	-0.02	-0.01	-0.12	0.00	0.17	0.00	0.07	0.00	0.02	1.00	-1.00	0.00	0.00	0.00	0.25	-0.04	1.00	0.00	0.00	-0.25	0.00
08	-0.08	-0.48	-0.00	-0.00	-0.00	0.00	0.00	-0.17	0.11	0.19	0.17	-0.02	0.00	-0.01	0.00	-0.01	0.25	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	-0.25	-1.00	0.00	0.00	0.00	0.00
11	-0.01	0.01	0.01	0.00	0.08	0.00	0.00	0.00	0.01	0.00	-0.01	-0.01	-0.01	0.03	0.00	0.00	0.00	0.02	-0.01	-0.01	-0.00	-0.00	0.00	0.00	0.02	-0.00	0.01	0.02	0.03	0.00	0.03
12	-0.04	-0.04	-0.01	0.03	0.05	0.17	-0.00	0.00	-0.01	-0.01	0.06	-0.01	-0.15	-0.14	-0.06	0.01	0.00	0.00	-0.16	-0.02	0.00	-0.07	-0.06	0.01	-0.06	-0.04	-0.04	0.00	-0.16	-0.33	0.00
13	-0.00	0.07	0.01	0.01	-0.00	-0.11	-0.01	0.01	0.00	0.00	-0.02	-0.01	0.04	0.02	-0.04	-0.01	0.04	0.17	0.25	-0.08	0.00	-0.00	-0.00	-0.07	-0.06	0.05	-0.14	1.00	0.08	0.00	0.00
14	-0.02	-0.00	0.01	0.01	-0.07	-0.19	-0.00	0.01	-0.00	0.00	0.02	-0.00	0.01	0.01	-0.00	0.00	-0.00	-0.05	0.00	0.01	-0.01	-0.00	-0.00	0.01	0.00	-0.00	-0.04	0.00	-0.08	0.00	0.00
15	-0.04	0.08	0.02	-0.00	0.02	-0.17	0.01	-0.06	0.02	-0.02	0.00	0.01	-0.02	-0.08	-0.07	0.01	0.05	0.02	0.07	-0.01	0.00	0.11	0.01	0.01	0.03	0.01	0.00	0.09	0.00	-0.02	-0.00
16	-0.00	-0.06	-0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.00	-0.01	0.00	-0.00	-0.00	0.01	0.00	0.03	0.33	0.00	0.12	0.00	0.03	0.00	-0.09	0.08	-0.04	-0.14	0.00	0.00	0.00	-0.19
17	0.05	-0.01	0.00	0.01	0.12	-0.00	0.01	0.15	-0.04	-0.01	0.02	0.00	0.00	0.01	-0.08	0.00	-0.00	0.00	0.00	-0.09	0.00	-0.01	0.01	-0.03	-0.01	-0.00	0.00	1.00	0.00	-0.15	0.00
18	0.00	0.08	-0.00	0.00	-0.00	0.01	-0.03	0.14	-0.02	-0.01	0.08	0.00	-0.01	0.00	-0.01	0.01	-0.04	0.25	-0.02	0.00	0.00	-0.03	-0.33	0.37	0.00	0.20	0.00	0.00	0.00	0.00	0.75
19	-0.08	0.14	0.00	0.19	-0.17	0.00	-0.00	0.06	0.04	0.00	0.07	-0.01	0.08	0.01	0.00	-0.01	-0.02	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00	-0.04	0.00	0.00	0.00	0.00	0.00
20	0.00	-0.02	0.00	0.00	-0.00	0.01	-0.00	-0.01	0.01	-0.00	-0.01	-0.00	-0.00	-0.01	0.01	0.00	-0.00	-0.04	0.00	-0.01	0.02	-0.00	-0.02	-0.00	0.00	0.00	-0.04	-0.25	0.00	-0.13	-0.02
22	-0.04	-0.00	-0.03	0.00	-0.07	-0.25	-0.00	0.00	-0.04	0.00	-0.05	-0.03	0.00	0.04	0.02	0.00	0.00	0.06	0.02	-0.04	0.07	0.01	-0.01	-0.03	0.00	-0.00	-0.07	-0.02	0.09	0.00	-0.00
26	-0.02	0.01	-0.01	-0.00	-0.00	0.00	-0.02	-0.00	-0.17	0.05	-0.02	-0.33	0.00	-0.25	0.00	0.04	-0.06	0.00	0.00	0.00	-0.01	-0.00	-0.00	-0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00
28	-0.03	-0.03	0.00	-0.00	-0.02	-0.11	0.01	0.16	-0.25	0.00	-0.07	0.00	0.00	0.02	0.00	-0.00	-0.02	-0.00	0.00	-0.00	0.01	-0.00	0.00	0.03	-0.01	0.00	0.00	0.07	0.02	0.01	0.02
30	-0.00	-0.03	-0.08	-0.03	-1.00	0.00	0.01	0.02	0.08	-0.01	0.01	-0.12	0.09	0.00	0.00	0.01	0.04	-0.00	0.00	0.00	-0.00	0.00	0.00	-0.00	0.00	-0.00	0.01	-0.01	-0.00	0.00	0.03
31	-0.07	-0.12	0.00	0.04	1.00	0.00	0.00	0.00	0.00	0.01	-0.00	0.00	0.00	0.00	0.00	-0.02	-0.07	0.01	-0.01	0.00	0.00	-0.00	-0.06	0.00	0.00	0.00	-0.08	0.00	-0.02	-0.00	0.03
32	0.04	0.04	0.03	-0.06	0.00	0.00	0.00	0.07	0.00	0.00	-0.11	-0.03	0.01	0.03	-0.00	0.00	-0.01	0.00	0.00	-0.00	0.00	0.00	0.01	0.01	0.00	-0.00	-0.04	0.75	-0.03	-0.00	0.02
33	-0.04	0.04	-0.25	0.00	0.00	0.00	-0.00	0.06	0.00	0.00	-0.01	-0.00	-0.01	0.33	-0.11	0.02	0.01	0.00	-0.00	-0.00	0.06	-0.01	0.00	0.00	-0.01	-0.01	0.00	0.02	-0.01	0.00	-0.01
34	0.01	-0.02	-0.03	0.06	0.00	0.00	-0.00	-0.01	0.07	-0.01	-0.01	0.09	0.03	-0.37	0.00	0.00	0.03	0.00	-0.03	0.00	-0.00	-0.01	-0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.08
35	-0.01	-0.02	-0.01	-0.00	-0.25	0.00	-0.02	0.06	0.06	-0.00	-0.03	-0.08	0.01	0.00	0.00	0.00	-0.00	-0.00	0.01	-0.00	-0.00	-0.00	0.01	-0.00	0.00	-0.00	0.00	0.33	0.00	-0.00	-0.01
37	-0.01	-0.03	-0.02	0.01	0.04	0.25	0.00	0.04	-0.05	0.00	-0.01	0.04	0.00	-0.20	0.04	-0.00	0.00	-0.01	-0.00	0.00	-0.00	0.00	0.01	-0.00	0.00	0.00	-0.00	0.09	-0.06	0.02	0.03
39	-0.01	-0.14	-0.07	0.02	-1.00	1.00	-0.01	0.04	0.14	0.04	-0.00	0.14	-0.00	0.00	0.00	0.04	0.07	-0.00	-0.00	-0.01	0.08	0.04	-0.00	-0.00	-0.00	0.00	0.00	0.05	-0.00	-0.02	0.05
40	-0.25	0.06	-0.14	0.13	0.00	0.00	-0.02	0.00	-1.00	0.00	-0.09	0.00	-1.00	0.00	0.00	0.25	0.02	-0.01	-0.07	0.01	0.00	-0.75	-0.02	-0.08	-0.33	-0.09	-0.05	0.00	-0.02	-0.01	0.06
41	-0.05	-0.05	0.12	0.06	0.00	0.00	-0.03	0.16	-0.08	0.08	-0.00	0.00	0.00	0.00	0.00	0.00	-0.09	-0.00	-0.02	0.00	0.02	0.03	0.01	-0.00	-0.00	0.06	0.00	0.02	0.00	-0.00	-0.04
42	-0.04	-0.05	-0.11	0.00	0.25	0.00	-0.00	0.33	0.00	0.00	0.02	0.00	0.15	0.00	0.00	0.13	-0.00	-0.00	-0.01	-0.00	0.00	0.00	-0.00	-0.00	0.00	-0.02	0.02	0.01	0.00	0.00	0.00
43	0.30	0.16	-0.05	-0.06	0.00	0.00	-0.03	0.00	0.00	0.00	0.00	0.19	-0.00	-0.75	0.00	0.02	0.00	-0.00	-0.02	-0.03	-0.03	-0.02	0.01	-0.08	0.01	-0.03	-0.05	-0.06	0.04	-0.00	0.00
44	-0.20	-0.25	0.00	0.09	0.00	0.00	-0.08	0.00	0.00	-0.13	0.10	1.00	0.50	0.00	0.00	0.11	0.01	-0.01	0.06	-0.01	0.05	0.07	-0.01	0.02	-0.01	-0.25	-0.08	0.07	-0.03	0.00	-0.00
45	-0.04	-0.29	0.50	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.25	0.00	0.00	-0.20	-0.02	-0.00	-0.00	-0.04	0.03	-0.25	0.03	-0.02	-0.17
46	-0.01	-0.03	-0.01	0.02	0.01	0.11	-0.01	-0.04	0.00	-0.00	-0.01	0.01	0.00	0.01	0.00	0.01	-0.00	-0.00	0.00	-0.00	-0.00	0.00	-0.01	0.01	-0.00	-0.00	-0.01	-0.00	-0.00	-0.00	0.00
47	-0.01	-0.04	0.00	0.00	-0.03	0.00	-0.02	-0.14	0.41	0.12	-0.00	0.02	0.00	-0.75	-0.00	0.03	0.01	-0.00	0.00	-0.00	0.00	0.00	-0.00	0.00	0.00	-0.00	0.00	0.00	0.00	-0.00	0.01
49	0.02	0.00	-0.08	-0.00	-0.02	0.00	-0.50	0.37	0.00	-0.50	-0.00	0.00	0.25	0.00	0.00	0.04	0.00	-0.00	-0.01	-0.02	0.03	0.17	0.00	0.00	-0.00	0.01	0.04	0.15	-0.01	0.05	0.19
51	-0.02	-0.01	-0.01	0.00	-0.00	-0.04	-0.02	-0.04	0.00	0.02	-0.00	-0.27	0.05	0.22	-0.50	0.00	-0.00	-0.06	0.14	-0.04	-0.21	-0.20	-0.33	0.00	-0.00	0.00	0.04	0.00	0.27	-0.33	-0.75
52	-0.02	0.04	-0.03	-0.00	-0.01	1.00	0.00	0.00	-0.00	0.00	0.02	0.08	-0.07	-0.07	-0.09	-0.01	-0.21	0.01	0.02	-0.03	-0.00	-0.02	0.06	-0.01	0.04	-0.00	-0.05	0.00	-0.03	-0.02	-0.02
53	-0.00	-0.02	-0.10	-0.03	-1.00	0.00	0.00	0.11	0.17	-0.00	-0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.04	-0.03	0.01	0.02	-0.00	-0.00	0.00	0.00	0.00	0.05	0.00	-0.01	0.00	0.03
54	0.03	-0.03	0.00	-0.01	0.00	-0.00	0.01	0.12	0.09	0.75	-0.13	0.03	0.00	0.00	-0.00	-0.01	-0.00	-0.00	0.00	0.00	-0.14	-0.03	-1.00	-0.02	0.00	-0.00	0.00	-0.00	-0.00	-0.03	-0.08
55	-0.09	0.06	-0.03	-0.02	-0.00	-0.04	0.00	0.33	-0.02	0.01	-0.02	-0.01	-0.03	0.00	-0.01	0.00	0.00	-0.75	-1.00	-0.21	0.00	-0.02	0.00	-0.00	-0.44	-0.01	0.00	0.00	-0.25	0.00	0.00
57	-0.02	-0.03	0.00	0.00	0.00	0.00	0.01	0.14	0.09	-0.00	-0.01	-0.01	0.01	0.00	-0.01	0.00	0.00	-0.25	0.08	-0.01	0.00	-0.00	0.00	-0.05	0.00	-0.00	0.19	0.00	-0.50	-0.48	-0.20
58	-0.01	-0.04	-0.07	-0.00	0.25	0.00	0.01	-0.01	0.09	0.00	0.03	0.01	-0.01	0.02	0.00	0.02	-0.00	0.00	-0.01	0.01	0.00	0.00	0.00	-0.00	-0.00	-0.00	-0.04	0.00	-0.05	0.02	-0.00
60	-0.01	-0.01	0.01	0.00	-0.04	0.07	-0.01	0.02	0.05	-0.03	0.00	0.13	0.00	0.17	0.00	0.01	0.01	0.01	0.00	0.01	0.00	-0.11	0.01	0.00	0.00	0.00	0.00	0.04	0.02	0.01	0.01
62	0.01	-0.01	-0.01	0.00	0.12	-0.50	-0.04	0.00	0.07	0.25	0.01	0.00	1.00	0.00	0.00	-0.12	0.00	0.03	0.01	0.09	0.41	0.00	0.02	0.00	0.00	0.01	-0.09	-0.50	0.00	0.01	0.08
65	0.01	0.02	-0.00	0.01	0.25	0.00	-0.01	-0.00	-0.02	0.01	0.00	-0.19	0.20	1.00	0.00	-0.11	0.07	-0.01	-0.03	-0.00	0.00	-0.37	-0.00	0.00	0.00	0.00	0.00	-0.04	-0.00	0.00	-0.09
68	0.00	-0.01	0.00	0.00	0.00	0.01	-0.00	0.01	-0.00	-0.00	0.01	-0.01	0.04	-0.00	0.00	-0.00	0.10	-0.04	0.01	0.00	1.00	-0.00	-0.02	-0.01	-0.01	-0.00	-0.00	0.25	-0.00	-0.00	-0.03
70	-0.00	-0.01	0.00	0.01	0.00	0.00	-0.01	0.13	0.25	-0.00	0.02	0.33	0.00	0.00	0.00	0.75	0.03	0.09	0.00	-0.00	0.08	0.00	0.08	0.00	-0.01	-0.00	0.04	0.00	0.37	0.24	0.03
74	0.01	0.04	0.33	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	-1.00	0.00	0.75	0.00	0.00	0.06	0.00	0.05	0.00	-0.02	-0.00	0.00	0.01	-0.01	1.00	0.00	0.12	1.00
76	-0.01	-0.02	0.11	0.00	0.00	0.00	-0.04	0.00	0.00	0.15	-0.00	0.00	0.01	0.00	0.00	0.00	0.25	-0.07	0.07	0.00	-0.00	0.00	0.00	0.00	-0.00	-0.00	0.00	0.25	0.01	0.00	-1.00
78	-0.06	-0.03	-1.00	0.00	0.00	0.00	0.19	0.00	0.00	1.00	0.09	0.00	-0.11	0.25	0.00	1.00	0.11	-0.14	0.48	-0.00	-0.00	0.00	0.02	0.01	-0.00	-0.00	0.07	0.75	0.00	-0.04	0.00
80	-0.10	-0.12	1.00	0.00	-1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.04	0.07	-1.00	0.00	0.12	-0.01	0.00	0.02	0.00	0.00	-0.33	0.00	0.00
81	0.00	-0.00	0.00	0.01	0.01	0.07	0.00	0.00	-0.13	0.00	0.01	0.00	0.00	0.01	-0.01	0.01	0.00	0.00	0.00	-0.02	-0.08	0.00	-0.00	-0.00	0.00	0.00	0.00	-0.00	0.04	-0.01	0.01
82	0.01	0.02	0.01	0.00	0.02	0.00	0.01	0.00	-1.00	0.00	0.01	0.00	-0.01	1.00	0.04	-0.02	-0.00	0.00	0.01	0.03	0.00	-0.08	0.00	0.00	0.00	0.00	0.01	0.00	0.09	-0.00	0.00
83	-0.01	0.01	0.12	-0.11	0.75	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.00	0.16	0.00	-0.11	0.08	0.00	0.25	0.12	0.25	0.02	0.04	0.03	0.01	0.01	0.24	0.00	0.00	-1.00	0.27
85	-0.20	-0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.16	0.07	0.02	0.04	-1.00	0.00	0.00	0.00	0.00
86	0.14	-0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.07	0.25	-0.20	0.00	-0.17	-0.03	0.00	0.01	-0.26	0.00	-0.15	0.06	-0.25
90	0.00	0.02	-0.01	0.00	0.04	0.00	-0.06	0.04	0.00	-0.12	0.00	0.02	-0.02	1.00	0.00	-0.16	0.00	0.00	-0.00	0.11	0.41	0.44	0.00	0.01	0.01	-0.00	0.01	0.00	-0.01	0.11	0.00
91	-0.01	0.01	-0.00	0.00	-0.01	0.19	-0.09	0.32	0.00	-0.17	0.00	0.00	0.25	0.00	0.00	0.03	0.05	0.03	0.01	0.75	0.00	0.00	0.04	0.00	-0.00	-0.01	0.00	1.00	0.07	0.00	0.00
92	0.00	-0.03	0.05	0.00	0.07	1.00	0.00	-0.22	0.33	0.25	-0.04	0.11	-0.12	0.00	0.00	0.04	-0.03	-0.11	-0.00	-0.00	0.00	0.00	0.00	-0.00	-0.00	0.00	0.00	0.00	-0.06	0.05	0.00
93	-0.00	-0.05	0.01	0.00	0.21	0.00	0.75	0.12	0.06	0.07	-0.00	0.08	0.09	1.00	1.00	0.13	0.06	0.05	-0.01	-0.00	-0.16	-0.01	0.00	0.00	0.00	-0.00	0.01	-1.00	0.00	0.00	0.25
94	-0.00	0.02	-0.01	0.00	0.01	-0.22	0.00	-0.04	-0.02	0.00	0.01	0.05	-0.00	0.05	0.00	0.01	0.06	-0.02	0.01	0.00	-0.11	-0.27	0.02	0.01	-0.01	0.00	-0.00	0.27	-0.01	-0.00	0.00

Table 19: Directed overlap scores in 2005–2009

	44	**45**	**46**	**47**	**49**	**51**	**52**	**53**	**54**	**55**	**57**	**58**	**60**	**62**	**65**	**68**	**70**	**74**	**76**	**78**	**80**	**81**	**82**	**83**	**85**	**86**	**90**	**91**	**92**	**93**	**94**
00	0.33	0.33	0.03	0.02	0.06	0.02	0.03	0.05	0.05	0.08	0.05	0.06	0.01	0.01	0.00	0.00	0.03	0.03	-0.02	0.05	-0.15	0.01	-0.02	0.02	-0.03	0.48	0.04	-0.02	0.02	0.04	0.05
01	0.00	0.19	-0.03	0.08	0.00	0.01	0.04	0.02	0.04	-0.08	0.05	0.10	-0.01	0.01	-0.02	0.02	0.01	0.03	0.02	0.03	0.17	0.01	0.02	0.01	0.07	-0.16	-0.02	0.02	-0.03	0.03	0.05
03	0.22	-1.00	-0.01	0.00	-0.20	0.03	0.04	0.18	-0.00	0.08	-0.00	0.10	0.01	0.00	0.00	-0.00	0.17	0.00	-0.03	0.00	0.00	-0.01	-0.04	-0.08	0.00	-1.00	-0.01	-0.00	-0.00	0.00	-0.00
05	-0.19	0.00	0.01	0.03	-0.07	0.00	-0.00	0.00	0.01	-0.00	0.00	-0.06	0.00	0.01	0.00	-0.00	-0.00	-0.12	0.00	-0.04	-0.33	-0.01	-0.00	-0.16	0.00	0.00	-0.00	-0.00	-0.00	-0.00	-0.00
06	0.25	0.00	-0.01	0.00	-0.25	0.00	0.02	-1.00	-0.00	-0.04	0.08	0.00	-0.00	-0.08	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	-0.01	0.17	-0.25	0.00	0.00	0.09	-0.02	0.09	0.22	0.01
08	0.00	0.00	-0.11	-0.21	0.00	-0.25	-0.44	1.00	-0.00	0.11	0.00	0.00	-0.25	0.30	0.00	0.02	0.00	0.00	0.00	0.00	0.00	-0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19
11	0.01	0.75	-0.02	-0.00	-0.22	0.02	0.01	-0.00	0.01	-0.05	-0.00	-0.01	0.01	0.05	0.00	0.00	0.00	-0.25	0.00	0.00	0.00	0.01	0.00	-0.05	0.00	0.00	-0.06	0.01	-0.14	-0.25	-0.00
12	0.50	-1.00	-0.00	0.25	0.00	0.05	0.19	0.00	-0.06	0.00	0.00	-0.06	-0.48	0.00	-0.05	0.02	-1.00	0.00	0.00	0.00	0.00	-0.44	0.00	0.25	0.00	0.00	0.01	-0.75	0.32	-0.01	-0.00
13	0.50	0.00	0.01	-0.20	0.00	-0.00	0.03	-0.16	-0.11	0.02	-0.02	-0.20	0.33	0.08	-0.00	0.01	-0.41	0.00	0.00	0.00	1.00	0.30	-1.00	0.00	0.00	-1.00	0.08	1.00	-0.14	-0.05	-0.03
14	-0.12	0.00	0.07	-0.00	-0.50	0.00	-0.00	0.00	-0.75	-0.00	-0.00	0.00	-0.09	-0.04	-0.02	0.01	-0.06	0.00	0.00	0.00	0.00	-0.00	0.06	-0.00	0.00	0.00	-0.05	-1.00	0.01	-0.13	0.01
15	0.09	0.44	-0.00	0.00	0.04	-0.02	0.00	-0.00	-0.13	-0.19	-0.01	-0.07	0.00	-0.01	-0.00	-0.01	-0.04	-0.03	-0.02	-0.08	-0.15	-0.01	-0.01	-0.08	0.00	0.00	-0.01	-0.04	-0.02	-0.00	0.00
16	0.00	0.00	-0.01	-0.01	-0.50	0.13	0.01	-0.03	0.03	-0.01	0.02	-0.00	-0.02	1.00	0.25	0.00	1.00	1.00	0.00	0.00	0.00	-0.01	0.00	0.25	0.00	0.00	-0.50	-1.00	0.00	-0.08	-0.05
17	0.00	-1.00	0.00	-0.03	-0.11	-0.05	0.01	-0.01	1.00	-0.05	0.03	0.01	0.01	-0.32	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	-0.01	-0.02	0.00	0.00	-0.17	-0.44	0.21	-0.03	0.75
18	0.00	0.00	-0.00	0.00	0.00	-0.25	-0.19	-0.04	0.01	0.00	-0.00	-0.04	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.12	0.00	0.00	0.00	0.19	-0.25	-0.25	-0.75
19	0.00	0.00	-0.01	-0.04	1.00	-1.00	-0.02	-0.05	0.00	0.01	-0.00	-0.01	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.00	0.00	-0.50	0.00	0.00	0.00	0.00	0.00	0.25	0.00
20	0.00	0.00	0.01	0.06	1.00	0.01	-0.00	0.00	0.02	0.00	-0.00	-0.00	0.01	-0.15	0.10	0.01	0.06	-0.30	0.00	-0.25	0.00	0.00	0.03	-0.02	0.00	0.00	-0.50	-0.17	-0.04	0.00	-0.01
22	0.00	0.00	-0.00	0.02	-0.00	0.06	0.08	0.01	-0.00	-0.05	0.01	0.01	-0.00	0.00	-1.00	0.00	-0.01	-0.25	-0.06	0.50	0.00	-0.01	0.20	-0.12	0.00	0.00	-1.00	0.00	0.00	-0.03	-0.03
26	-0.01	-0.01	0.00	0.00	-0.00	0.03	-0.00	-0.04	0.01	0.50	-0.11	-0.01	-0.00	0.00	0.00	0.03	-0.04	-0.00	-0.00	0.10	-0.32	-0.00	-0.11	0.13	0.25	-0.05	-0.01	-0.02	-0.00	-0.02	0.00
28	-0.09	-0.01	-0.00	-0.00	-0.01	0.11	-0.02	-0.05	0.00	0.25	-0.01	-0.02	-0.00	-0.00	-0.03	-0.00	0.00	-0.11	-0.00	0.15	0.00	-0.00	0.02	0.00	0.00	-1.00	-0.04	0.01	-0.08	-0.07	-0.02
30	-0.01	0.01	0.00	-0.00	-0.00	0.03	-0.03	-0.01	0.03	0.17	-0.01	-0.02	0.01	0.16	-0.01	0.00	-0.02	-0.03	-0.02	-0.07	-0.14	0.02	-0.00	-0.75	-0.20	-0.27	0.33	0.25	0.00	-0.03	0.04
31	-0.06	-0.00	-0.00	-0.01	-0.03	0.00	0.04	-0.04	0.24	0.00	0.00	0.00	-0.01	0.00	0.03	1.00	0.23	-0.17	0.01	0.06	-1.00	-0.00	0.00	0.00	0.00	0.15	0.75	0.00	0.00	0.00	0.12
32	0.11	0.25	0.00	0.00	-0.12	0.00	0.03	0.00	0.33	0.03	0.00	-0.01	0.09	0.00	0.20	0.11	0.00	1.00	0.00	0.00	0.00	-0.00	-0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.44	-0.01
33	0.01	0.00	-0.00	-0.01	-0.00	-0.00	-0.09	-0.00	0.00	0.00	-0.00	-0.04	0.01	0.01	-0.00	-0.00	0.08	-0.01	-0.00	0.03	0.05	0.00	0.01	-0.00	-0.11	-0.04	-1.00	-0.12	0.07	-0.25	-0.00
34	0.03	0.00	0.00	0.00	-0.00	1.00	-0.23	0.01	-0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.00	-0.00	-0.00	0.01	-0.02	0.00	-0.00	-0.07	0.17	0.05	0.01	0.00	0.00	-0.00	-0.01
35	0.01	-0.00	0.00	0.00	0.00	-0.15	0.00	0.00	-0.12	0.16	0.13	0.00	-0.00	-0.03	0.00	-0.00	-0.01	-0.00	-0.00	0.00	-0.00	-0.00	-0.00	-0.01	-0.02	-0.00	-0.01	-0.00	-0.00	-0.00	-0.00
37	0.00	0.03	0.01	0.00	-0.01	-0.05	-0.00	-0.00	0.00	-0.01	-0.00	0.00	0.00	-0.01	0.00	-0.00	-0.00	-0.01	-0.00	-0.01	0.02	0.00	0.00	-0.02	0.06	0.01	-0.00	-0.00	0.00	-0.00	-0.00
39	-0.11	-0.00	-0.01	0.00	0.02	0.06	-0.00	-0.03	0.03	1.00	-1.00	0.06	0.01	0.07	0.01	0.05	-0.00	-0.17	-0.00	0.17	0.25	-0.00	-0.02	-0.75	0.00	0.00	0.05	-0.01	-0.00	-0.00	0.03
40	-0.19	0.50	0.01	0.02	-0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.00	-0.00	0.17	0.00	-0.17	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.07	-0.19	0.00	0.00	-0.44
41	-0.00	-0.04	0.00	0.00	-0.00	0.00	0.00	-0.02	0.00	0.00	0.00	-0.08	0.00	-0.00	-0.00	-0.00	-0.00	0.00	-0.00	-0.00	0.00	-0.09	-0.10	0.00	0.00	0.02	0.02	-0.12	0.02	-0.00	0.01
42	-0.01	0.02	0.00	0.00	0.00	0.00	0.05	-0.33	0.00	0.00	0.00	0.06	-0.01	-0.00	0.00	0.00	-0.50	-0.01	-0.04	-0.00	0.00	-0.00	0.03	-0.50	0.33	-0.08	0.30	-0.01	-0.03	-0.03	-0.00
43	-0.02	-0.02	-0.00	-0.01	-0.32	0.33	-0.25	-0.00	-0.00	0.00	0.00	-0.00	0.00	-0.06	-0.04	-0.00	0.00	0.00	0.00	-1.00	0.00	-0.00	-0.01	-0.11	0.00	0.00	0.00	0.00	0.75	-0.50	-0.02
44	0.00	0.02	0.00	0.01	-0.04	0.00	0.00	0.08	0.00	0.00	1.00	-0.14	-0.00	0.00	0.01	0.00	0.00	-0.07	0.00	-0.04	0.01	0.07	0.19	0.00	-1.00	-0.00	-0.01	-0.09	-0.00	0.02	0.01
45	-0.02	0.00	0.00	-0.00	-0.03	0.00	0.00	0.75	0.00	0.00	0.00	0.00	-0.01	-0.01	0.00	0.00	-0.50	0.01	0.00	0.01	-0.00	-0.00	-0.02	0.00	-0.07	-0.21	-0.00	-0.02	-0.00	-0.03	-0.00
46	-0.00	-0.00	0.00	-0.00	-0.00	0.00	0.01	-0.01	0.00	0.00	-0.02	-0.00	-0.00	0.00	0.01	0.03	0.00	-0.00	0.00	0.04	0.00	-0.00	0.01	-0.00	0.00	0.00	-0.01	-0.00	-0.00	-0.04	-0.00
47	-0.01	0.00	0.00	0.00	-0.00	-0.03	0.00	-0.03	-0.00	-0.02	0.00	0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.01	-0.00	0.00	0.00	-0.00	-0.25	0.05	-0.00	-0.00	-0.00	-0.00	-0.00	-0.01
49	0.04	0.03	0.00	0.00	0.00	-0.22	0.01	0.00	-0.01	-0.16	0.01	0.00	0.00	0.00	0.00	0.00	0.01	-0.00	0.00	0.02	0.02	0.02	0.00	-0.19	-0.14	-0.04	0.00	-0.00	-0.00	0.00	-0.00
51	0.00	0.00	-0.00	0.03	0.22	0.00	-0.00	0.02	0.03	-0.02	-0.02	-0.01	-0.02	-0.05	0.03	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	-0.04	0.00	0.00	0.07	0.00	-0.09	0.00	-0.01
52	-0.00	0.00	-0.01	-0.00	-0.01	0.00	0.00	-0.01	-0.01	0.02	-0.01	-0.00	0.01	0.04	0.00	-0.00	-0.00	-0.10	0.00	0.25	0.00	-0.06	0.01	0.00	0.00	0.25	-0.00	-0.03	-0.02	0.10	0.02
53	-0.08	-0.75	0.01	0.03	-0.00	-0.02	0.01	0.00	0.05	0.00	-0.00	-0.00	-0.00	0.05	-0.01	0.00	0.00	-0.00	-0.02	0.06	-0.05	-0.00	-0.04	-0.00	0.00	0.25	0.03	-0.14	-0.05	0.00	-0.00
54	0.00	0.00	-0.00	0.00	0.01	-0.03	0.01	-0.05	0.00	-0.01	-0.01	-0.00	-0.02	0.00	-0.00	-0.01	1.00	0.00	0.00	0.00	0.00	-0.04	0.25	0.00	0.00	0.00	-0.00	-0.01	-0.07	0.12	-0.00
55	0.00	0.00	-0.00	0.02	0.16	0.02	-0.02	-0.00	0.01	0.00	-0.00	-0.00	0.25	0.75	0.27	-0.02	0.09	-1.00	0.00	0.00	0.00	-0.03	0.00	0.00	0.00	0.00	-0.14	-0.02	0.00	-0.14	0.11
57	-1.00	0.00	0.02	-0.00	-0.01	0.02	0.01	0.00	0.01	0.00	0.00	-0.00	0.00	0.06	-0.11	-0.02	0.00	-0.19	-0.14	0.00	0.00	0.00	-0.00	0.06	0.00	0.00	-0.12	0.00	-0.02	-0.15	-0.13
58	0.14	0.00	0.00	-0.00	-0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.07	-0.02	0.05	0.01	0.02	-0.00	0.04	0.25	0.00	-0.01	0.01	0.00	0.00	-0.00	-0.06	0.00	-0.03	0.00
60	0.00	0.01	0.00	0.00	-0.00	0.02	-0.01	0.00	0.02	-0.25	-0.00	0.01	0.00	-0.00	0.00	-0.00	0.00	0.00	-0.00	-0.00	0.09	-0.00	-0.00	0.11	0.25	-0.03	-0.00	-0.00	-0.00	-0.00	0.00
62	-0.00	0.01	-0.00	0.00	-0.00	0.05	-0.04	-0.05	-0.00	-0.75	-0.06	-0.07	0.00	0.00	0.00	-0.00	-0.01	-0.08	0.03	0.12	0.07	-0.03	0.00	-0.75	-0.11	0.02	-0.00	0.00	-0.00	-0.00	0.00
65	-0.01	-0.00	-0.01	0.00	-0.00	-0.03	-0.00	0.01	0.00	-0.27	0.11	0.02	-0.00	-0.00	0.00	-0.00	-0.00	-0.00	0.00	0.00	-0.00	-0.00	0.00	-0.07	0.00	0.00	0.00	-0.00	-0.00	-0.00	0.00
68	-0.00	0.00	-0.03	0.00	-0.00	-0.00	0.00	-0.00	0.01	0.02	0.02	-0.05	0.00	0.00	0.00	0.00	0.01	-0.00	-0.00	-0.00	-0.17	-0.00	0.01	0.23	0.00	0.03	-0.00	-0.00	0.00	-0.00	-0.00
70	0.00	0.50	0.00	0.00	-0.01	-0.01	0.00	-0.00	-1.00	-0.09	-0.00	-0.01	-0.00	0.01	0.00	-0.01	0.00	0.00	0.01	0.02	-0.19	-0.00	-0.01	-0.01	0.02	-0.14	0.03	-0.10	0.01	0.00	0.06
74	0.07	-0.01	0.00	0.00	0.00	-0.00	0.10	0.00	0.00	1.00	0.19	-0.02	-0.00	0.08	0.00	0.00	-0.00	0.00	-0.00	0.01	0.01	0.00	0.00	0.09	0.00	0.01	0.00	-0.25	0.00	-0.00	0.00
76	-0.00	-0.00	-0.00	0.01	-0.00	0.00	0.00	0.02	0.00	0.00	0.14	0.00	0.00	-0.03	-0.00	0.00	-0.01	0.00	0.00	-0.00	0.00	0.00	0.00	-0.03	-0.01	0.00	-0.03	0.17	0.00	-0.01	0.04
78	0.04	-0.01	-0.04	0.00	-0.02	0.00	-0.25	-0.06	0.00	0.00	0.00	-0.04	0.00	-0.12	-0.00	0.00	-0.02	-0.01	0.00	0.00	-0.05	-0.01	-0.00	0.02	0.00	0.00	0.06	-0.11	0.01	0.02	-0.02
80	-0.01	0.00	0.00	0.00	-0.02	0.00	0.00	0.05	0.00	0.00	0.00	-0.25	-0.09	-0.07	0.00	0.17	0.19	-0.01	-0.00	0.05	0.00	0.15	-0.00	0.14	-0.23	0.05	0.19	-0.02	0.00	0.06	0.01
81	-0.07	0.00	0.00	-0.00	-0.02	-0.00	0.06	0.00	0.04	0.03	-0.00	-0.00	0.00	0.03	0.00	0.00	0.00	-0.00	-0.00	0.01	-0.15	0.00	0.00	-0.00	0.09	-0.25	0.04	0.02	-0.01	-0.01	-0.00
82	-0.19	0.02	-0.01	0.00	-0.00	-0.00	-0.01	0.04	-0.25	0.00	0.00	0.01	0.00	-0.00	-0.00	-0.01	0.01	-0.00	-0.00	0.00	0.00	-0.00	0.00	-0.01	-0.02	-0.06	-0.01	-0.01	-0.00	-0.02	0.00
83	0.00	0.00	0.00	0.25	0.19	0.04	0.00	0.00	0.00	0.00	-0.06	-0.01	-0.11	0.75	0.07	-0.23	0.01	-0.09	0.03	-0.02	-0.14	0.00	0.01	0.00	0.03	0.75	0.00	0.00	0.00	0.00	-0.10
85	1.00	0.07	0.00	-0.05	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.25	0.11	-0.00	0.00	-0.02	0.00	0.01	-0.00	0.23	-0.09	0.02	-0.03	0.00	-0.03	0.00	0.00	0.00	0.00	-0.19
86	0.00	0.21	0.00	0.00	0.04	0.00	-0.25	-0.25	0.00	0.00	0.00	0.00	0.03	-0.02	-0.00	-0.03	0.14	-0.01	-0.00	-0.00	-0.05	0.25	0.06	-0.75	0.03	0.00	-0.07	0.00	-0.04	-0.00	0.08
90	0.01	0.00	0.01	0.00	-0.00	-0.07	0.00	-0.03	0.00	0.14	0.12	0.00	0.00	0.00	-0.00	0.00	-0.03	-0.00	0.03	-0.06	-0.19	-0.04	0.01	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00
91	0.09	0.02	0.00	0.00	0.00	0.00	0.03	0.14	0.01	0.02	0.00	0.06	0.00	-0.00	0.00	0.00	0.10	0.25	-0.17	0.11	0.02	-0.02	0.01	0.00	0.00	-0.00	-0.00	0.00	0.00	-0.00	0.01
92	0.00	0.00	0.00	0.00	0.00	0.09	0.02	0.05	0.07	-0.00	0.02	-0.00	0.00	0.00	0.00	-0.00	-0.01	-0.00	-0.00	-0.01	-0.00	0.01	0.00	0.00	0.00	0.04	-0.00	-0.00	0.00	0.00	-0.00
93	-0.02	0.03	0.04	0.00	-0.00	0.00	-0.10	-0.00	-0.12	0.14	0.15	0.03	0.00	0.00	0.00	0.00	-0.00	0.00	0.01	-0.02	-0.06	0.01	0.02	0.00	0.00	0.00	-0.00	0.00	-0.00	0.00	0.00
94	-0.01	0.00	0.00	0.01	0.00	0.01	-0.02	0.00	0.00	-0.11	0.13	-0.00	-0.00	-0.00	-0.00	0.00	-0.06	-0.00	-0.04	0.02	-0.01	0.00	-0.00	0.10	0.19	-0.08	-0.00	-0.01	0.00	-0.00	0.00

Table 20: Directed overlap scores in 2005–2009, cont.

	00	**01**	**03**	**05**	**06**	**08**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**22**	**26**	**28**	**30**	**31**	**32**	**33**	**34**	**35**	**37**	**39**	**40**	**41**	**42**	**43**
00	0.00	0.00	-0.00	0.02	0.23	0.75	0.02	0.04	0.05	0.04	0.09	0.07	-0.10	0.04	0.00	0.02	-0.09	0.04	0.05	-0.06	0.25	0.20	0.17	0.04	0.02	0.02	-0.26	0.00	0.07	-0.07	0.24
01	-0.00	0.00	-0.00	-0.02	0.21	1.00	0.01	0.01	0.07	0.03	0.06	-0.05	0.11	0.10	0.00	-0.05	0.12	0.02	0.06	0.05	0.00	-0.03	0.04	-0.02	0.02	0.02	0.25	0.06	0.06	-0.01	0.25
03	0.00	0.00	0.00	-0.01	0.00	0.01	-0.01	0.01	-0.02	0.02	-0.02	-0.01	-0.03	0.00	0.00	0.00	0.04	-0.00	-0.00	0.09	-0.15	-0.06	-0.11	0.04	-0.06	0.01	0.05	0.07	-0.07	0.41	0.21
05	-0.02	0.02	0.01	0.00	-0.00	-0.08	0.00	0.05	-0.01	-0.01	0.00	-0.01	0.01	0.03	0.00	-0.00	0.03	-0.02	0.03	0.00	-0.08	0.01	0.00	-0.03	-0.05	0.00	0.00	0.00	-0.04	0.03	0.03
06	-0.23	-0.21	-0.00	0.00	0.00	0.01	0.05	-0.00	-0.03	-0.09	0.02	-0.01	0.23	-0.01	-0.25	0.00	-0.08	-0.10	0.00	0.50	0.00	0.00	1.00	-0.75	-0.75	0.02	0.75	1.00	-1.00	-0.17	-0.33
08	-0.75	-1.00	-0.01	0.08	-0.01	0.00	0.00	0.00	0.25	1.00	-0.24	0.03	-0.17	-0.02	0.00	-0.01	1.00	0.75	-0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00
11	-0.02	-0.01	0.01	-0.00	-0.05	0.00	0.00	0.00	-0.01	-0.00	0.01	0.00	0.02	0.00	0.01	-0.00	0.00	0.00	0.01	0.00	0.02	-0.02	0.00	0.04	-0.04	0.00	-0.02	-0.02	-0.04	-0.00	0.03
12	-0.04	-0.01	-0.01	-0.05	0.00	0.00	-0.00	0.00	-0.00	-0.01	-0.06	-0.02	0.12	0.30	-0.08	-0.00	0.00	-0.00	-0.20	-0.02	0.00	0.00	0.00	-0.00	0.22	-0.08	-0.06	0.00	0.22	0.00	1.00
13	-0.05	-0.07	0.02	0.01	0.03	-0.25	0.01	0.00	0.00	-0.00	0.00	0.01	-0.04	0.02	-0.05	0.00	-0.50	0.30	0.75	-0.20	0.00	0.00	0.09	-0.08	-0.09	-0.00	-0.11	-1.00	-0.00	-0.11	-0.25
14	-0.04	-0.03	-0.02	0.01	0.09	-1.00	0.00	0.01	0.00	0.00	-0.00	-0.00	0.01	0.01	-0.01	0.00	-0.00	-0.06	0.04	0.00	-0.50	0.00	0.02	-0.02	0.03	-0.01	-0.01	0.00	-0.00	0.00	1.00
15	-0.09	-0.06	0.02	-0.00	-0.02	0.24	-0.01	0.06	-0.00	0.00	0.00	-0.01	0.00	0.12	0.05	-0.00	-0.06	-0.02	0.01	0.02	0.11	0.13	0.00	-0.00	0.00	-0.00	-0.00	-0.27	0.00	0.00	0.06
16	-0.07	0.05	0.01	0.01	0.01	-0.03	-0.00	0.02	-0.01	0.00	0.01	0.00	0.00	-0.00	0.01	-0.00	-0.00	-1.00	0.00	0.37	0.00	0.00	-0.00	0.20	0.22	0.07	-0.07	0.00	-1.00	0.25	0.00
17	0.10	-0.11	0.03	-0.01	-0.23	0.17	-0.02	-0.12	0.04	-0.01	-0.00	-0.00	0.00	0.00	0.12	-0.00	0.01	0.00	0.00	0.19	0.00	0.02	-0.01	-0.03	-0.00	-0.00	-0.07	0.00	-1.00	-0.25	0.08
18	-0.04	-0.10	-0.00	-0.03	0.01	0.02	-0.00	-0.30	-0.02	-0.01	-0.12	0.00	-0.00	0.00	-0.02	0.01	-0.06	0.50	-0.10	0.00	0.00	-0.00	0.00	-0.50	-1.00	-0.00	0.00	0.50	0.00	0.00	0.33
19	0.00	0.00	0.00	0.00	0.25	0.00	-0.01	0.08	0.05	0.01	-0.05	-0.01	-0.12	0.02	0.00	0.01	0.06	0.00	0.00	0.00	-1.00	-0.14	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	-0.75
20	-0.02	0.05	-0.00	0.00	-0.00	0.01	0.00	0.00	-0.00	-0.00	0.00	0.00	0.00	-0.01	-0.01	0.00	-0.00	-0.00	-0.00	0.00	-0.00	-0.02	0.02	-0.09	-0.27	-0.00	-0.04	0.00	0.50	0.09	0.00
22	0.09	-0.12	-0.04	-0.03	0.08	-1.00	-0.00	0.00	0.50	0.00	0.06	0.00	-0.01	0.06	-0.06	0.00	0.00	-0.08	0.02	0.06	-0.03	0.02	-0.00	-0.12	0.02	-0.00	-0.11	1.00	0.07	-0.00	-0.00
26	-0.04	-0.02	0.00	0.02	0.10	-0.75	-0.00	0.00	-0.30	0.06	0.02	1.00	0.00	-0.50	0.00	0.00	0.08	0.00	0.00	0.01	-0.00	0.06	-0.00	-0.00	-0.00	0.00	-0.00	-0.01	0.00	-0.00	-0.00
28	-0.05	-0.06	0.00	-0.03	-0.00	0.50	-0.01	0.20	-0.75	-0.04	-0.01	0.00	0.00	0.10	0.00	0.00	-0.02	-0.00	0.00	0.02	0.00	-0.17	0.00	-0.03	-0.01	-0.00	0.00	-0.11	0.03	-0.01	0.00
30	0.06	-0.05	-0.09	-0.00	-0.50	0.00	-0.00	0.02	0.20	-0.00	-0.02	-0.37	-0.19	0.00	0.00	-0.00	-0.06	-0.01	-0.02	0.00	0.00	-0.00	0.00	-0.00	-0.00	-0.00	-0.01	0.02	-0.00	0.00	0.00
31	-0.25	0.00	0.15	0.08	0.00	0.00	-0.02	0.00	0.00	0.50	-0.11	0.00	0.00	0.00	1.00	0.00	0.03	0.00	-0.00	-0.00	0.00	-0.00	0.00	-0.06	0.00	0.13	0.25	0.00	0.04	-0.00	-0.00
32	-0.20	0.03	0.06	-0.01	0.00	0.00	0.02	-0.00	-0.00	-0.00	-0.13	-0.00	-0.02	0.00	0.14	0.02	-0.02	-0.06	0.17	0.00	0.00	0.00	0.00	0.01	0.01	0.00	-0.19	0.00	0.07	0.03	0.00
33	-0.17	-0.04	0.11	-0.00	-1.00	0.00	-0.00	-0.00	-0.09	-0.02	-0.00	0.00	0.01	0.00	0.00	-0.02	0.00	0.00	0.00	-0.00	-0.00	-0.00	0.00	0.00	-0.01	-0.00	-0.01	-0.03	0.01	-0.00	0.01
34	-0.04	0.02	-0.04	0.03	0.75	0.00	-0.04	0.00	0.08	0.02	0.00	-0.20	0.03	0.50	0.00	0.09	0.12	0.00	0.03	0.00	0.06	-0.01	-0.00	0.00	-0.00	0.00	0.00	0.02	0.02	0.00	-0.04
35	-0.02	-0.02	0.06	0.05	0.75	0.00	0.04	-0.22	0.09	-0.03	-0.00	-0.22	0.00	1.00	0.00	0.27	-0.02	0.00	0.01	0.00	-0.00	-0.01	0.01	0.00	0.00	0.00	-0.00	0.01	0.01	0.00	0.00
37	-0.02	-0.02	-0.01	-0.00	-0.02	0.00	-0.00	0.08	0.00	0.01	0.00	-0.07	0.00	0.00	-0.01	0.00	0.00	-0.00	0.00	0.00	-0.13	-0.00	0.00	-0.00	-0.00	0.00	-0.00	-0.14	0.00	0.02	0.02
39	0.26	-0.25	-0.05	-0.00	-0.75	-0.75	0.02	0.06	0.11	0.01	0.00	0.07	0.07	0.00	0.00	0.04	0.11	0.00	-0.00	0.01	-0.25	0.19	0.01	-0.00	0.00	0.00	0.00	0.07	0.03	0.02	-0.00
40	0.00	-0.06	-0.07	-0.00	-1.00	0.00	0.02	0.00	1.00	0.00	0.27	0.00	0.00	-0.50	0.00	0.00	-1.00	0.01	0.11	-0.02	0.00	0.00	0.03	-0.02	-0.01	0.14	-0.07	0.00	0.03	-0.01	0.25
41	-0.07	-0.06	0.07	0.04	1.00	0.00	0.04	-0.22	0.00	0.00	-0.00	1.00	1.00	0.00	0.00	-0.50	-0.07	-0.00	-0.03	0.00	-0.04	-0.07	-0.01	-0.02	-0.01	-0.00	-0.03	-0.03	0.00	0.00	0.00
42	0.07	0.01	-0.41	-0.03	0.17	0.00	0.00	0.00	0.11	0.00	-0.00	-0.25	0.25	0.00	0.00	-0.09	0.00	0.00	0.01	-0.00	0.00	-0.03	0.00	-0.00	-0.00	-0.02	-0.02	0.01	-0.00	0.00	0.00
43	-0.24	-0.25	-0.21	-0.03	0.33	0.00	-0.03	-1.00	0.25	-1.00	-0.06	-0.00	-0.08	-0.33	0.75	-0.00	0.00	0.00	-0.00	-0.00	0.00	-0.00	-0.01	0.04	-0.00	-0.02	0.00	-0.25	-0.00	-0.00	0.00
44	-0.33	0.00	-0.22	0.19	-0.25	0.00	-0.01	-0.50	-0.50	0.12	-0.09	0.00	0.00	0.00	0.00	0.00	-0.00	0.01	0.09	0.01	0.06	-0.11	-0.01	-0.03	-0.01	0.00	0.11	0.19	0.00	0.01	0.02
45	-0.33	-0.19	1.00	0.00	0.00	0.00	-0.75	1.00	0.00	0.00	-0.44	0.00	1.00	0.00	0.00	0.00	0.00	0.01	0.01	-0.01	0.00	-0.25	-0.00	-0.00	0.00	-0.03	0.00	-0.50	0.04	-0.02	0.02
46	-0.03	0.03	0.01	-0.01	0.01	0.11	0.02	0.00	-0.01	-0.07	0.00	0.01	-0.00	0.00	0.01	-0.01	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00	-0.00	-0.01	0.01	-0.01	-0.00	-0.00	0.00
47	-0.02	-0.08	-0.00	-0.03	-0.00	0.21	0.00	-0.25	0.20	0.00	-0.00	0.01	0.03	0.00	0.04	-0.06	-0.02	-0.00	0.00	0.00	0.01	-0.00	0.01	-0.00	-0.00	-0.00	-0.00	-0.02	-0.00	-0.00	0.01
49	-0.06	-0.00	0.20	0.07	0.25	0.00	0.22	0.00	0.00	0.50	-0.04	0.50	0.11	0.00	-1.00	-1.00	0.00	0.00	0.01	0.00	0.03	0.12	0.00	0.00	-0.00	0.01	-0.02	0.06	0.00	-0.00	0.32
51	-0.02	-0.01	-0.03	-0.00	-0.00	0.25	-0.02	-0.05	0.00	-0.00	0.02	-0.13	0.05	0.25	1.00	-0.01	-0.06	-0.03	-0.11	-0.03	0.00	-0.00	0.00	-1.00	0.15	0.05	-0.06	-0.04	-0.00	0.00	-0.33
52	-0.03	-0.04	-0.04	0.00	-0.02	0.44	-0.01	-0.19	-0.03	0.00	-0.00	-0.01	-0.01	0.19	0.02	0.00	-0.08	0.00	0.02	0.03	-0.04	-0.03	0.09	0.23	-0.00	0.00	0.00	0.00	-0.00	-0.05	0.25
53	-0.05	-0.02	-0.18	-0.00	1.00	-1.00	0.00	0.00	0.16	-0.00	0.00	0.03	0.01	0.04	0.05	-0.00	-0.01	0.04	0.05	0.01	0.04	-0.00	0.00	-0.01	-0.00	0.00	0.03	0.00	0.02	0.33	0.00
54	-0.05	-0.04	0.00	-0.01	0.00	0.00	-0.01	0.06	0.11	0.75	0.13	-0.03	-1.00	-0.01	0.00	-0.02	0.00	-0.01	-0.00	-0.03	-0.24	-0.33	0.00	0.00	0.12	-0.00	-0.03	-0.00	-0.00	-0.00	0.00
55	-0.08	0.08	-0.08	0.00	0.04	-0.11	0.05	0.00	-0.02	0.00	0.19	0.01	0.05	-0.00	-0.01	-0.00	0.05	-0.50	-0.25	-0.17	0.00	-0.03	0.00	-0.00	-0.16	0.01	-1.00	0.00	0.00	0.00	0.00
57	-0.05	-0.05	0.00	-0.00	-0.08	0.00	0.00	0.00	0.02	0.00	0.01	-0.02	-0.03	0.00	0.00	0.00	-0.01	0.11	0.01	0.01	0.00	-0.00	0.00	-0.00	-0.13	0.00	1.00	0.00	0.00	0.00	0.00
58	-0.06	-0.10	-0.10	0.06	0.00	0.00	0.01	0.06	0.20	-0.00	0.07	0.00	-0.01	0.04	0.01	0.00	-0.01	0.01	0.02	0.02	-0.00	0.01	0.04	-0.00	-0.00	-0.00	-0.06	0.00	0.08	-0.06	0.00
60	-0.01	0.01	-0.01	-0.00	0.00	0.25	-0.01	0.48	-0.33	0.09	-0.00	0.02	-0.01	-0.00	-0.50	-0.01	0.00	0.00	0.00	-0.01	0.01	-0.09	-0.01	-0.00	0.00	-0.00	-0.01	0.00	-0.00	0.01	-0.00
62	-0.01	-0.01	-0.00	-0.01	0.08	-0.30	-0.05	0.00	-0.08	0.04	0.01	-1.00	0.32	0.00	0.00	0.15	0.00	-0.00	0.00	-0.16	0.00	0.00	-0.01	-0.00	0.03	0.01	-0.07	-0.17	0.00	0.00	0.06
65	-0.00	0.02	-0.00	-0.00	0.00	0.00	-0.00	0.05	0.00	0.02	0.00	-0.25	0.00	0.00	0.00	-0.10	1.00	-0.00	0.03	0.01	-0.03	-0.20	0.00	-0.00	-0.00	-0.00	-0.01	-0.00	0.00	-0.00	0.04
68	-0.00	-0.02	0.00	0.00	0.01	-0.02	-0.00	-0.02	-0.01	-0.01	0.01	-0.00	-0.00	0.01	0.00	-0.01	-0.00	-0.03	0.00	-0.00	-1.00	-0.11	0.00	-0.00	0.00	0.00	-0.05	0.17	0.00	-0.00	0.00
70	-0.03	-0.01	-0.17	0.00	0.00	0.00	0.00	1.00	0.41	0.06	0.04	-1.00	-0.00	0.00	0.00	-0.06	0.01	0.04	0.00	0.02	-0.23	0.00	-0.08	0.00	0.01	0.00	0.00	0.00	0.00	0.50	0.00
74	-0.03	-0.03	0.00	0.12	0.00	0.00	0.25	0.00	0.00	0.00	0.03	-1.00	-1.00	0.00	0.00	0.30	0.25	0.00	0.11	0.03	0.17	-1.00	0.01	0.00	0.00	0.01	0.17	-1.00	-0.00	0.01	0.00
76	0.02	-0.02	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.02	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00
78	-0.05	-0.03	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.25	-0.50	-0.10	-0.15	0.07	-0.06	0.00	-0.03	-0.01	-0.00	0.01	-0.17	0.00	0.00	0.00	1.00
80	0.15	-0.17	0.00	0.33	0.00	0.00	0.00	0.00	-1.00	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.00	0.14	1.00	0.00	-0.05	0.02	0.00	-0.02	-0.25	0.00	0.00	0.00	0.00
81	-0.01	-0.01	0.01	0.01	0.01	0.33	-0.01	0.44	-0.30	0.00	0.01	0.01	-0.00	-0.00	0.00	-0.00	0.01	0.00	0.00	-0.02	0.00	0.00	-0.00	-0.00	0.00	-0.00	0.00	0.00	0.09	0.00	0.00
82	0.02	-0.02	0.04	0.00	-0.17	0.00	-0.00	0.00	1.00	-0.06	0.01	-0.00	0.01	0.00	0.00	-0.03	-0.20	0.11	-0.02	0.00	-0.00	0.02	-0.01	0.00	0.00	-0.00	0.02	0.00	0.10	-0.03	0.01
83	-0.02	-0.01	0.08	0.16	0.25	0.00	0.05	-0.25	0.00	0.00	0.08	-0.25	0.02	0.12	0.50	0.02	0.12	-0.13	0.00	0.75	0.00	-0.00	0.00	0.07	0.01	0.02	0.75	0.00	0.00	0.50	0.11
85	0.03	-0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.25	0.00	0.20	0.00	0.00	0.11	-0.17	0.02	-0.06	0.00	0.00	0.00	-0.33	0.00
86	-0.48	0.16	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	1.00	0.27	-0.15	0.00	0.04	-0.05	0.00	-0.01	0.00	0.00	-0.02	0.08	0.00
90	-0.04	0.02	0.01	0.00	-0.09	0.00	0.06	-0.01	-0.08	0.05	0.01	0.50	0.17	0.00	0.00	0.50	1.00	0.01	0.04	-0.33	-0.75	0.00	1.00	-0.01	0.01	0.00	-0.05	0.07	-0.02	-0.30	0.00
91	0.02	-0.02	0.00	0.00	0.02	0.00	-0.01	0.75	-1.00	1.00	0.04	1.00	0.44	-0.19	0.00	0.17	0.00	0.02	-0.01	-0.25	0.00	0.00	0.12	-0.00	0.00	0.00	0.01	0.19	0.12	0.01	0.00
92	-0.02	0.03	0.00	0.00	-0.09	0.00	0.14	-0.32	0.14	-0.01	0.02	0.00	-0.21	0.25	0.00	0.04	0.00	0.00	0.08	0.00	0.00	0.00	-0.07	-0.00	0.00	-0.00	0.00	0.00	-0.02	0.03	-0.75
93	-0.04	-0.03	-0.00	0.00	-0.22	0.00	0.25	0.01	0.05	0.13	0.00	0.08	0.03	0.25	-0.25	-0.00	0.03	0.02	0.07	0.03	0.00	-0.44	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.50
94	-0.05	-0.05	0.00	0.00	-0.01	-0.19	0.00	0.00	0.03	-0.01	-0.00	0.05	-0.75	0.75	0.00	0.01	0.03	-0.00	0.02	-0.04	-0.12	0.01	0.00	0.01	0.00	0.00	-0.03	0.44	-0.01	0.00	0.02

B Clustering coefficients

Table 21: Global transitivity. 2-digit classifications on the vertical, five-year periods on the horizontal.

	1985–1989	**1990–1994**	**1995–1999**	**2000–2004**	**2004–2009**
00	0.35	0.33	0.25	0.48	0.33
01	0.13	0.15	0.15	0.17	0.19
03	0.13	0.16	0.21	0.24	0.29
05	0.26	0.29	0.33	0.39	0.43
06	0.15	0.18	0.23	0.28	0.35
08	0.13	0.14	0.17	0.24	0.31
11	0.14	0.16	0.20	0.22	0.26
12	0.11	0.16	0.25	0.18	0.23
13	0.19	0.23	0.25	0.28	0.27
14	0.14	0.15	0.16	0.20	0.23
15	0.18	0.19	0.26	0.34	0.37
16	0.13	0.17	0.19	0.26	0.29
17	0.19	0.23	0.24	0.28	0.31
18	0.13	0.14	0.18	0.31	0.22
19	0.00	0.12	0.12	0.25	0.15
20	0.15	0.16	0.20	0.23	0.28
22	0.16	0.18	0.20	0.25	0.24
26	0.12	0.14	0.23	0.24	0.30
28	0.15	0.17	0.26	0.30	0.33
30	0.12	0.15	0.21	0.23	0.27
31	0.13	0.13	0.20	0.23	0.28
32	0.11	0.14	0.15	0.20	0.24
33	0.20	0.26	0.27	0.35	0.36
34	0.23	0.24	0.29	0.32	0.38
35	0.17	0.21	0.26	0.30	0.35
37	0.23	0.29	0.33	0.39	0.44
39	0.13	0.21	0.30	0.36	0.38
40	0.11	0.13	0.09	0.20	0.26
41	0.12	0.19	0.25	0.28	0.33
42	0.12	0.19	0.24	0.32	0.36
43	0.13	0.18	0.18	0.23	0.25
44	0.15	0.23	0.33	0.33	0.38
45	0.14	0.19	0.22	0.33	0.36
46	0.16	0.19	0.22	0.26	0.30
47	0.13	0.18	0.23	0.27	0.32
49	0.21	0.24	0.26	0.35	0.39
51	0.14	0.16	0.20	0.26	0.29
52	0.21	0.24	0.30	0.38	0.38
53	0.14	0.20	0.22	0.26	0.29
54	0.14	0.21	0.26	0.30	0.33
55	0.17	0.15	0.24	0.22	0.24
57	0.14	0.15	0.21	0.25	0.24
58	0.19	0.22	0.26	0.26	0.25
60	0.15	0.19	0.24	0.29	0.32
62	0.20	0.23	0.28	0.40	0.43
65	0.28	0.32	0.38	0.44	0.48
68	0.30	0.34	0.41	0.48	0.55
70	0.24	0.28	0.37	0.42	0.49
74	0.26	0.31	0.36	0.42	0.50
76	0.32	0.37	0.43	0.48	0.55
78	0.35	0.40	0.49	0.54	0.61
80	0.32	0.37	0.47	0.51	0.56
81	0.36	0.37	0.41	0.44	0.49
82	0.34	0.37	0.43	0.48	0.51
83	0.28	0.32	0.37	0.41	0.45
85	0.30	0.32	0.17	0.53	0.54
86	0.27	0.33	0.42	0.48	0.56
90	0.28	0.31	0.40	0.46	0.51
91	0.20	0.20	0.27	0.32	0.36
92	0.39	0.35	0.46	0.60	0.67
93	0.32	0.36	0.43	0.49	0.57
94	0.27	0.34	0.40	0.50	0.58

Table 22: Local transitivity. 2-digit classifications on the vertical, five-year periods on the horizontal.

	1985–1989	**1990–1994**	**1995–1999**	**2000–2004**	**2004–2009**
00	0.73	0.66	0.81	0.74	0.84
01	0.40	0.33	0.43	0.28	0.50
03	0.37	0.31	0.31	0.29	0.35
05	0.23	0.20	0.22	0.24	0.28
06	0.31	0.27	0.31	0.34	0.34
08	0.33	0.31	0.33	0.33	0.37
11	0.26	0.27	0.26	0.26	0.30
12	0.42	0.33	0.38	0.38	0.52
13	0.31	0.30	0.32	0.33	0.33
14	0.31	0.28	0.30	0.28	0.35
15	0.30	0.30	0.31	0.32	0.34
16	0.29	0.29	0.28	0.26	0.30
17	0.32	0.32	0.33	0.33	0.38
18	0.29	0.31	0.36	0.34	0.39
19	0.34	0.33	0.39	0.33	0.43
20	0.33	0.28	0.28	0.27	0.30
22	0.34	0.37	0.41	0.34	0.40
26	0.38	0.30	0.26	0.24	0.29
28	0.43	0.33	0.32	0.36	0.50
30	0.30	0.28	0.29	0.26	0.28
31	0.36	0.30	0.30	0.34	0.40
32	0.33	0.32	0.32	0.30	0.37
33	0.32	0.32	0.28	0.28	0.32
34	0.36	0.28	0.28	0.25	0.26
35	0.27	0.24	0.24	0.23	0.28
37	0.41	0.32	0.32	0.29	0.31
39	0.60	0.37	0.32	0.28	0.30
40	0.38	0.36	0.37	0.40	0.40
41	0.27	0.27	0.33	0.34	0.38
42	0.33	0.30	0.31	0.30	0.36
43	0.27	0.38	0.33	0.38	0.45
44	0.51	0.38	0.37	0.44	0.55
45	0.39	0.34	0.33	0.34	0.40
46	0.30	0.26	0.26	0.26	0.29
47	0.29	0.24	0.24	0.22	0.23
49	0.56	0.29	0.29	0.30	0.31
51	0.42	0.30	0.34	0.34	0.41
52	0.33	0.27	0.29	0.30	0.34
53	0.32	0.31	0.32	0.31	0.37
54	0.33	0.26	0.27	0.27	0.29
55	0.36	0.36	0.35	0.33	0.41
57	0.33	0.36	0.35	0.31	0.44
58	0.32	0.31	0.31	0.30	0.34
60	0.26	0.24	0.23	0.25	0.34
62	0.27	0.23	0.25	0.32	0.47
65	0.42	0.30	0.31	0.31	0.37
68	0.38	0.26	0.26	0.28	0.36
70	0.48	0.42	0.43	0.42	0.51
74	0.46	0.35	0.35	0.37	0.46
76	0.43	0.34	0.36	0.35	0.44
78	0.60	0.56	0.57	0.50	0.62
80	0.45	0.39	0.46	0.48	0.57
81	0.32	0.30	0.30	0.29	0.42
82	0.35	0.35	0.36	0.35	0.43
83	0.30	0.32	0.30	0.26	0.37
85	0.67	0.67	0.58	0.70	0.73
86	0.64	0.66	0.59	0.57	0.70
90	0.38	0.29	0.29	0.30	0.34
91	0.48	0.35	0.38	0.37	0.40
92	0.62	0.46	0.47	0.48	0.51
93	0.46	0.32	0.31	0.31	0.32
94	0.40	0.35	0.31	0.35	0.44

C Z-scores

Table 23: Z-scores. Global transitivity. 2-digit classifications on the vertical, five-year periods on the horizontal.

	1985–1989	**1990–1994**	**1995–1999**	**2000–2004**	**2004–2009**
00	0.82	0.25	1.52	0.16	1.34
01	29.34	22.10	36.97	22.69	10.01
03	33.63	60.42	71.31	68.65	71.87
05	24.69	31.85	38.10	37.67	33.49
06	5.15	4.45	8.22	9.06	16.50
08	1.14	-1.53	-0.32	-2.00	-1.07
11	0.18	-3.07	-2.80	-2.83	-2.07
12	13.86	3.31	1.53	0.16	-0.74
13	0.50	-2.27	-1.75	3.90	4.92
14	0.74	1.21	1.38	9.33	9.15
15	22.84	29.41	27.15	19.94	10.85
16	2.65	5.59	4.43	4.47	5.64
17	1.53	11.49	6.64	14.55	13.11
18	7.98	6.06	2.67	12.15	12.21
19	6.77	6.84	2.53	8.75	4.68
20	11.13	5.33	6.64	4.98	7.30
22	11.80	13.07	20.79	24.57	14.73
26	12.37	9.27	12.91	16.78	20.57
28	13.64	4.51	6.68	6.02	3.91
30	21.91	16.48	27.75	44.58	58.11
31	0.13	-0.31	1.76	8.15	3.10
32	17.94	11.46	9.08	10.84	7.57
33	4.06	9.54	17.98	18.21	21.90
34	17.44	23.49	19.68	18.12	37.62
35	-1.71	-2.46	-3.59	8.28	13.00
37	11.43	14.00	8.55	29.70	51.81
39	1.31	7.79	18.09	23.24	25.54
40	6.47	7.04	2.02	2.37	4.66
41	15.18	21.40	18.85	14.71	6.07
42	16.62	16.31	23.03	40.11	48.46
43	-0.55	1.68	4.75	-0.65	2.56
44	0.75	6.23	5.35	3.66	4.47
45	6.68	3.69	9.76	8.16	9.84
46	31.22	35.57	37.93	42.05	52.32
47	7.28	20.06	18.68	26.24	48.31
49	5.67	3.12	4.89	9.47	10.79
51	7.33	12.23	12.16	17.01	21.63
52	-0.83	5.32	9.31	18.46	15.87
53	15.27	27.14	27.14	29.71	31.92
54	-2.17	-1.52	-1.62	-2.37	2.04
55	1.78	0.97	-1.89	-0.03	-1.90
57	5.52	1.81	1.51	2.15	-0.03
58	16.78	10.65	12.11	12.89	11.24
60	5.84	-0.44	2.37	18.22	30.80
62	7.52	0.74	6.13	26.31	22.50
65	45.54	60.53	68.09	74.22	99.08
68	9.48	19.08	20.46	27.75	32.86
70	11.85	10.46	12.03	12.53	15.01
74	7.64	7.99	8.77	2.17	7.65
76	8.78	7.36	11.96	13.31	17.37
78	6.51	-0.67	1.33	2.39	5.04
80	3.00	4.38	5.32	7.58	5.56
81	58.19	78.35	111.71	135.41	126.59
82	21.43	23.39	26.58	38.79	31.65
83	13.05	3.11	6.46	28.30	16.40
85	-0.50	8.66	4.37	-0.38	1.81
86	0.93	5.54	7.81	6.10	5.31
90	16.77	26.87	17.62	9.89	13.84
91	33.61	20.27	31.44	35.38	24.53
92	28.27	10.82	8.88	37.36	33.65
93	21.78	29.22	37.60	39.10	30.47
94	6.05	2.88	1.60	2.36	0.77