MEASURING DIFFERENTIALS OF INFORMATION POWER BETWEEN ACADEMIC DISCIPLINES USING INTERDISCIPLINARY CITATION PATTERNS AMONG EIGHT SOCIAL SCIENCES FROM 1979-1983 AND 2005-2009

by

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A dissertation submitted to the Faculty of the Graduate School of the University at Buffalo, State University of New York in partial fulfillment of the requirements for the degree of

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Dedication

Dedicated to my grandfather, George Harding Pierce

Grampa I have dedicated this whole shebang to you; without your aid and encouragement none of it would have been possible. It is true perhaps that it didn't cost any more for me to live there than you alone. Nonetheless, I will never forget how you told me about life on the farm, life in the navy, Tesla and electricity, helped with my first car and first passport trip—as well as fed my cat whilst I was away driving to Seattle and then Tucson. Thank you. To me, you are not gone.

Remember Me

To the living, I am gone To the sorrowful, I will never return To the angry, I was cheated

But to the happy, I am at peace And to the faithful, I have never left.

I cannot speak, but I can listen. I cannot be seen, but I can be heard.

> So as you stand upon a shore Gazing at a beautiful sea... Remember me.

As you look in awe at the mighty forest And its grand majesty... Remember me.

Remember me in your heart; Your thoughts and your memories... Of the times we cried, the times we fought, The times we laughed.

For if you always think of me, ...I will never have gone.

-Anonymous, Veterans Hospital Remembrance Ceremony on May 14, 2011 in Buffalo, NY



Acknowledgments

"...we see only what we are ready to see, what we have been taught to see." Jean-Martin Charcot, 1825 – 1893

"One must systematically discard all preconceptions." Emile Durkheim, *The Rules of Sociological Method* (translated 1982 by W.D. Halls)

What I liked most, why I came to grad school at all, was Galileo[™]. The idea of concepts related spatially in multiple dimensions was fascinating--topography, geometry, algebra, calculus, physics, and all the other stuff I had no clue about notwithstanding. Doing Galileo surveys showed me things about my own thoughts that were useful, making the relationships between objects I'd never consciously connected explicit. The results seemed always surprising, and yet not surprising, both at the same time. I loved that it was surprising.

A bit later relating my own survey results to the results of others became possible (using cgi-forms, the Galileo Matrix, .asp forms, Survey Monkey, LimeSurvey, and then LimeSurvey with sliders). The first time I realized most folks I knew did not regard Pop-Tarts® as a major food group was after one of my innumerable food surveys—and it wasn't until repeatedly running emotion Galileos that I realized how much closer to fear I was at that time than anyone else taking the surveys. I loved running what I thought of as "goof" surveys about anything that came to mind (animals, dogs, weather, snowmen, boys' names, food, plants, my classes, more food, movies, location of objects in my office, soda, food yet again) and then eventually more "serious" projects (emotion words vs. images, Iraq war, organ donation, quality of life, technology, elections, selling socks).

Yet still the goof surveys also continued since you can, after all, Galileo anything; that is especially exciting as cognitive groupings mapped so far appear to be complex systems and display power laws. As Melanie Mitchell says in her 2009 book *Complexity: A guided tour,* "A nonlinear system is one in which the whole is different from the sum of the parts. Jake puts in



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two cups of baking soda. Nicky puts in a cup of vinegar. The whole thing explodes..."! and something new is created. Of course timing matters too; if the vinegar has evaporated nothing much will happen. Or, as one of my early food metaphor thought examples went, fruit added to jello at just the right time suspends well; added too soon it may sink to the bottom, wait much too long and the jello has already hardened so nothing will sink at all. Fresh pineapple will also prevent jello gelling but canned pineapple is ok (since it was heated in the canning process). The process parts are simple yet nonetheless lead to a multiplicity of conditions.

Similarly, people from many places and times have helped shape and guide me to this point; indeed that is the nature of significant other theory. I wish to thank my friends at MSKK and the Buffalo Zoo, as well as colleagues from Singapore in fall 2011; their perspective and encouragement enabled me to go on more than once. My family has also made me who I am today, as have my friends, particularly Brenda Battleson, Hao Chen, Cindy (Yixin) Chen, Mike Egnoto, Arch Haller, Hyunjung Kim, Brian LaValley, HyunJoo Lee, Kristen Lovejoy, and EA (Beth) Sears. I also greatly appreciate Mom and Dad's help proofreading the tables; thank you and love always. Last but surely not least I thank the members of my dissertation committee: Arun Viswanath, Michael Stefanone, and especially Joseph Woelfel. Joe what can I really say? You allowed me to keep questioning, observe repeatedly, not assume there was only one reference frame, and go beyond what I'd been taught to see...



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Abstract

Although social stratification usually calls to mind the hierarchical ranking of individuals, sociology often broadly considers it the ranking of any social objects. The Treiman Socio-Economic Index (SEI), for example, provides a quantitative assessment of the hierarchical ranking of occupations. This dissertation considers the hierarchical ranking of eight social science disciplines (anthropology, communication, economics, geography, library and information science, political science, psychology, and sociology).

The hierarchical ranking of disciplines was operationalized as the degree of asymmetry in cross-discipline citation patterns. Asymmetries in the information flow in the citation data were regarded as indicators of gravitational gradients (making movement in some directions "easier" than others) and the idea that "higher" disciplines exerted greater influence over "lower" disciplines than vice versa was explored. Lower ranking disciplines were expected to cite higher ranking disciplines more than higher ranking disciplines cited lower ranking disciplines.

Interdisciplinary citations in journal citation data from 1979-1983 and 2005-2009 showed considerable asymmetries, and ranking of the status of the eight disciplines investigated were derived from those asymmetries.



Introduction and Research Questions

In this project stratified proxemic relationship patterns between academic disciplines in the social sciences are considered as collective cognitive phenomena. Stratification theory is usually concerned with the difference in status of particular people or groups of people. Marx's theory of stratification, for example, is concerned with the difference in status of classes (Haller, 2000; Livesey, 1995-2010). Occupational prestige is a bit different as it is concerned with the difference in status among roles, regardless of who fills those roles (Nakao, 2010)—yet whoever fills the rolls, they are people. A theory of the stratification of collective representations (Woelfel & Fink, 1980), however, concerns systems of ideas.

Collective cognitive phenomena are considered to be the primary elements of society in this study; individuals are the substrate in which these collective patterns of thought reside. Academic disciplines, e.g., communication, psychology, sociology, and the like, constitute collective representations in this sense. Although manifested as neural patterns in individual brains, these patterns of thought transcend particular embodiments and continue to exist as collective patterns despite the replacement of all individuals every generation (Woelfel & Murero, 2005, p. 59). Collective representations may interact with each other, influencing and being influenced, and it is these asymmetric patterns of influence that were examined as indicators of stratification. In particular, questions such as "Are some ideas more powerful than others and, if so, which ideas dominate?", "Do some academic disciplines primarily appear to influence others or to be influenced by others—and if so is that a reciprocal arrangement that changes over time?", and "How do they interact with one another over time and are they competitive?" were explored.



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Theoretical Background

Durkheim

Emile Durkheim, a French sociologist who wrote in the late nineteenth and early twentieth centuries (although most of his writings were not translated into English until the mid to late twentieth century¹), referred to collective phenomena variously as *conscience colectif* and as *représentations collectives* (Collins, 1985; 1951). Both phrases are most often translated into English as either "collective consciousness" or "collective conscience"; either translation is acceptable for the purpose of this study. What is relevant is an idea both phrases include, namely, that collective patterns of thought reside in particular individuals but are not formed in each separate individual.

Specific instances of collective representations are what Durkheim regards as social facts, that is, "...the social structures and cultural norms and values that are external to, and coercive² over, actors [individuals]" (Ritzer & Goodman, 2004, p. 73). Social facts may represent both manners of acting or thinking and are "general over the whole of a given society" (Durkheim, 1938, p. 59). As such, they are culturally transmitted and learned by each individual in a

² Although it might sometimes be the case, the English word "coercive" should not necessarily be taken to imply social facts are consciously restrictive. A particular social fact may seem so natural to an individual that its influence is imperceptible, much as Dewey surmises that fish do not notice water; it is merely a fact of their existence, their environment (Campbell, 1995). In this same manner, particular social facts may be perceived in varying degrees as restrictive or "natural" depending on the perceiver(s).



¹ Durkheim's work was initially translated into English largely through Talcott Parsons' influence. Parsons' commentary and interpretation are now thought to reveal his own perspectives as much as those of Durkheim (Pope, 1973). Although some newer translations do not recognize Durkheim as a functionalist and/or structuralist (Giddens & Turner, 1987; Pickering, 2001), many still do (Lemanna, 2002; Pope, 1975). This diversity of opinions is not entirely surprising in light of the fact that what functionalism itself means is also not always agreed upon (Pope, 1975). All do appear to agree, however, that "The way in which Durkheim's work was presented to American audiences also influenced perception of his theoretical interests" (Lemanna, 2002).

particular society (Pickering, 2000, p. 101). Regarding social facts as "things" (Durkheim, 1938, p. 34), rather than ideas in an individual mind, allows data to be acquired through observation and experimentation. This allows individuals and groups in a society to be investigated empirically (Durkheim, 1938, p. 12) as both main and sub culture(s)--even if they disagree about how particular social facts are to be interpreted or recognize different social facts.

This mechanism should not, however, be taken to indicate that a social fact merely represents the average of any coherent group of individual representations "for in that case they [collective representations] would be poorer than the latter [individual representations] in individual content, while, as a matter of fact, they contain much that surpasses the knowledge of the average individual" (Durkheim, 1968, p. 483). As suggested by Woelfel, Danielson, & Yum "The key question for analysis above the individual level is whether or not the group—audience, society, or culture—has group properties above and beyond the aggregate properties of its individual members" (2009, p. 2). Durkheim believes this to be so, stating that groups and individuals are not the same, each having their own laws (1982, p. 40), and the groups' laws may "differ from those displayed by the parts from which it is formed" (1982, p. 128).

This third sense that Durkheim outlines, that is, that group properties are distinct from both individual representations and the aggregate representation, relates to Schelling's idea that people's choices and behaviors that are dependent upon behaviors or choices made by others "...are the ones that usually don't permit any simple summation or extrapolation to the aggregates" (1978, p. 14). For example, individuals may each have their own memories of an event and may have also heard via media the perceptions of others regarding that same event. Yet when aggregated, what each individual knows and what others know may merge--destroying neither the personal nor public parts but rather, transforming them into a new "shared" created



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meaning. This is similar to the idea of a complex system, that is "a system composed of many interacting parts, such that the collective behavior of those parts together is more than the sum of their individual behaviors" (Newman, 2011, p. 800). In this manner such systems may create patterns, potentially evolving and learning, that exhibit "nontrivial emergent and self-organizing behaviors" (Mitchell, 2009, p. 13).

Shared (collective) knowledge

The Internet appears to especially foster such creation of shared knowledge, meaning, and "selves" by merging private and public representations and then transforming them into something new. This situation agrees with Woelfel's definition of a communication network, namely, that it is "sets of nodes [individuals in this case] whose state is at least partly a function of the states of other nodes in the set" (1990, p. 1).

Individuals may or may not be consciously aware (Lewicki, 1986) of a collective's ability to function as more than the sum of its parts, like a network. As Doty's classical conditioning work demonstrated, however, "...the brain does not require motivation: it simply requires the pairing of two stimuli" (Kandel, 2006, p. 161); that is, purposeful conscious awareness is not necessarily required even at an individual level. That an object as collective representation is something shared among individuals, among the "parts" (Piepmeyer, 2007) is what matters in this study--not that this shared nature, formed perhaps by ritual and education (Gane, 1992, p. 91), is necessarily recognized by the individual(s) as something outside themselves in which they participate.

Society as a whole may be considered an information processing system which has attitudes, beliefs, scripts, plans, and "goals" that no individual or set of individuals within the society holds (Woelfel, et al., 2009, p. 2; Woelfel, Newton, Holmes, Kincaid, & Lee, 1986).



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Since it has been previously demonstrated that individuals are influenced by others, albeit at times even by factors beyond their conscious awareness (Lewicki, 1986), this study will assume it possible that culture(s) possess ideas not found in any particular individuals that may, nonetheless, influence individuals.

This sort of interrelationship has frequently been considered at the individual level in both developmental psychological and educational research. For example Vygotsky's learning theory indicates individuals' "developmental change occurs via the internalization of socially shared processes" (Siegler & Alibali, 2005, p. 110). That is, children learn to perform cognitive tasks with social partners and only later perform tasks on their own. Considering this it is clear the learner was not initially aware of the "pattern", what was to be done, prior to doing it. Another more recent developmental psychologist, Katherine Nelson, also invokes Vygotskian social constructivism; she indicates that using language children adapt their understanding to agree with their linguistic community (Remmel, 2008). Since the present project is concerned with interaction between concepts developed by groups of individuals, rather than the development of those group concepts within individuals, this educational literature will not be reviewed further.

Significant Other Project

One model that exemplifies and extends the idea of interrelationship between a focal individual and a group of individuals is the Wisconsin Significant Other Model. The Wisconsin Model is a social psychological model demonstrating how individuals form their educational and occupational aspirations and move through a status trajectory throughout their lives (Woelfel & Murero, 2005, pp. 60, 64). This model assumes that "preferences are formed and modified



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largely on the basis of information from others about the occupational structure and self" (Saltiel, 1988, p. 336).

In the significant other³ project 30 students in various Wisconsin high schools were interviewed; data was then collected from 100 high school seniors in a small Wisconsin city high school. Significant others, people who exercised major influence over the attitudes of these students,⁴ were identified for each student and the educational and occupational expectations for each of these significant others, as well as for the student, were measured. Finally, expectations from the significant others for each student were averaged together as it was hypothesized that "…there should be a relationship between the aggregate value of the expectations of others and the aspirations of ego, although the precise nature of that aggregate was (and is) a matter for conjecture" (Woelfel & Haller, 1971, p. 79).

It was found that the aspiration level of the students was substantially related to the expectation level their significant others held for them (Haller & Woelfel, 1969) and students' aspirations were indeed strongly related to the mean expectations of their significant others, no matter how many others a particular student had. That is, the students' aspirations were not the same as the expectations of particular significant others but were an aggregate of the expectations all their significant others held for them—and not only were those expectations of others related to the students' attitudes, they were the main factor determining them (Haller & Woelfel, 1972, pp. 616-617). Further, both the expectations of the significant others and the

⁴ Significant others were defined more specifically as those people who influenced the attitudes of the high school students either by defining objects (occupations or the students themselves) via personal communication or representing an occupational example by their actions (Woelfel & Haller, 1971, p. 75).



³ The first known occurrence of the term "significant other" was in 1953 by US psychiatrist, Harry Stack Sullivan, a former editor of the journal Psychiatry, in his posthumously published work, *The Interpersonal Theory of Psychiatry*.

students were influenced by social structural factors such as the father's occupational level (Saltiel, 1990; Woelfel & Haller, 1971).

The present study assumes that since these cognitive and structural elements influence each other, the reverse, that individual cognitive factors influence collective structural elements, is also true. Yet although collective representations as experienced by an individual begin at that individual's birth, such representations as experienced by society have no clear beginning⁵. Nonetheless it is proposed that it is this overlap of individual perspectives that allows cultural representations to continue beyond the lifetime of particular human beings. The initial significant other work suggests, but does not directly uphold, such a notion; subsequent studies that generalize the Wisconsin Model as the Linear Force Aggregation Model (which in the multidimensional case is Galileo Theory), however, do support this assumption.

Linear Force Aggregation Model

The Wisconsin Model specifically indicated that "...others are significant in direct proportion to the amount of information they convey to an ego about the categories he used to define objects and self, either by word (definers) or examples (models), affective factors notwithstanding" (Woelfel & Haller, 1971, p. 76). Therefore it was the total amount of information conveyed that mattered, not whether the significant other was liked or disliked by the student. The Linear Force Aggregation Model, originally built on the Belief Certainty Model and also sometimes referred to as the Accumulated Information Model (Blau & Katerberg, 1982), notes that the rate of a behavior (or strength of a belief) equals a linear aggregate of information from all sources (Blau & Katerberg, 1982; Woelfel, Hernandez, & Allen, 1973;

⁵ See Woelfel, J., & Barnett, G. A. (1990). *Procedures for controlling reference frame effects in the measurement of multidimensional processes* at http://www.galileoco.com/CEtestLit/literature.asp for more information on reference frames.



Woelfel & Saltiel, 1978). Resistance to change may therefore be predicted by the amount of previously accumulated knowledge (Blau & Katerberg, 1982; Danes, Hunter, & Woelfel, 1984) and "old" beliefs, those based on greater amounts of information, are less likely to change than weaker "new" beliefs (Danes, Hunter, & Woelfel, 1978). Thresholding in neural networks displays a similar mechanism; unless an input value causes a neuron to exceed a certain preset threshold value, no nodal connection is made (Woelfel, 2009, p. 12; Woelfel & Richards, 1989, p. 35).

A subsequent study by Kincaid, Yum, Woelfel, and Barnett suggested that it was inertial mass that determined the rate of change in acceleration. Even massive objects (strong beliefs formed by a large amount of previous knowledge) could be expected to move as quickly as weaker beliefs once movement began; it was such movement beginning at all that was related to previous knowledge (Kincaid, Yum, Woelfel, & Barnett, 1983). This is similar to the idea of a local minimum in a neural network and has more recently been developed by Woelfel and Stoyanoff in relation to sales funnels (Woelfel & Stoyanoff, 2007).

Sales Funnels and Theory of Reasoned Action

Sales funnels, also sometimes called sales pipelines or sales tunnels, are a concept used by marketing professionals to visually describe different stages prospective customers go through when buying a product (Harry-The-Spider, 2011). The wide top of the funnel is where most potential buyers are located and the width of the funnel is correlated with the number of potential buyers. There are fewer and fewer people located at each stage as one moves through the sales process so the funnel narrows; customers at the very bottom have made a purchase. This is somewhat analogous to the Theory of Reasoned Action (TRA); TRA was developed by Ajzen and Fishbein in 1980 and is often used in health communication (University of Twente, 2010).



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Both sales funnels and TRA maintain that a person's intention to perform a behavior (in the case of sales funnels, for example, the intention to purchase a product) determines their subsequent behavior. TRA goes further, introducing the idea that both social norms as well as perceived behavioral control play a role in this intention. What most relates to the present study, however, is the fact that how likely one is to perform a particular behavior correlates with the strength of the intention to perform that behavior; the stronger the intention to perform a behavior is, the more likely it is to be performed.

Relationships between objects in both TRA and sales funnels suggest the importance of viewing variables as continuous in time, else no meaning exists for considering "stages" or process. Woelfel and Stoyanoff (2007) go further and attempt not only to situate continuous variables in time, but also in space. By using a sales funnel type visualization as an overlay for Galileo space, they were able not only to consider concepts in isolation, each in their own funnel, but also model relationships between multiple concepts.

In such a space, massive objects create regions that attract other objects yet also cause objects within to be difficult to move; these regions may usefully be considered to be valleys. Considered in this manner, it is possible to suggest that beliefs at the bottom of a deep funnel (valley) may have more trouble moving than beliefs in shallower funnels or those not in a funnel at all⁶. How likely it is that objects in valleys will begin to move may depend on the strength of the initial beliefs (as evidenced by the depth of the initial funnel); this is consistent with previous

⁶ Although the terms "funnel" and "valley" are being used here, one might alternately consider the funnels as mountains; the idea that other concepts are attracted somehow to whatever is at the bottom of the funnel (or peak of the mountain) is what matters; "up" and "down" are irrelevant so these ideas are interchangeable.



research (Barnett, 1988; Danes, et al., 1984; Kincaid, et al., 1983; Woelfel, Holmes, Newton, & Kincaid, 1988).

The Galileo Model and Collective Stratification Theory

These relational ideas are at the heart of what is usually referred to as Galileo Spatial Modeling. The Galileo Model has been regarded as both a theory and measurement tool dealing with "the structure and development of social cognitive space"⁷ that holds concept meaning to be both relational and situational (Ewert & Linton, n.d.). As such, concepts (sometimes also referred to as objects⁸ or terms) may be both directly and indirectly connected.

Spatial representation allows equations used to describe physical movement to be used with non-physical concepts and is an extension of the earlier Wisconsin Model which stated "...each significant other's expectation can be represented as a force vector pulling the adolescent in a specific direction..." (Woelfel & Murero, 2005, p. 61). Indeed, in Galileo space "message" relationships between objects average as vectors (Woelfel, Holmes, Cody, & Fink, 1988; Woelfel & Stoyanoff, 2007, p. 16) and, over time, individuals' attitudes will "tend toward the point at which all such forces are balanced" (Woelfel & Murero, 2005, p. 61).

Collective stratification theory, as shown using Galileo spatial modeling, suggests that social objects are most usefully measured⁹ comparatively as continuous, multidimensional variables. The relational pattern of all concepts observed shows how respondents, as a group,

⁹ Traditionally this measurement has been done at the individual level using pair comparison questions in surveys administered via face to face, telephone, or internet communication.



⁷ "Knowledge structure" does not have a precise agreed meaning at this time; "social cognitive space" is meant as a representational knowledge structure in this paper ("DEFINITION: Knowledge structure," 2012) and knowledge structures will be regarded herein as a cognitive structures.

⁸ "Object" is the term preferred by Mead in Symbolic Interactionism and was used most frequently in early Galileo work.

view them (Cancian, 1975, p. 53; Vishwanath & Chen, 2006) and it is this pattern that defines the concepts, allowing central tendencies of cultural belief systems to be investigated (Woelfel & Barnett, 1982) and multiple patterns (or the same pattern over time) to be compared¹⁰.

Magnitude estimations generated thusly are situated as coordinates in Riemann space by using the Young-Householder and Torgerson procedures for obtaining a double-centered scalar products matrix from a matrix of dissimilarities (Torgerson, 1952; Torgerson, 1958; Young & Householder, 1938). A method that finds the principle axes of the centroid scalar products using a procedure first established by Karl Jacobi in 1849, implemented in a mathematical algorithm by Johannes Van de Geer in 1971, and incorporated into the Galileo Fortran program by Kim Blaine Serota and Richard A. Holmes in 1975 is then used to calculate the eigenvalues and eigenvectors for this coordinate space (Barnett, Serota, & Taylor, 1976; "Galileo Website," 2011; Van de Geer, 1971; Woelfel & Evans, 2009; Woelfel, Newton, Kincaid, & Holmes, 1979; Woelfel, et al., 1975, August).

Similar concepts are close to one another in this space and concepts that are dissimilar are distant from one another. These distance relationships describe and define the concepts (Woelfel & Fink, 1980) and the concepts are therefore not independent from one another. The self-concept may also be located close to, or distant from, other concepts and behavioral concepts closest to the self-concept are those performed most frequently—while those seldom or never performed are more distant from the self-concept (Woelfel & Fink, 1980, pp. 163-164). More

¹⁰ This idea of similar and dissimilar features defining concept connections is somewhat analogous to Geoffrey Hinton's discussion of image recognition features as forming energy "landscapes" that include valleys and ravines (Hinton, 2007, 19:24-20:10)



recently it has also been found that media close to the self-concept are utilized more often than media further from the self-concept (Cheong, et al., 2010).¹¹

It should be noted, however, that although particular points are plotted, the location of objects is best thought of as a field with indefinite range, rather than as a discrete point. Where a particular measured point is located within such a field at any given time is dependent upon the degree of uncertainty, as expressed by the measurement of standard error (Woelfel & Pruzek, 1983). That is, the center of the fields where points reside in a particular Galileo space is located within a tolerance (permitted measurement variation) as estimated by a hypersphere with a radius of one standard error around the mean coordinates for the values of the point's location. Accordingly, it should also be noted that although the first three dimensions of a Galileo space can be plotted visually, more complete and meaningful analysis must rely on mathematical computations based on all dimensions of the spatial coordinates.

In Wisan's 1972 dissertation, Galileo space (called therein a "social manifold" so as to model terminology after physical science¹²), was constructed and investigated as "…continuous, linear, unbounded, metric, isotropic, and homogenous." The present study will, however, reconsider whether it has inherent anisotropic or isotropic characteristics for the concept set under investigation (academic disciplines). Continuous is assumed.

¹²This terminology was more recently used by Geoffrey Samuel (1990) but does not appear to have been adopted by present day neuroanthropology. It did, however, resurface in 2009 when discussed at some length in a biblical sociology book (Mol, 2009) that was then reviewed by a religious studies journal in 2010 (Joyce, 2010). Presently much of the 2009 book is available online as a Google book; the section mentioning Samuel's work begins on p249 and includes his definitions of both social manifold and modal states. It is of interest that his definition uses the image of a flowing river as an analogy for social "currents" and notes the social manifold is derived, but differs, from both individuals and societies.



¹¹ This research, as well as unpublished replications and partial replications, appears to display a power law.

Method

Eight social science disciplines¹³ (anthropology, communication, economics, geography, information & lib science, political science, psychology, sociology) were considered using citations from journals ranked highest by impact factor¹⁴ according to *Journal Citation Reports*® (JCR)¹⁵ and downloaded from the *Web of Science*® database¹⁶. For each year 2005-2009, citations in the highest impact factor journal for each of the eight disciplines were downloaded and inspected for citations to any of the top five impact factor journals for all eight disciplines. A second dataset of citations from 1979-1983 was also created. In that dataset, citations from the highest impact factor journal for each of the eight disciplines in 1981¹⁷ were downloaded¹⁸ for

¹⁸ Web of Science® has online access for articles from 1965 and after.



¹³ Which disciplines are regarded as a social science is not always agreed upon. The disciplines considered in this project were chosen by aggregating a number of different sources listing social science disciplines and then choosing the six disciplines that were mentioned most frequently plus two disciplines of interest to the researcher (Appendix A). Listiac, a non-hierarchical clustering program (Appendix B), was used to confirm results.

¹⁴ Impact factor was chosen, although other rankings are available, as it is regarded by *JCR* publisher Thomson Reuters as a "gross approximation of the prestige of journals" (Garfield, 2006, p. 14; The Institute for Scientific Information (ISI), 1994). See Appendix C for more information on *Journal Citation Reports*®.

¹⁵ Appendix D shows a screenshot of the 2009 *JCR* database interface.

¹⁶ See Appendix E for more information on *Web of Science*®

¹⁷ University at Buffalo has online access for *JCR* 2002 and after; prior to that year information is available for some years in print form or on CDs. A scanned example of one of the print pages used to locate the highest impact journals for 1981 is in Appendix F. Since impact factor sorted by discipline was not available, all impact factor rankings were examined and compared to the 1981 *JCR* subject reference provided (see Appendix G). Dr. Brenda Battleson, a professor from the UB library science dept., was also consulted as it was at times unclear which journals may have been regarded as relating to library science during that timespan. An Ulrich's listing she provided (Appendix H) showing dates of publication for library and information science journals was used thereafter when inspecting the 1981 *JCR* impact factor report.

all five years and citations to the top five 1981 impact factor journals for were counted¹⁹ each year.

Journal choice procedures using Journal Citation Reports (JCR)

Lists of journals appearing in the *JCR* database for eight disciplines (anthropology, communication, economics, geography, information & lib science, political science, psychology, sociology) were downloaded; for psychology all subject categories available were chosen so as to include all possible journals.²⁰ These lists were then combined and that master list was sorted; Appendix I shows the first page of the combined sort document. Forty-three of the 1082 journals located were associated with at least two disciplines and two of those 43 journals were associated with three disciplines: DISCOURSE SOC [Discourse & Society] was associated with communication, psychology, and sociology; GLOBAL NETW [Global Networks—A Journal of Transnational Affairs] was associated with anthropology, geography, and sociology.

²⁰ All *JCR* psychology headings (psychology; psychology, applied; psychology, biological; psychology, clinical; psychology, developmental; psychology, educational; psychology, mathematical; psychology, multidisciplinary; psychology, psychoanalysis; psychology, social) were selected prior to impact factor sort in 2005, 2007, and 2009. In 2006 a single subject heading entitled "psychology" was available; it, however, only found 4 journals. A single subject heading psychology also appeared in 2008 but only returned one journal. In light of this, all psychology headings including this "general", albeit limited, heading were selected in 2006 and 2008.



¹⁹ Garfield notes when discussing impact factor that 1, 7, and 15 year rankings for journals within subject disciplines do not differ significantly (2006); he also indicates that although exceptions to these generalities are possible, possible exceptions do not represent average behavior. Accordingly it was decided to use the same journals in each discipline 1979-1983, based on their 1981 impact factor.

	multidisciplinary Journals	Total journals	Percentage of total discipline journals that are multidisciplinary
Anthropology	8	61	13.1
Communication	12	45	26.7
Economics	18	209	8.6
Geography	5	51	9.8
Info & Lib Science	4	61	6.6
Political Science	15	99	15.2
Psychology	10	457	2.2
Sociology	16	99	16.2
Totals	88	1082	8.1

 Table 1: 2008 Journals listed in JCR by discipline



Figure 1: 2008 Journals listed in JCR by discipline

Five journals for each of the eight disciplines were then chosen for further investigation by ranking the top five 2008 journals by impact factor on the *JCR* report for each discipline (Appendix J).²¹ All 2008 citations available from the top impact journals (one journal/discipline)

²¹ History was originally investigated as a social science but after inspection of the 2008 citation data it was deemed more closely aligned with humanities in many cases. Anthropology was often, although not always, more closely aligned with scientific disciplines but was retained.



were then downloaded from the *ISI Web of Science* database²² using the *Social Sciences Citation Index.* This content was then inspected and each time a journal ranked as a top five journal by impact factor for that year for any of the eight disciplines was found, it was counted.

Based on these initial findings it appeared the anthropology journal with the highest 2008 impact factor (*American Journal of Physical Anthropology*) might be somewhat atypical as it featured substantially more articles than the journals in any of the other chosen disciplines--yet largely cited only other anthropology journals. After consultation with a colleague whose background was in anthropology, 2008 citations from a journal felt to be potentially more representative of that discipline (*Cultural Anthropology*) were also examined. The citation pattern in that journal was more in line with patterns found in other disciplines; that is, sparse connections were found but not to the point of virtual isolation. In light of that discovery, a table was created listing all top five journals in each discipline using any ranking method on *JCR* and a two mode binomial network²³ (# of times journal was in the top five by citation ranking type) using UCINET was created for each (Appendices L1 to L8).²⁴

²⁴ It was noted after this work was completed that the ranking Cited Half-Life had been incompletely considered as only the top 5 journals alphabetically were inspected—but Cited Half-Life rankings of equal value often extended beyond the top 5 journals in an alphabetical listing. In light of that it is now recommended that this ranking be disregarded in Appendices L1-L8. Were the proposed aggregate ranking method done again it is suggested that either Cited Half-Life not be included or that the Cited Half-Life ranking of all journals in any other top 5 ranking be inspected and counted if that rank is equivalent to the highest Cited Half-life ranking possible for the year inspected (even if that means there may be more than five aggregated entries with a Cited-Half life maximum ranking).



²² Although the *Web of KnowledgeSM* database accesses the same article set, citations used by each article are available as an option to download through the *Web of Science*® database (see Appendix K).

²³ To create the binomial network it is important that if there was no connection a value of zero is entered into the cell. Steps in order: 1 start UCINET; 2 file, open, choose excel file, save, close spreadsheet editor (be sure to click to add zero to blank cells); 3 click on visualize network with netdraw (icon at far right); 4 click on open-ucinetwork-2mode network.

Although there were some discrepancies, most notably in political science (see Appendix L-6), most rankings found in this manner were determined not to differ substantially from the *JCR* impact factor ranking; that is, almost all journals in the top 5 ranking by impact factor were also among the top journals listed when aggregated by all *JCR* ranking methods. Since the aim of the present study is to compare citations between fields, not to compare journals within fields, impact factor was used for the remainder of the project. It is, however, proposed that the aggregate ranking system demonstrated (rather than journals ranked highest by impact factor alone) be utilized in future studies, especially when further investigation within particular disciplines is desired.

Journal citation download procedures from Web of Science

After *JCR* was used to locate the top five journals in the chosen disciplines each year by impact factor ranking, the *Web of Science*® database²⁵ was used to download all citations from the top impact factor journal in each discipline.²⁶ Since *JCR* lists journals by abbreviated journal name but *Web of Science* requires unabbreviated journal names entered to search, it was necessary to locate unabbreviated journal names for all journals under investigation using http://www.efm.leeds.ac.uk/~mark/ISIabbr/A_abrvjt.html,

http://images.isiknowledge.com/WOK46/help/WOS/J_abrvjt.html, or

http://library.caltech.edu/reference/abbreviations/ to match abbreviations with titles.

Searches for the journal contents were done in the *Web of Science*® database as follows: publication name=[insert journal name] AND Year Published=[insert desired year], timespan all Years, Databases=SCI-EXPANDED, SSCI, A&HCI [the default database settings]. If searches

²⁶ See Appendices M & N for a screenshots illustrating the 2008 download procedures in detail.



²⁵ *Web of knowledge* also accesses the same journal set but does not allow one to download the citations used in each article (see Appendix K).

were done using only the publication name and restricted the timespan by year, rather than searching by year published, that sometimes also found data from the final issue of the previous year (usually December or November); this was first noticed during test data collection for the 2008 citations. It was also noted that (for example) searching for 2008 plus restricting the timespan to 2008 returned the same results as searching for 2008 and not restricting the timespan; therefore, "Timespan all years" (the default setting) was used in all future searches.

It should be noted that only 500 records may be downloaded at a time from the *Web of Science*® database. When more than 500 records needed to be downloaded, for example in a journal like *American Journal of Physical Anthropology*, they were downloaded as multiple groups and then reassembled. Such reassembly was easier in the Excel file than in the initially downloaded text files as the Excel spreadsheet allowed one to double check the total number of records downloaded against the row numbers, thereby making it clear none had been lost or were duplicated. When downloading from *Web of Science*® both "fill record" and "plus cited references" were checked. Records were initially downloaded as text files and then imported into Excel spreadsheet documents. In the initial 2008 test dataset this was done using Excel 2003 on a Samsung NC10 netbook or Excel 2004 on a Mac²⁷ by opening a blank excel document,

²⁷ This project was carried out using a Macintosh computer running OS X v10.5 then v10.6 and six PC computers (Samsung NC10 netbook with Windows XP, a Gateway SX2801 with Windows 7 Ultimate, an IBM Thinkpad with Windows XP, a Dell Latitude e5400 with Windows VISTA, a Samsung laptop running Windows 7 Home Premium, and an HP Compaq LE1711 running Windows XP 5.1 service pack 3). The 2008 test data was processed with Microsoft office Excel and Word 2003 (Samsung netbook and IBM) and Word 2004 (Mac), UCINET 6 for Windows for network visualization (Samsung netbook), Endnote X for references (all computers), Listiac to inspect the list of potential social science disciplines (Samsung netbook), and Galileo V56 for 3d plots and reports (HP, IBM, and Samsung netbook). In later work Microsoft office Excel and Word (2007 and 2010 on all PCs; 2008 and 2011 on the Mac), UCINET 6 for Windows (Samsung netbook only), Grab (windows v1.6 and Mac, v1.5), Endnote X3 and then X4 (all computers), Galileo V56 (Samsung netbook, IBM, Dell, Gateway virtual



choosing the data menu, and importing the text files as external data.

Counting Citations in 2008 test dataset

In the 2008 test dataset counting was done by opening the eight²⁸ text files containing citations from each discipline's highest impact journal, importing them into Excel (using semicolon as a delimiter), and sequentially searching them for the names of the top 5 impact factor journals in each of the eight disciplines²⁹. A find/replace command finding each journal name and replacing it with the same journal name but formatted in a different color was used and the total number of replacements for each journal was noted in the Excel counting worksheet (Appendix O). ³⁰ The journal citations in each discipline were then totalled to create an asymmetric matrix showing when a discipline was cited by, as well as when they cited, another discipline.

machine, and Mac w/parallels 6), Fireworks in Macromedia Studio MX, then Adobe CS4, Fireworks 10 and Photoshop 11, and CS5 (Samsungs and Gateway), and Adobe Acrobat Pro 9, then 10 (Samsungs & Gateway) and 10 (Mac) were used. The Excel work was largely done on the Mac (except fall 2011 when only the Samsung PCs were used) because it allowed more than one Excel document window to open at the same time and the larger monitor facilitated easier image captures; work with Word, however, was most often done on the PCs (especially the Gateway in the USA and Samsungs fall 2011) because they scrolled more quickly and inserting pages, changing page orientation, and updating the TOC was more easily done using the same type of computer consistently. Moving from Mac to pc using Word also at times changed small things (for example linebreak spacing in Appendix Q) even when using compatibility mode. ²⁸ Ten files including history and cultural anthropology; this data was later not used. ²⁹ A listing of the highest five impact factor 2008 journals ranked by discipline is in Appendix R. Note that in 2008 there were only 29 searches done for each of the 8 highest impact journals, rather than 40, as SOCIAL NETWORKS was one of the top 5 highest journals in both anthropology and sociology.

³⁰ Another method explored was creating Visual Basic Code (VBA) using the Macro Recorder, rather than cut/pasting a journal template, to get the counts in multiple files. Since the macro recorder was no longer available in Excel 2008 and only one of the three computers regularly used during data collection could still run Microsoft Excel 2003, however, this proved unsatisfactory.



Counting citations in 2005-2009 and 1979-1983 datasets

The counting method was entirely revised for the non-test data. This new method was initially evaluated by recounting the 2008 data and comparing those new counts to the test dataset counts. There were a few differences that, upon investigation, were all inaccuracies in the test dataset counts. Some problems had already been discovered and the initial count method had already been revised (for example, any column containing the journal's name was deleted so as not to inflate the self-citation counts for example; that was no longer necessary in the non-test data, however, as only the contents of column Z, header CR, were now searched) but more irregularities were discovered when checking at this time. For example J COMM (the abbreviation for *Journal of Communication*) is contained within I J COMM (the abbreviation for *International Journal of Communication*). The new counting sheet was modified accordingly to take into account journal abbreviations contained within other abbreviations as they were discovered (and previously run data was rerun each time).³¹ For a final listing of all journals excluded from the count of other journals with similar abbreviated names, please refer to the example count worksheets (for Library and Information Science, 2006) in Appendix P.

The highest impact factor journals for each year 2005-2009 were located, as described earlier, by sorting a *JCR* report containing all journals in a particular discipline. Citations in these journals were then counted by pasting the counting sheet (using the "paste special" command and checking "formula" box) into each of the eight excel files, one for each discipline, for each

³¹ It should be noted that when a main journal was found less often than other journals including the title of the main journal, that generated a negative number. Although absolute values were used at first, that proved problematic for subsequent formulas using the cell value. This problem was solved by using the following formula in Excel: =MAX(0,E181-G188)



year in rows 173-231.³² The citations were located in column Z so the particular count formula for each journal was (for example): =SUMPRODUCT((LEN(Z1:Z170) -

LEN(SUBSTITUTE(Z1:Z170, "ECONOMETRICA", ""))) / LEN("ECONOMETRICA")) This formula finds the total count of text in quotes from cells specified and writes that output value into the formula cell. A listing of all journals investigated 2005-2009 for each discipline is available in Appendix Q.

The same download and counting methods were used for the 1979-1983 dataset although the journal choice method was modified. As discussed in the journal choice section earlier, for this dataset a print version of *JCR* was consulted and the journals ranked highest by impact factor in 1981 were used for all five years. Appendix R shows details on the 1979-1983 journals.

After counting the citations in each discipline they were then totalled in the same way as the 2008 test data to create an asymmetric matrix showing when a discipline was cited, as well as when they cited, another discipline. Unlike the 2008 data which was manually re-entered when transferring between the Excel spreadsheet where it was counted to the original total count spreadsheet, however, the 2005-2009 data and 1979-1983 count sheets were arranged so as to allow a cut/paste directly from column D of the discipline count sheets into the master count total worksheet for each year (thereby allowing the totals generated on count sheets to be checked against master count sheet to ensure no data was lost). All additional matrices were then created in the same workbook with the master count sheets and tied to the original data in an effort to minimize error; when values were transferred between worksheets using cut/paste, rather than

³² There were also two additional count templates created to accommodate journals that had more than 173 items (each item was a data row). The formulas are the same but the row range was increased from Z1-Z170 to Z1-whatever was necessary. These templates were then pasted a few rows below the last row of data in the Excel file.



direct connection, the "paste special" command with "values" checked was used (else the formulas were copied). Listings of only the asymmetric matrices (raw data counts, both with and without self-citation) extracted from these workbooks for all years are in Appendices S-V; other matrices will be discussed in the results section.

Creating additional matrices from the counted asymmetric matrices

The asymmetric counting matrices for each of the ten years observed, both with and without self-citations, were used to create a number of additional matrices in Excel workbooks. Additional matrices created were: Transpose of the asymmetric count matrix, symmetric matrix 1 (upper triangle of asymmetric matrix), symmetric matrix 2 (lower triangle of asymmetric matrix), a matrix of the means of the upper/lower triangle values, a matrix of the absolute value differences of the upper/lower triangle values. Two more additional matrices based on the original asymmetric matrix (matrix A) and its transpose (matrix At) were calculated using the online matrix calculator at http://www.bluebit.gr/matrix-calculator. Settings used indicated values were delimited by tabs (cut/pasted directly from the excel worksheets to the online calculator) and results were returned with zero decimal digits (if you chose more digits it just added zeros as placeholders, for example 7.00 would be returned if you chose two digits and your result was 7); see Appendix Y for screenshots showing both settings and output. *Measures taken to guard against calculation error*

With so many calculations and matrices generated, the minimization of error whenever possible was a priority. The name for each discipline's data file included the total number of results found in the Web of Science search; this was then checked against the Excel file row numbers after the text files were opened and saved there. Use of the counting sheets, placed in the same rows in each Excel data file (so the range was consistent), proved to be more accurate



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than the original counting method used. The formulas were checked on each counting sheet before counts were generated for each discipline every year; they were also checked again approximately a week after counting was completed³³. Counting was primarily completed in three waves: the 2008 test data, the 2005-2009 years, and the 1979-1983 years. The count sheet was reconfigured after the 2008 data check to allow citation numbers for all 25 journals (5/discipline) to be pasted directly into an excel sheet³⁴; that excel sheet then calculated the totals and placed those calculated values into the initial asymmetric matrices.

These totals were also calculated on the count sheet (in a separate column so they were not selected), thus allowing comparison to ensure accuracy. The Excel matrix and percent workbooks were also constructed so most values were calculated two different ways; both values could then be compared to be sure they matched. Additionally, formulas that allowed linkage of cell values were utilized extensively, especially when generating the symmetric matrices. Temporary matrices of values used later in one of the final matrix formats for the means and difference matrices were also generated. Finally, although initially all online matrix calculator results were saved, it was discovered to be just as fast to cut/paste and re-multiply the matrices (rather than check against the saved results). That was done for each discipline, every year, at least a week after initial calculations were performed; which results had already been checked

³⁴ This was necessary because, as mentioned in footnote 26, one journal appeared in the top 5 ranking for two different disciplines and the initial count template test was prepared only counting it in only one discipline (since the value would be the same). The template was subsequently modified to count this journal twice (once in each discipline) however, so the same template could be used all years.



³³ This may seem unnecessary, and perhaps would have been were the initial procedure what was used in the end. It took time to realize, however, that cut/pasting the counting template into different rows (for example) could at times change the range.

was kept track of by not completing the text to column³⁵ and formatting steps until after results were verified.

It is possible that despite the safeguards employed error may have crept into the results; for example perhaps a mistake was made at first and then the same exact calculation error was made again two weeks later. Based on comparison of the original 2008 test data (including matrices) with the final 2008 dataset, however, it is felt that although it is not impossible such a thing may have happened, it is unlikely.

Getting the Excel matrices to display in word and subsequent .pdf

The Excel matrix files were saved as .pdfs; these .pdfs were then viewed and *Grab* (version 1.5) was used on the Mac to capture an image of each page. This image was then inserted into the word document (which later became the dissertation .pdf). The percent tables, ratio tables, and charts were also originally calculated in Excel and inserted into the word document in this manner.³⁶

Generating TIN/TOUT matrices

The citation count asymmetric matrices were changed into binomial matrices and the presence or absence of links between disciplines was investigated as follows:

 \leftrightarrow = home concept links both to and from another discipline (IN and OUT)

 \leftarrow = home concept is cited by another discipline (IN)

 \rightarrow = home concept cites another discipline (OUT)

UTlink = total unique links, any direction, not including home concept (total possible=7)

³⁶ It is possible to use the Grab program to save portions of the Excel files, rather than the .pdfs created from Excel, but the image quality is usually not as good. This was done, however, for a few of the charts.



³⁵ See Appendix Z for screenshots of text to columns procedure.

Tout = total outlinks--home concept cites another (OUT) Tin = total inlinks--home concept cited by another (IN) Tlink = tin+tout (total links) TlinkMaxOUT = tout-tin TlinkMaxIN = tin-tout

The maximum formula for Excel calculations was used with TlinkMaxOUT and TlinkMaxIN so negative calculation results were reported as zero (see Appendix AA for Excel sheet with formulas and footnote 28).

Generating the UCINET graphs

The UCINET graphs we created by copying and pasting each asymmetric matrix into the UCINET spreadsheet editor to create .##D and .##H files. The .##H files were then opened within UCINET in Netdraw (choosing "open UCINET network dataset and using default settings) and saved as .jpgs. These images were edited with Adobe Fireworks to add the year and "asymmetric matrix" and then inserted into the dissertation MSword document.

Using Galileo to generate coordinates & descriptive statistics for the matrices

An initial runstream file was created using INTERGAL (see appendix AF); subsequent runstream files were then created by modifying the initial runstream using Notepad++. The Excel matrix files for each year were then opened and the symmetric matrices were cut/pasted to the end of the runstream files. After cut/pasting the spacing was then manually modified so columns lined up in the way the Galileo v5.6 program requires. Using a temporary text file (created by saving the excel files as .prn files) to modify the pasted values was also briefly tried; although that worked, it still required further spacing modification so that method was discontinued in favor of directly pasting and modifying spacing within the runstream files.



The runstreams were then used to create coordinate and print files (containing eigenvalues and variance percentages for each dimension as well as information on distances each term moved between sets) using Galileo v5.6. Runstream files were created to rotate together the following symmetric matrices for 2005-2009: upper triangle of original asymmetric matrix, lower triangle of original asymmetric matrix, matrix of means between upper/lower triangle values, matrix of differences between upper/lower triangle values.

Results

The citation count matrices were first inspected using UCINET. In UCINET, the asymmetric matrices for all ten years were graphed using NetDraw. Arrowheads were shown by tie strength (minimum=0, maximum=50) and label defaults were used with placement set after the node symbols. Initially matrices both with and without self citations were graphed; when it was discovered, however, that UCINET graphs for both were the same this was discontinued (although the initial duplicate graphs were maintained and used as a check). Upon further investigation it was noted that UCINET could graph self reflexive connections but only as arrows from/to the same node that did not convey how many self connections there were (no weight). Therefore these graphs were made without showing self connections.

It should also be noted that the arrows shown on the UCINET graphs may at times appear to show an opposite relation to the arrows shown on the Cite(OUT)|Cited(IN) link results. On the UCINET graphs an arrow facing a discipline indicates it is cited by the discipline the arrow is coming from. This is the same as in the Cite(OUT)|Cited(IN) link results. Also, an arrow pointing towards the home concept indicates the home concept is cited by the second discipline (like on a UCINET graph) and an arrow pointing away from the home concept indicates the home concept cites the discipline it is pointing towards. In this way the Cite(OUT)|Cited(IN)



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results attempt to clearly capture the fact that a single point (node on UCINET graph) has both in/out relationships to the other nodes related to it. Both relationships are then considered separately, rather than using a single arrow as in the UCINET graphs³⁷; it is as if two lines were shown on the UCINET graphs connecting each dyad. Thus both the in and out relationships for particular nodes from the point of view of each node are considered. This makes is easier to tell which disciplines are being cited by many other disciplines—whereas in the matrix rankings alone sometimes a discipline will be placed highly because a few other disciplines cite them many times, rather than because many disciplines cite them.

"Home concept" on the Cite(OUT)|Cited(IN) results therefore refers to the discipline under consideration; that is, the discipline being examined to see how it connects to others. This is equivalent to the "target" concept in message generation in Galileo ("home" being the concept under consideration towards which the "start" concept would be moved just as the source/target relationship in Galileo message generation). Another way to think of it would be to equate the "home concept" to "ego" in social networking; that is, all other concepts are being considered from the point of view of the "home concept".

The matrices for 2005-2009 were also inspected using the Galileo program to rotate and plot coordinates for both the upper and lower triangle symmetric matrices as well as the matrices formed from the differences between the upper and lower triangles and the means between the upper and lower triangles³⁸. The relationships between the disciplines in these plots was not

³⁸ Plots for the upper triangle, lower triangle, or each year separately are available from the author by request.



³⁷ UCINET can display weighted edge information as double headed arrows with two numbers per single line; see Appendix AE for an example using the 2008 test data. The researcher felt, however, that this graph was a confusing visualization. It is nonetheless included as an example as others may think differently and wish to use this visualization method.

entirely clear but did suggest that the disciplines plotted in a similar manner from year to year, not randomly. If communication was located in the lower left quadrant of the plot in 2005, it was also located in the lower left quadrant in 2009, etc. Communication and political science appear to be outliers in 2005 and 2007. It is felt this is due to that fact that *Public Opinion Quarterly* was one of the top 5 journals by impact factor for both disciplines those years so both cited the same journal heavily--thus strengthening the connection between them, especially as compared to their connections to others. This is especially noticeable in the plot without self-citations.

The numbers preceding the disciplinary abbreviation in the following plots indicate the year (for example 2005 is 5, 2006 is 6, etc.) and the disciplinary abbreviations are as follows:

Anthropology = ANTH Communication = COMM Economics = ECON Geography = GEOG Library and information science = INF LIB Political Science = POL SCI Psychology = PSYCH Sociology = SOC





Figure 2 : 2005-2009 mean citations, without self citations, plotted as coordinates using Galileo





Figure 3: 2005-2009 mean citations, without self citations, plotted as coordinates using Galileo, lower center section only

Note that this plot was enlarged, cropped, and rotated so as many labels as possible might be seen and it now mirrors the image in figure 2 although it was created from the same data; that is, polisci is on the right in figure 2 but the left here and communication is on the left in figure 2 but on the right here.





Figure 4: 2005-2009 mean citations, including self citations, plotted as coordinates using Galileo



1979	ANTH	СОМ	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
sociology	0	13	0	4	0	5	4	440	466
anthropology	436	0	7	1	0	0	3	3	450
economics	0	0	150	4	0	2	0	30	186
psychology	1	7	0	0	3	0	162	8	181
politicalSci	0	2	24	0	0	25	1	17	69
communication	0	34	0	0	2	0	3	7	46
info&libSci	0	0	0	0	21	0	0	0	21
geography	1	0	0	16	0	0	0	2	19
totals	438	56	181	25	26	32	173	507	1438

Table	2: 1979 A	Asymmetric	matrix	with self	citation	sorted	most to	least	citations ³⁹

1979	ANTH	COM	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
politicalSci	0	2	24	0	0	0	1	17	44
economics	0	0	0	4	0	2	0	30	36
sociology	0	13	0	4	0	5	4	0	26
psychology	1	7	0	0	3	0	0	8	19
anthropology	0	0	7	1	0	0	3	3	14
communication	0	0	0	0	2	0	3	7	12
geography	1	0	0	0	0	0	0	2	3
info&libSci	0	0	0	0	0	0	0	0	0
totals	2	22	31	9	5	7	11	67	154

 Table 3: 1979 Asymmetric matrix without self citation sorted most to least citations



Figure 5: 1979 UCINET graph of asymmetric matrix

³⁹ For original asymmetric matrices sorted alphabetically see Appendices T, U, V, and W.



1979	AN TH	COM	ECON	GEOG	InfoLib	PoliSc i	PSYCH	SOC	Tin (INtotal)
anthropology	0	0	1	1	0	0	1	1	4
communication	0	0	0	0	1	0	1	1	3
economics	0	0	0	1	0	1	0	1	3
geography	1	0	0	0	0	0	0	1	2
info&libSci	0	0	0	0	0	0	0	0	0
politicalSci	0	1	1	0	0	0	1	1	4
psychology	1	1	0	0	1	0	0	1	4
sociology	0	1	0	1	0	1	1	0	4
Tout (OUTtotal)	2	3	2	3	2	2	4	6	24
Tlink (tin+tout)	6	6	5	5	2	6	8	10	24
TlinkMaxOUT (tout-tin)	0	0	0	1	2	0	0	2	
(tin-tout)	2	0	1	0	0	2	0	0	

Table 4: 1979 Cites(OUT) and cited(IN) asymmetric binomial link matrix without self citation $^{\rm 40}$

 \leftrightarrow = citations (links) both to and from another discipline (both IN & OUT)

 \leftarrow = home concept is cited by another discipline (IN)

 \rightarrow = home concept cites another discipline (OUT)

UTlink TWO:	Communication	UTlink FIVE:
Info. & Library Sci	1 <u>Com↔psych</u>	Psychology
1 InfLib→com	2 <u>Com⇔soc</u>	1 <u>Psych⇔anth</u>
2 InfLib→psych	3 <u>Com←infoLib</u>	2 Psych↔com
$(0\leftrightarrow, 0\leftarrow, 2\rightarrow)$	4 <u>Com→poliSci</u>	3 Psych↔soc
	$(2\leftrightarrow, 1\leftarrow, 1\rightarrow)$	4 Psych←infoSci
UTlink THREE:		5 Psych→PoliSci
Geography	Economics	$(3\leftrightarrow, 1\leftarrow, 1\rightarrow)$
1Geog⇔anth	1 Econ⇔polSci	
2Geog⇔soc	2 Econ←soc	UTlink SIX:
3Geog→econ	3 Econ←geog	Sociology
(2↔, 0←, 1→)	4 Econ→anth	1 Soc⇔com
	$(1\leftrightarrow, 2\leftarrow, 1\rightarrow)$	2 Soc⇔geog
UTlink FOUR:		3 Soc↔polSci
Anthropology	Political Science	4 Soc↔psych
1 Anth⇔geog	1 PolSci↔econ	5 <u>Soc→anth</u>
2 Anth⇔psych	2 PolSci↔soc	6 <u>Soc→econ</u> .
3 Anth←econ	3 PolSci←com	(4↔, 0←, 2→)
4 Anth←soc,	4 PolSci←psych	
$(2\leftrightarrow, 2\leftarrow, 0\rightarrow)$	$(2\leftrightarrow, 2\leftarrow, 0\rightarrow)$	

⁴⁰ An Excel binomial link matrix table showing formulas used is in Appendix AA.



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Table 5: 1979 raw data citation counts 41

⁴¹ Counts were done for all 10 years this way and are available from author upon request.



2	CITES perce	ent (as	symmetr	ic mat	rix) wit	h self	cites 1	1979										
		anthro	oloav	comm	unication	econo	mics	aeoara	phy	inform	ation & librar	political	science	psycho	loav	sociolo	vov	
		cites	%Column	cites	%Colum	cites	%Colur	cites	%Colum	cites	%ColumnTo	cites	%Colum	cites	%Colu	cites	%ColumnT	otal(cites)
	anthropology	436	99.5434	0	0	7	3.8674	1	4	0	0	0	0	3	1.734	3	0.592	
	communication	0	0	34	60.714	0	0	0	0	2	7.6923077	0	0	3	1.734	7	1.381	
Α	economics	0	0	0	0	150	82.873	4	16	0	0	2	6,25	0	0	30	5.917	
[this column=	geography	1	0.22831	0	0	0	0	16	64	0	0	0	0	0	0	2	0.394	
what goes	info&libSci	0	0	0	0	0	0	0	0	21	80.769231	0	0	0	0	0	0	
where on	politicalSci	0	0	2	3.5714	24	13.26	0	0	0	0	25	78.125		0.578	17	3.353	
ratio sheet]	psychology	্ৰ	0.22831	7	12.5	0	0	0	0	3	11.538462	0	0	162	93.64	8	1.578	
	sociology	0	0	13	23.214	0	0	4	16	0	0	5	15.625	4	2.312	440	86.79	
	Total	438	100	56	100	181	82.873	25	100	26	100	32	100	173	100	507	100	1438
	%totalCols	1	30.459		3.8943		12.587		1.7385		1.8080668		2.2253		12.03		35.26	100
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<u></u>		anthrop	ology	comm	unication	econo	mics	geogra	phy	inform	ation & librar	political	science	psycho	ology	sociolo	gy	
		cites	%Column	cites	%Colum	cites	%Colur	cites	%Colum	cites	%ColumnTo	cites	%Colum	cites	%Colu	cites	%ColumnT	otal(cites)
	anthropology	0	0	0	0	7	22.581	1	11.111	0	0	0	0	3	27.27	3	4.478	
	communication	0	0	0	0	0	0	0	0	2	40	0	0	3	27.27	7	10.45	
В	economics	0	0	0	0	0	0	4	44.444	0	0	2	28.571	0	0	30	44.78	
	geography	1	50	0	0	0	0	0	0	0	0	0	0	0	0	2	2.985	
	info&libSci	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	politicalSci	0	0	2	9.0909	24	77.419	0	0	0	0	0	0	1	9.091	17	25.37	
	psychology	1	50	7	31.818	0	0	0	0	3	60	0	0	0	0	8	11.94	
	sociology	0	0	13	59.091	0	0	4	44.444	0	0	5	71.429	4	36.36	0	0	
	Total	2	50	22	100	31	0	9	100	5	100	7	100	11	100	67	100	154
	%totalCols		1.2987		14.286		20.13		5.8442		3.2467532		4.5455		7.143		43.51	100

Table 6: 1979 Cites percent (asymmetric matrix) with and without self citation⁴²



⁴² A portion of this Excel percentage sheet for 1979 showing formulas is in Appendix AB. Percents were done for all 10 years for both cites and cited citation counts; data available from author upon request.

	CITED perce	ent (as	symmetri	ic trar	nspose)	with	selfcite	es 197	'9									
		anthro	pology	comm	unication	econo	mics	geogra	phy	inform	ation & libra	politica	science	psycho	logy	sociolo	gy	
		cites	%Column1	cites	%Colum	cites	%Colum	cites	%Colum	cites	%ColumnTo	cites	%Colum	cites	%Colu	cites		
	anthropology	436	96.8889	0	0	0	0	1	5.2632	0	0	0	0	1	0.552	0	0	
	communication	0	0	34	73.913	0	0	0	0	0	0	2	2.8986	7	3.867	13	2.79	
	economics	7	1.55556	0	0	150	80.645	0	0	0	0	24	34.783	0	0	0	0	
	geography	1	0.22222	0	0	4	2.1505	16	84.211	0	0	0	0	0	0	4	0.858	
C	info&libSci	0	0	2	4.3478	0	0	0	0	21	100	0	0	3	1.657	0	0	
	politicalSci	0	0	0	0	2	1.0753	0	0	0	0	25	36.232	0	0	5	1.073	
	psychology	3	0.66667	3	6.5217	0	0	0	0	0	0	1	1.4493	162	89.5	4	0.858	
	sociology	3	0.66667	7	15.217	30	16.129	2	10.526	0	0	17	24.638	8	4.42	440	94.42	
	Total	450	100	46	100	186	100	19	100	21	100	69	100	181	100	466	100	1438
	%totalCols		31.2935		3.1989		12.935		1.3213		1.4603616		4.7983		12.59		32.41	100
	CITED pero	ent (w	ithout se	elfcites	5)													
		anthro	pology	comm	unication	econo	mics	geogra	aphy	inform	ation & libra	politica	science	psycho	logy	sociolo	gy	
		cites	%Column1	cites	%Colum	cites	%Colum	cites	%Colum	cites	%ColumnTo	cites	%Colum	cites	%Colu	cites		
	anthropology	0	0	0	0	0	0	1	33.333	0	#DIV/0!	0	0	1	5.263	0	0	
	communication	0	0	0	0	0	0	0	0	0	#DIV/0!	2	4.5455	7	36.84	13	50	
D	economics	7	50	0	0	0	0	0	0	0	#DIV/0!	24	54.545	0	0	0	0	
	geography	1	7.14286	0	0	4	11.111	0	0	0	#DIV/0!	0	0	0	0	4	15.38	
	info&libSci	0	0	2	16.667	0	0	0	0	0	#DIV/0!	0	0	3	15.79	0	0	
	politicalSci	0	0	0	0	2	5.5556	0	0	0	#DIV/0!	0	0	0	0	5	19.23	
	psychology	3	21.4286	3	25	0	0	0	0	0	#DIV/0!	1	2.2727	0	0	4	15.38	
	sociology	3	21.4286	7	58.333	30	83.333	2	66.667	0	#DIV/0!	17	38.636	8	42.11	0	0	
	Total	14	100	12	100	36	100	3	100	0	#DIV/0!	44	100	19	100	26	100	154
	%totalCols		9.09091		7.7922		23.377		1.9481		0		28.571		12.34		16.88	100

 Table
 7: 1979 Cited percent (asymmetric matrix transpose) with and without self citation

%s for asymmetric	matrix WITHO	UT self-citations				check	
	CITES/CITED	row%ofTotalCited				-7.792207792	<-=B45-C36
anthropology	7.792207792	9.090909				6.493506494	<=C45-C37
communication	-6.493506494	7.792208	CITES/CITED formula: =row%tota	al-col%total		-3.246753247	etc.
economics	3.246753247	23.37662	check formula: =col%total-row%	total		3.896103896	
geography	-3.896103896	1.948052 D				3.246753247	
info. & library science	-3.246753247	0				-24.02597403	
politicalScience	24.02597403	28.5714				-5.194805195	
psychology	5.194805195	12.3377				26.62337662	
sociology	-26.62337662	16.88312					
columns:%ofTotal	1.298701299	14.2857143 20.1298701	5.844155844	3.246753247	4.545454545	7.142857143	43.506494
%s for asymmetric	matrix WITH s	elf-citations	В			check	
	CITES/CITED	row%ofTotalCited				-0.834492353	<-=B59-C50
anthropology	0.834492353	31.29346				0.695410292	<=C59-C51
communication	-0.695410292	3.198887	CITES/CITED formula: =row%tota	al-col%total		-0.347705143	etc.
economics	0.347705143	12.93463	check formula: =col%total-row%	total		0.417246175	
geography	-0.417246175	1.32128 C				0.347705146	
info. & library science	-0.347705146	1.460362				-1.389144896	
politicalScience	1.389144896	3.614458				-0.556328237	
psychology	0.556328237	12.5869				2.851182199	
sociology	-2.851182199	32.40612					
col%ofTotalCited	30.45897079	3.89429764 12.5869263	1.73852573	1.808066759	2.225312935	12.03059805	35.257302
notice poli sci flips	when own cita	tions are excluded	A				
CITES/CITED:	negative#=they cite positive#=they are	others more than they are cited by oth cited by others more than they cite oth	ers ers				

1979 Citation tota	als/discipline rat	ios WITHOUT	self-citation (r	aw count #s):		
	cites	cited	more likely to others	cite others than to be cited by	more likely to others than to	be cited by cite
anthropology	2	14	2,14	0	14,2	7
communication	22	12	22,12	1	12,22	0
economics	31	36	31,36	0	36,31	1
geography	9	3	9,3	3	3,9	0
info&libSci	5	0	5,0	#DIV/0!	0,5	0
politicalSci	7	44	7,44	0	44,7	6
psychology	11	19	11,19	0	19,11	1
sociology	67	26	67,26	2	26,67	0
totals	154	154				
1979 Citation tota	als/discipline rat	ios WITH self	citation (raw o	count #s):		
	cites	cited	more likely to others	cite others than to be cited by	more likely to others than to	be cited by cite
anthropology	438	450	438,450	0	450,438	1
communication	56	46	56,46	1	46,56	0
economics	181	186	181,186	0	186,181	1
geography	25	19	25,19	1	19,25	0
info&libSci	26	21	26,21	1	21,26	0
politicalSci	32	69	32,69	0	69,32	2
psychology	173	181	173,181	0	181,173	1
sociology	507	466	507,466	1	466,507	0
totals	1438	1438				

Table 8: 1979 Cites divided by cited and cited divided by cites⁴³

⁴³ This Excel sheet with formulas is in Appendix AC and AD. Ratios were done for all 10 years; data available from author upon request.





Figure 6: 1979 Total percent/discipline graph



Figure 7: 1979 Cites subtracted from cited graph



1980	ANTH	СОМ	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
sociology	0	7	3	8	0	0	27	483	528
economics	0	0	155	15	0	1	17	24	212
psychology	0	4	1	0	3	0	134	6	148
communication	0	58	0	0	9	0	1	9	77
anthropology	57	0	0	2	0	0	0	4	63
politicalSci	0	4	18	2	0	4	8	18	54
geography	0	0	0	44	0	0	0	3	47
info&libSci	0	0	0	0	6	0	0	0	6
totals	57	73	177	71	18	5	187	547	1135

 Table
 9: 1980 Asymmetric matrix with self citation sorted most to least citations

1980	ANTH	COM	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
economics	0	0	0	15	0	1	17	24	57
politicalSci	0	4	18	2	0	0	8	18	50
sociology	0	7	3	8	0	0	27	0	45
communication	0	0	0	0	9	0	1	9	19
psychology	0	4	1	0	3	0	0	6	14
anthropology	0	0	0	2	0	0	0	4	6
geography	0	0	0	0	0	0	0	3	3
info&libSci	0	0	0	0	0	0	0	0	0
totals	0	15	22	27	12	1	53	64	194

Table 10: 1980 Asymmetric matrix without self citation sorted most to least citations



Figure 8: 1980 UCINET graph of asymmetric matrix



1980	ANTH	СОМ	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	Tin(INtotal)
anthropology	0	0	0	1	0	0	0	1	2
communication	0	0	0	0	1	0	1	1	3
economics	0	0	0	1	0	1	1	1	4
geography	0	0	0	0	0	0	0	1	1
info&libSci	0	0	0	0	0	0	0	0	0
politicalSci	0	1	1	1	0	0	1	1	5
psychology	0	1	1	0	1	0	0	1	4
sociology	0	1	1	1	0	0	1	0	4
Tout (OUTtotal)	0	3	3	4	2	1	4	6	23
Tlink (tin+tout)	2	6	7	5	2	6	8	10	23
TlinkMaxOUT (tout-tin)	0	0	0	3	2	0	0	2	
TlinkMaxIN (tin-tout)	2	0	1	0	0	4	0	0	

Table 11: 1980 Cites(OUT) and cited(IN) asymmetric binomial link matrix without self citation

 \leftrightarrow = citations (links) both to and from another discipline (both IN & OUT)

 \leftarrow = home concept is cited by another discipline (IN)

UTlinks TWO:	Economics	Psychology
Info. & Library Sci	1 Econ⇔polSci	1 Psych⇔com
1 InfLib→com	2 Econ⇔psych	2 Psych⇔econ
2 InfLib→psych	3 Econ⇔soc	3 Psych⇔soc
$(0\leftrightarrow, 0\leftarrow, 2\rightarrow)$	4 Econ←geog	4 Psych←infoSci
	$(3\leftrightarrow, 1\leftarrow, 0\rightarrow)$	5 Psych→PoliSci
Anthropology		$(3\leftrightarrow, 1\leftarrow, 1\rightarrow)$
1 Anth←geog	Geography	
2 Anth←soc	1Geog⇔anth	UTlinks SIX:
$(0\leftrightarrow, 2\leftarrow, 0\rightarrow)$	2Geog⇔soc	Sociology
	3Geog→econ	1 Soc⇔com
UTlinks THREE.	4Geog→polSci	2 Soc⇔geog
None	$(2\leftrightarrow, 0\leftarrow, 2\rightarrow)$	3 Soc⇔polSci
Trolle		4 Soc↔psych
UTlinks FOUR:	UTlinks FIVE:	5 Soc→anth
Communication	Political Science	6 Soc→econ,
1 Com⇔psych	1 PolSci⇔econ	$(4\leftrightarrow, 0\leftarrow, 2\rightarrow)$
2 Com⇔soc	3 PolSci←com	
3 Com←infoLib	2 PolSci←geog	
4 Com→poliSci	4 PolSci←psych	
$(2\leftrightarrow, 1\leftarrow, 1\rightarrow)$	2 PolSci←soc	
- , - , - , - , - ,	$(1\leftrightarrow, 4\leftarrow, 0\rightarrow)$	





Figure 9: 1980 Total percent/discipline graph



Figure 10: 1980 Cites subtracted from cited graph



1981	ANTH	COM	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
anthropology	584	0	0	0	0	0	3	11	598
sociology	1	10	1	1	1	3	4	499	520
psychology	0	6	1	16	2	0	192	2	219
communication	0	70	0	0	0	0	90	11	171
economics	0	1	144	3	0	2	5	15	170
geography	0	0	0	50	0	0	0	0	50
politicalSci	0	5	17	1	0	16	2	8	49
info&libSci	0	0	0	0	35	0	0	0	35
totals	585	92	163	71	38	21	296	546	1812

Table 12: 1981 Asymmetric matrix with self citation from most to least citations

1981	ANTH	COM	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
communication	0	0	0	0	0	0	90	11	101
politicalSci	0	5	17	1	0	0	2	8	33
psychology	0	6	1	16	2	0	0	2	27
economics	0	1	0	3	0	2	5	15	26
sociology	1	10	1	1	1	3	4	0	21
anthropology	0	0	0	0	0	0	3	11	14
geography	0	0	0	0	0	0	0	0	0
info&libSci	0	0	0	0	0	0	0	0	0
totals	1	22	19	21	3	5	104	47	222

Table 13: 1981 Asymmetric matrix without self citation sorted most to least citations



Figure 11: 1981 UCINET graph of asymmetric matrix



1981	ANTH	СОМ	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	Tin (INtotal)
anthropology	0	0	0	0	0	0	1	1	2
communication	0	0	0	0	0	0	1	1	2
economics	0	1	0	1	0	1	1	1	5
geography	0	0	0	0	0	0	0	0	0
info&libSci	0	0	0	0	0	0	0	0	0
politicalSci	0	1	1	1	0	0	1	1	5
psychology	0	1	1	1	1	0	0	1	5
sociology	1	1	1	1	1	1	1	0	7
Tout (OUTtotal)	1	4	3	4	2	2	5	5	26
Tlink (IN+OUT)	3	6	8	4	2	7	10	12	26
TlinkMaxOUT (tout-tin)	0	2	0	4	2	0	0	0	
TlinkMaxIN tin-tout)	1	0	2	0	0	3	0	2	

Table 14: 1981 Cites(OUT) and cited(IN) asymmetric binomial link matrix without self citation

 \leftrightarrow = citations (links) both to and from another discipline (both IN & OUT)

 \leftarrow = home concept is cited by another discipline (IN)

UTlinks TWO:	Geography	UTlinks SEVEN:
Anthropology	1Geog→econ	Psychology
1 Anth←psych	2Geog→poliSci	1 Psych↔com
2 Anth \leftrightarrow soc,	3Geog→psych	2Psych⇔econ
$(1\leftrightarrow, 1\leftarrow, 0\rightarrow)$	4Geog→soc	3 Psych⇔soc
	$(0\leftrightarrow, 0\leftarrow, 4\rightarrow)$	4 Psych→anth
Info. & Library Sci		5 Psych→PoliSci
1 InfLib→psych	UTlinks FIVE:	6 Psych←geog
2 InfLib→soc	Economics	7 Psych←infoLib
$(0\leftrightarrow, 0\leftarrow, 2\rightarrow)$	1 Econ⇔polSci	$(3\leftrightarrow, 2\leftarrow, 2\rightarrow)$
	2 Econ↔psych	
UTlinks THREE:	3 Econ⇔soc	Sociology
None	4 Econ←geog	1 Soc⇔anth
	5 Econ←com	2 Soc⇔com
UTlinks FOUR:	$(3\leftrightarrow, 2\leftarrow, 0\rightarrow)$	3 Soc⇔econ
Communication		4 Soc↔polSci
1 Com⇔psych	Political Science	5 Soc↔psych
2 Com⇔soc	1 PolSci⇔econ	6 Soc←geog
3 Com→economics	2 PolSci⇔soc	7 Soc←infoLib
4 Com→poliSci	3 PolSci←com	$(5\leftrightarrow, 0\leftarrow, 2\rightarrow)$
$(2\leftrightarrow, 0\leftarrow, 2\rightarrow)$	4 PolSci←geog	
	5 PolSci←psych	
	$(2\leftrightarrow, 2\leftarrow, 0\rightarrow)$	





Figure 12: 1981 Total percent/discipline graph



Figure 13: 1981 Cites subtracted from cited graph



1982	ANTH	COM	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
anthropology	473	0	0	0	0	0	0	4	477
sociology	0	14	2	10	0	8	9	389	432
psychology	0	11	13	0	0	5	142	7	178
economics	0	0	112	2	2	4	0	19	139
communication	0	83	0	0	12	0	2	17	114
politicalSci	0	10	20	0	0	8	13	8	59
geography	0	0	0	20	0	0	1	1	22
info&libSci	0	0	0	1	10	0	0	0	11
totals	473	118	147	33	24	25	167	445	1432

1 able 15: 1962 Asymmetric matrix with sen citation softed most to least citations	Table 15	: 1982	Asymmetric	matrix wit	h self citation	sorted most t	o least citations
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1982	ANTH	COM	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
politicalSci	0	10	20	0	0	0	13	8	51
sociology	0	14	2	10	0	8	9	0	43
psychology	0	11	13	0	0	5	0	7	36
communication	0	0	0	0	12	0	2	17	31
economics	0	0	0	2	2	4	0	19	27
anthropology	0	0	0	0	0	0	0	4	4
geography	0	0	0	0	0	0	1	1	2
info&libSci	0	0	0	1	0	0	0	0	1
totals	0	35	35	13	14	17	25	56	195

Table 16: 1982 Asymmetric matrix with self citation sorted most to least citations



Figure 14: 1982 UCINET graph for asymmetric matrix



1982	ANTH	СОМ	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	Tin(Intotals)
anthropology	0	0	0	0	0	0	0	1	1
communication	0	0	0	0	1	0	1	1	3
economics	0	0	0	1	1	1	0	1	4
geography	0	0	0	0	0	0	1	1	2
info&libSci	0	0	0	1	0	0	0	0	1
politicalSci	0	1	1	0	0	0	1	1	4
psychology	0	1	1	0	0	1	0	1	4
sociology	0	1	1	1	0	1	1	0	5
Tout(OUTtotals)	0	3	3	3	2	3	4	6	24
Tlink (tin+tout)	1	6	7	5	3	7	8	11	24
TlinkMaxOUT (tout-tin)	0	0	0	1	1	0	0	1	
TlinkMaxIN (tin-tout	1	0	1	0	0	1	0	0	

Table 17: 1982 Cites(OUT) and cited(IN) asymmetric binomial link matrix without self citation

 \leftrightarrow = citations (links) both to and from another discipline (both IN & OUT)

 \leftarrow = home concept is cited by another discipline (IN)

UTlinks ONE:	Geography	Psychology
Anthropology	1Geog⇔soc	1 Psych↔com
1 Anth←soc,	2Geog←psych	2 Psych↔poliSci
$(0\leftrightarrow, 1\leftarrow, 0\rightarrow)$	3Geog→econ	3 Psych↔soc
	4Geog→infLib	4 Psych←econ
UTlinks TWO:	$(1\leftrightarrow, 1\leftarrow, 2\rightarrow)$	5 Psych→geog
None		$(3\leftrightarrow, 1\leftarrow, 1\rightarrow)$
	Political Science	
UTlinks THREE:	1 PolSci⇔econ	UTlinks SIX:
Info. & Library Sci	4 PolSci⇔psych	Sociology
1 InfLib→com	2 PolSci⇔soc	1 Soc⇔com
2 InfLib→econ	3 PolSci←com	2 Soc⇔econ
3InfLib←geog	$(3\leftrightarrow, 1\leftarrow, 0\rightarrow)$	3 Soc⇔geog
$(0\leftrightarrow, 1\leftarrow, 2\rightarrow)$		4 Soc⇔polSci
	UTlinks FIVE:	5 Soc↔psych
UTlinks FOUR:	Economics	6 Soc→anth
Communication	1 Econ⇔polSci	$(5\leftrightarrow, 0\leftarrow, 1\rightarrow)$
1 Com⇔psych	2 Econ⇔soc	
2 Com⇔soc	3 Econ←geog	
3 Com←infoLib	4 Econ←infLib	
4 Com→poliSci	5 Econ→psych	
$(2\leftrightarrow, 1\leftarrow, 1\rightarrow)$	$(2\leftrightarrow, 2\leftarrow, 1\rightarrow)$	





Figure 15: 1982 Total percent/discipline graph



Figure 16: 1982 Cites subtracted from cited graph



1983	ANTH	COM	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
anthropology	532	0	0	0	0	1	2	14	549
sociology	0	21	1	6	0	1	2	416	447
psychology	0	1	0	0	1	0	130	3	135
economics	0	0	86	12	0	2	0	28	128
communication	0	99	0	1	3	1	2	10	116
politicalSci	0	8	9	5	0	11	0	14	47
geography	0	0	0	37	0	0	0	0	37
info&libSci	0	0	0	0	4	0	0	0	4
totals	532	129	96	61	8	16	136	485	1463

Table 18: 1983 Asymmetric matrix with self citation sorted most to least citations

1983	ANTH	COM	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
economics	0	0	0	12	0	2	0	28	42
politicalSci	0	8	9	5	0	0	0	14	36
sociology	0	21	1	6	0	1	2	0	31
anthropology	0	0	0	0	0	1	2	14	17
communication	0	0	0	1	3	1	2	10	17
psychology	0	1	0	0	1	0	0	3	5
geography	0	0	0	0	0	0	0	0	0
info&libSci	0	0	0	0	0	0	0	0	0
totals	0	30	10	24	4	5	6	69	148

Table 19: 1983 Asymmetric matrix without self citation sorted most to least citations



Figure 17: 1983 UCINET graph of asymmetric matrix



1983	ANTH	СОМ	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	Tin(Intotals)
anthropology	0	0	0	0	0	1	1	1	3
communication	0	0	0	1	1	1	1	1	5
economics	0	0	0	1	0	1	0	1	3
geography	0	0	0	0	0	0	0	0	0
info&libSci	0	0	0	0	0	0	0	0	0
politicalSci	0	1	1	1	0	0	0	1	4
psychology	0	1	0	0	1	0	0	1	3
sociology	0	1	1	1	0	1	1	0	5
Tout(OUTtotals)	0	3	2	4	2	4	3	5	23
Tlink (tin+tout)	3	8	5	4	2	8	6	10	23
TlinkMaxOUT (tout-tin)	0	0	0	4	2	0	0	0	
TlinkMaxIN (tin-tout)	3	2	1	0	0	0	0	0	

Table 20: 1983 Cites(OUT) and cited(IN) asymmetric binomial link matrix without self citation

 \leftrightarrow = citations (links) both to and from another discipline (both IN & OUT)

 \leftarrow = home concept is cited by another discipline (IN)

 \rightarrow = home concept cites another discipline (OUT)

UTlink TWO:	UTlink FOUR:	Political Science
Info. & Library Sci	Geography	1 PolSci⇔econ
1 InfLib→com	1Geog→com	2 PolSci⇔soc
2 InfLib→psych	2Geog→econ	3 PolSci⇔com
$(0\leftrightarrow, 0\leftarrow, 2\rightarrow)$	3Geog→poliSci	4 PolSci←geog
	4Geog→soc	5 PolSci→anth
UTlink THREE:	$(0\leftrightarrow, 0\leftarrow, 4\rightarrow)$	$(3\leftrightarrow, 1\leftarrow, 1\rightarrow)$
Anthropology		
1 Anth←poliSci	Psychology	UTlink SIX:
2 Anth←psych	1 Psych⇔com	Sociology
3 Anth←soc	2 Psych⇔soc	1 Soc↔com
$(0\leftrightarrow, 3\leftarrow, 0\rightarrow)$	3 Psych→anth	2 Soc⇔econ
	4 Psych←infoSci	3 Soc⇔polSci
Economics	$(2\leftrightarrow, 1\leftarrow, 1\rightarrow)$	4 Soc↔psych
1 Econ⇔polSci		5 Soc←geog
2 Econ⇔soc	UTlink FIVE:	6 Soc→anth
3 Econ←geog	Communication	$(4\leftrightarrow, 1\leftarrow, 1\rightarrow)$
$(2\leftrightarrow, 1\leftarrow, 0\rightarrow)$	1 Com⇔poliSci	
	2 Com⇔psych	
	3 Com⇔soc	
	4 Com←geog	



5 Com \leftarrow infoLib (3 \leftrightarrow , 2 \leftarrow , 0 \rightarrow)



Figure 18: 1983 Total percent/discipline graph



Figure 19: 1983 Cites subtracted from cited graph



2005	ANTH	СОМ	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
anthropology	1124	0	0	0	0	0	43	1	1168
politicalSci	0	219	14	0	2	280	1	48	564
sociology	0	17	11	3	14	10	8	455	518
psychology	11	4	1	0	19	5	395	11	446
economics	0	4	129	71	6	20	15	19	264
info&libSci	0	0	0	0	229	0	0	0	229
communication	0	140	1	0	8	11	0	7	167
geography	0	0	0	61	0	0	0	0	61
totals	1135	384	156	135	278	326	462	541	3417

Table 21: 2005 As	symmetric matrix	with self citation	sorted most to	least citations
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2005	ANTH	СОМ	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
politicalSci	0	219	14	0	2	0	1	48	283
economics	0	4	0	71	6	20	15	19	135
sociology	0	17	11	3	14	10	8	0	63
psychology	11	4	1	0	19	5	0	11	51
anthropology	0	0	0	0	0	0	43	1	44
communication	0	0	1	0	8	11	0	7	27
geography	0	0	0	0	0	0	0	0	0
info&libSci	0	0	0	0	0	0	0	0	0
Totals	11	244	27	74	49	46	66	75	604

Table 22: 2005 Asymmetric matrix without self citation sorted most to least citations



Figure 20: 2005 UCINET graph of asymmetric matrix



2005	ANTH	СОМ	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	Tin(INtotal)
anthropology	0	0	0	0	0	0	1	1	2
communication	0	0	1	0	1	1	0	1	4
economics	0	1	0	1	1	1	1	1	6
geography	0	0	0	0	0	0	0	0	0
info&libSci	0	0	0	0	0	0	0	0	0
politicalSci	0	1	1	0	1	0	1	1	5
psychology	1	1	1	0	1	1	0	1	6
sociology	0	1	1	1	1	1	1	0	6
Tout(OUTtotal)	1	4	4	2	5	4	4	5	29
Tlink (tin+tout)	3	8	10	2	5	8	8	11	29
TlinkMaxOUT (tout-tin)	0	0	0	2	5	0	0	0	
TlinkMaxIN (tin-tout)	1	0	2	0	0	1	2	1	

Table 23: 2005 Cites(OUT) and cited(IN) asymmetric binomial link matrix without self citation

 \leftrightarrow = citations (links) both to and from another discipline (both IN & OUT)

 \leftarrow = home concept is cited by another discipline (IN)

UTlink TWO:	Info. & Library Sci	6 Econ←infLib		
Anthropology	1 InfLib→com	$(4\leftrightarrow, 2\leftarrow, 0\rightarrow)$		
1 Anth⇔psych	2 InfLib→econ			
2 Anth←soc,	3 InfLib→poliSci	Psychology		
$(1\leftrightarrow, 1\leftarrow, 0\rightarrow)$	4 InfLib→psych	1 Psych⇔anth		
	5 InfLib→soc	2 Psych⇔econ		
Geography	$(0\leftrightarrow, 0\leftarrow, 5\rightarrow)$	3 Psych⇔poliSci		
1Geog \rightarrow soc 2Geog \rightarrow econ $(0\leftrightarrow, 0\leftarrow, 2\rightarrow)$ UTlink THREE &	Political Science 1 PolSci⇔com 2 PolSci⇔econ 3 PolSci⇔psych	4 Psych \leftrightarrow soc 5 Psych \leftarrow com 6 Psych \leftarrow infoLib (4 \leftrightarrow , 2 \leftarrow , 0 \rightarrow)		
FOUR: None	4 PolSci \leftrightarrow soc 5PolSci \leftarrow infoSci (4(\times) 1($-$ 0) \times)	UTlink SEVEN: Sociology		
Tlink FIVE:	$(4\leftrightarrow, 1\leftarrow, 0\rightarrow)$	1 Soc⇔com		
Communication 1 Com \leftrightarrow econ 2 Com \leftrightarrow poliSci 3 Com \leftrightarrow soc 4 Com \leftarrow infoLib 5 Com \rightarrow psych (3 \leftrightarrow , 1 \leftarrow , 1 \rightarrow)	UTlink SIX: Economics 1 Econ↔com 2 Econ↔polSci 3 Econ↔psych 4 Econ↔soc 5 Econ←geog	2 Soc \leftrightarrow econ 3 Soc \leftrightarrow polSci 4 Soc \leftrightarrow psych 5 Soc \leftarrow geog 6 Soc \leftarrow infLib 7 Soc \rightarrow anth $(4\leftrightarrow, 2\leftarrow, 1\rightarrow)$		





Figure 21: 2005 Total percent/discipline graph



Figure 22: 2005 Cites subtracted from cited graph



2006	ANTH	СОМ	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
anthropology	1338	0	0	0	1	0	39	2	1380
politicalSci	0	0	2	2	2	466	1	28	501
info&libSci	0	0	0	0	351	0	1	0	352
psychology	18	1	16	0	18	0	255	7	315
sociology	1	0	4	8	15	17	5	242	292
geography	0	0	1	168	0	0	1	0	170
economics	0	0	100	1	16	34	8	7	166
communication	0	6	0	0	4	6	1	11	28
totals	1357	7	123	179	407	523	311	297	3204

•	Table 24:	2006	Asymmetric matrix	with self	citation	sorted	most to	least citations
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2006	ANTH	COM	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
economics	0	0	0	1	16	34	8	7	66
psychology	18	1	16	0	18	0	0	7	60
sociology	1	0	4	8	15	17	5	0	50
anthropology	0	0	0	0	1	0	39	2	42
politicalSci	0	0	2	2	2	0	1	28	35
communication	0	0	0	0	4	6	1	11	22
geography	0	0	1	0	0	0	1	0	2
info&libSci	0	0	0	0	0	0	1	0	1
Totals	19	1	23	11	56	57	56	55	278

Table 25: 2006 Asymmetric matrix without self citation sorted most to least citations



Figure 23: 2006 UCINET graph of asymmetric matrix



2006	ANTH	СОМ	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	Tin(Intotals)
anthropology	0	0	0	0	1	0	1	1	3
communication	0	0	0	0	1	1	1	1	4
economics	0	0	0	1	1	1	1	1	5
geography	0	0	1	0	0	0	1	0	2
info&libSci	0	0	0	0	0	0	1	0	1
politicalSci	0	0	1	1	1	0	1	1	5
psychology	1	1	1	0	1	0	0	1	5
sociology	1	0	1	1	1	1	1	0	6
Tout(OUTtotals)	2	1	4	3	6	3	7	5	31
Tlink	5	5	9	5	7	8	12	11	31
TlinkMaxOUT	0	0	0	1	5	0	2	0	
TlinkMaxIN	1	3	1	0	0	2	0	1	

Table 26: 2006 Cites(OUT) and cited(IN) asymmetric binomial matrix without self citations

 \leftrightarrow = citations (links) both to and from another discipline (both IN & OUT)

 \leftarrow = home concept is cited by another discipline (IN)

 \rightarrow = home concept cites another discipline (OUT)

UTlink TWO: None UTlink THREE: Anthropology 1 Anth \leftrightarrow psych 2 Anth \leftrightarrow soc 3 Anth \leftarrow infoLib (2 \leftrightarrow , 1 \leftarrow , 0 \rightarrow) UTlink FOUR: Communication 1 Com \leftrightarrow psych 2 Com \leftarrow infoLib 3 Com \leftarrow poliSci 4 Com \leftarrow soc (1 \leftrightarrow 3 \leftarrow 0 \rightarrow)	UTlink FIVE: Economics 1Econ \leftrightarrow geog 2Econ \leftrightarrow poliSci 3Econ \leftrightarrow psych 4Econ \leftrightarrow soc 5Econ \leftarrow infLib (4 \leftrightarrow , 1 \leftarrow , 0 \rightarrow) UTlink SIX: Info & Lib Sci 1 InfoLib \leftrightarrow psych 2 InfoLib \rightarrow soc 5 InfoLib \rightarrow poliSci 6 InfoLib \rightarrow soc	UTlink SEVEN: Psychology 1Psych \leftrightarrow anth 2Psych \leftrightarrow com 3Psych \leftrightarrow econ 4Psych \leftrightarrow infoLib 6Psych \leftrightarrow soc 7Psych \rightarrow geog 5Psych \rightarrow poliSci (5 \leftrightarrow , 0 \leftarrow , 2 \rightarrow) Sociology 1 Soc \leftrightarrow anth 2 Soc \leftrightarrow econ 3 Soc \leftrightarrow polSci 4 Soc \leftarrow geog
$(1\leftrightarrow, 5\leftarrow, 0\rightarrow)$	$(1\leftrightarrow, 0\leftarrow, 5\rightarrow)$	5 Soc←geog 6 Soc←infoLib
Geography 1Geog \leftrightarrow econ 2Geog \leftarrow psych 3Geog \rightarrow polSci 4Geog \rightarrow soc $(1\leftrightarrow, 1\leftarrow, 2\rightarrow)$	1 PolSci⇔econ 2 PolSci⇔soc 3 PolSci←geog 4 PolSci←infLib 5 PolSci←psych 6 PolSci→com	7 Soc \rightarrow com (4 \leftrightarrow , 2 \leftarrow , 1 \rightarrow)



 $(2\leftrightarrow, 3\leftarrow, 1\rightarrow)$



Figure 24: 2006 Total percent/discipline graph



Figure 25: 2006 Cites subtracted from cited graph



2007	ANTH	COM	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
sociology	1	11	0	2	17	3	4	478	516
politicalSci	0	229	1	0	0	167	4	34	435
info&libSci	0	0	0	0	432	0	0	0	432
psychology	1	14	0	0	40	1	334	16	406
communication	0	152	0	0	10	15	1	3	181
anthropology	80	0	0	0	0	0	30	1	111
economics	0	0	31	0	11	1	14	20	77
geography	0	0	0	14	2	0	0	1	17
totals	82	406	32	16	512	187	387	553	2175

Table 27: 2007 Asymmetric matrix with self citation sorted most to least citations
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2007	ANTH	COM	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
politicalSci	0	229	1	0	0	0	4	34	268
psychology	1	14	0	0	40	1	0	16	72
economics	0	0	0	0	11	1	14	20	46
sociology	1	11	0	2	17	3	4	0	38
anthropology	0	0	0	0	0	0	30	1	31
communication	0	0	0	0	10	15	1	3	29
geography	0	0	0	0	2	0	0	1	3
info&libSci	0	0	0	0	0	0	0	0	0
Totals	2	254	1	2	80	20	53	75	487

 Table 28: 2007 Asymmetric matrix without self citation sorted most to least citations



Figure 26: 2007 UCINET graph of asymmetric matrix



2007	ANTH	СОМ	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	Tin (Intotals)
anthropology	0	0	0	0	0	0	1	1	2
communication	0	0	0	0	1	1	1	1	4
economics	0	0	0	0	1	1	1	1	4
geography	0	0	0	0	1	0	0	1	2
info&libSci	0	0	0	0	0	0	0	0	0
politicalSci	0	1	1	0	0	0	1	1	4
psychology	1	1	0	0	1	1	0	1	5
sociology	1	1	0	1	1	1	1	0	6
Tout(OUTtotals)	2	3	1	1	5	4	5	6	27
Tlink (IN+OUT)	4	7	5	3	5	8	10	12	27
TlinkMaxOUT	0	0	0	0	5	0	0	0	
TlinkMaxIN	0	1	3	1	0	0	0	0	

Table 29: 2007 Cites(OUT) and cited(IN) asymmetric binomial link matrix without self citation

 \leftrightarrow = citations (links) both to and from another discipline (both IN & OUT)

 \leftarrow = home concept is cited by another discipline (IN)

UTlink TWO:	Economics	UTlink SIX:
Anthropology	1Econ⇔poliSci	Psychology
1 Anth↔psych	5Econ←infLib	1Psych↔anth
2 Anth⇔soc	3Econ←psych	2Psych⇔com
$(2\leftrightarrow, 0\leftarrow, 0\rightarrow)$	4Econ←soc	3Psych↔poliSci
	$(1\leftrightarrow, 3\leftarrow, 0\rightarrow)$	4Psych⇔soc
Geography		5Psych←infoLib
1Geog⇔soc	Political Science	6Psych→econ
2Geog←infoLib	1 PolSci⇔com	$(4\leftrightarrow, 1\leftarrow, 1\rightarrow)$
$(1\leftrightarrow, 1\leftarrow, 0\rightarrow)$	2 PolSci⇔econ	
	3 PolSci↔psych	UTlink SEVEN:
UTlink THREE:	4 PolSci⇔soc	Sociology
None	$(4\leftrightarrow, 0\leftarrow, 0\rightarrow)$	1 Soc↔anth
		2 Soc⇔com
UTlink FOUR:	UTlink FIVE:	3 Soc⇔geog
Communication	Info & Lib Sci	4 Soc↔polSci
1 Com⇔poliSci	1 InfoLib→com	5 Soc↔psych
2 Com↔psych	2 InfoLib→econ	6 Soc←infoLib
3 Com⇔soc	3 InfoLib→geog	7 Soc→econ
4 Com←infoLib	4 InfoLib→psych	$(5\leftrightarrow, 1\leftarrow, 1\rightarrow)$
$(3\leftrightarrow, 1\leftarrow, 0\rightarrow)$	5 InfoLib→soc	
	$(0\leftrightarrow, 0\leftarrow, 5\rightarrow)$	





Figure 27: 2007 Total percent/discipline graph



Figure 28: 2007 Cites subtracted from cited graph



2008	ANTH	COM	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
anthropology	2229	1	0	1	0	0	2	9	2242
sociology	0	27	7	5	13	6	0	402	460
economics	0	11	307	1	20	15	17	41	412
psychology	4	24	5	1	18	0	240	6	298
info&libSci	0	1	0	0	236	0	3	0	240
communication	0	165	4	0	11	3	1	2	186
geography	0	0	0	158	0	0	0	2	160
politicalSci	0	11	0	22	0	113	0	4	150
totals	2233	240	323	188	298	137	263	466	4148

Table 30, 2000 Asymmetric matrix with sen chanon sorted most to least chanons	Table	30:	2008	Asymmetric	matrix	with self	citation	sorted	most to	least	citations
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2008	ANTH	COM	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
economics	0	11	0	1	20	15	17	41	105
psychology	4	24	5	1	18	0	0	6	58
sociology	0	27	7	5	13	6	0	0	58
politicalSci	0	11	0	22	0	0	0	4	37
communication	0	0	4	0	11	3	1	2	21
anthropology	0	1	0	1	0	0	2	9	13
info&libSci	0	1	0	0	0	0	3	0	4
geography	0	0	0	0	0	0	0	2	2
Totals	4	75	16	30	62	24	23	64	298

 Table 31: 2008 Asymmetric matrix without self citation sorted most to least citations



Figure 29: 2008 UCINET graph of asymmetric matrix



2008	ANTH	СОМ	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	Tin (Intotals)
anthropology	0	1	0	1	0	0	1	1	4
communication	0	0	1	0	1	1	1	1	5
economics	0	1	0	1	1	1	1	1	6
geography	0	0	0	0	0	0	0	1	1
info&libSci	0	1	0	0	0	0	1	0	2
politicalSci	0	1	0	1	0	0	0	1	3
psychology	1	1	1	1	1	0	0	1	6
sociology	0	1	1	1	1	1	0	0	5
Tout(OUTtotals)	1	6	3	5	4	3	4	6	32
Tlink (IN+OUT)	5	11	9	6	6	6	10	11	32
TlinkMaxOUT	0	1	0	4	2	0	0	1	
TlinkMaxIN	3	0	3	0	0	0	2	0	

Table 32: 2008 Cites(OUT) and cited(IN) asymmetric binomial matrix without self citations

UTlink TWO & THREE: None **UTlink FOUR:** Anthropology 1 Anth↔psych 2 Anth←com 3 Anth←geog 4 Anth←soc $(1\leftrightarrow, 3\leftarrow, 0\rightarrow)$ Info. & Library Sci 1 InfLib↔com 2 InfLib↔psych 3 InfLib→econ 4 InfLib→soc $(2\leftrightarrow, 0\leftarrow, 2\rightarrow)$ **Political Science** 1 PolSci⇔com 2 PolSci↔soc 3 PolSci←geog 4 PolSci→econ $(2\leftrightarrow, 1\leftarrow, 1\rightarrow)$

UTlink FIVE: Geography 1 Geog⇔soc 2 Geog \rightarrow anth 3 Geog→econ 4 Geog→polSci 5 Geog \rightarrow psych $(1\leftrightarrow, 0\leftarrow, 4\rightarrow)$ **UTlink SIX:** Communication 1 Com↔econ 2 Com⇔infoLib 3 Com⇔polSci 4 Com↔psych 5 Com⇔soc 6 Com→anth $(5\leftrightarrow, 0\leftarrow, 1\rightarrow)$ **Economics** 1 Econ↔com 2 Econ \leftrightarrow psych 3 Econ⇔soc 4 Econ←polSci 5 Econ←geog 6 Econ←infLib

Psychology 1 Psych \leftrightarrow anth 2 Psych \leftrightarrow com 3 Psych \leftrightarrow econ 4 Psych \leftrightarrow infoSci 5 Psych \leftarrow geog 6 Psych \leftarrow soc $(4\leftrightarrow, 2\leftarrow, 0\rightarrow)$

UTlink SEVEN: Sociology 1 Soc \leftrightarrow com 2 Soc \leftrightarrow econ 3 Soc \leftrightarrow geog 4 Soc \leftrightarrow polSci 5 Soc \rightarrow anth 6 Soc \rightarrow psych 7 Soc \leftarrow infoLib (4 \leftrightarrow , 1 \leftarrow , 2 \rightarrow)



 $(3\leftrightarrow, 3\leftarrow, 0\rightarrow)$



Figure 30: 2008 Total percent/discipline graph



Figure 31: 2008 Cites subtracted from cited graph


2009	ANTH	СОМ	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
economics	0	2	222	165	18	31	9	17	464
sociology	0	40	9	17	28	4	4	307	409
info&libSci	0	42	0	0	283	0	0	2	327
psychology	19	10	10	1	59	5	188	2	294
politicalSci	0	13	4	4	2	169	30	14	236
anthropology	219	6	0	0	2	0	4	2	233
communication	0	168	0	0	3	0	17	8	196
geography	0	0	0	189	0	0	0	4	193
totals	238	281	245	376	395	209	252	356	2352

Table 33: 2009 Asymmetric matrix with self citation sorted most to least citations

2009	ANTH	СОМ	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
economics	0	2	0	165	18	31	9	17	242
psychology	19	10	10	1	59	5	0	2	106
sociology	0	40	9	17	28	4	4	0	102
politicalSci	0	13	4	4	2	0	30	14	67
info&libSci	0	42	0	0	0	0	0	2	44
communication	0	0	0	0	3	0	17	8	28
anthropology	0	6	0	0	2	0	4	2	14
geography	0	0	0	0	0	0	0	4	4
Totals	19	113	23	187	112	40	64	49	607

Table 34: 2009	Asymmetric matrix	without self ci	itation sorted	most to least	t citations
	•				



Figure 32: 2009 UCINET graph of asymmetric matrix



2009	ANTH	СОМ	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	Tin(Intotals)
anthropology	0	1	0	0	1	0	1	1	4
communication	0	0	0	0	1	0	1	1	3
economics	0	1	0	1	1	1	1	1	6
geography	0	0	0	0	0	0	0	1	1
info&libSci	0	1	0	0	0	0	0	1	2
politicalSci	0	1	1	1	1	0	1	1	6
psychology	1	1	1	1	1	1	0	1	7
sociology	0	1	1	1	1	1	1	0	6
Tout(OUTtotals)	1	6	3	4	6	3	5	7	35
Tlink (IN+OUT)	5	9	9	5	8	9	12	13	35
TlinkMaxOUT	0	3	0	3	4	0	0	1	
TlinkMaxIN	3	0	3	0	0	3	2	0	

Table 35: 2009 Cites(OUT) and cited(IN) asymmetric binomial matrix without self citations

UTlink TWO, THREE	Economics
and FIVE: None	1 Econ⇔poliSci
	2 Econ⇔psych
UTlink FOUR:	3 Econ⇔soc
Anthropology	4 Econ←com
1 Anth⇔psych	5 Econ←geog
2 Anth←com	6 Econ←infLib
3 Anth←infoLib	$(3\leftrightarrow, 3\leftarrow, 0\rightarrow)$
4 Anth←soc	
$(1\leftrightarrow, 3\leftarrow, 0\rightarrow)$	Info & Lib Sci
	1 InfoLib⇔com
Geography	2 InfoLib⇔soc
1Geog⇔soc	3 InfoLib→anth
2Geog→econ	4 InfoLib→econ
3Geog→poliSci	5 InfoLib→polSci
4Geog→psych	6 InfoLib→psych
$(1\leftrightarrow, 0\leftarrow, 3\rightarrow)$	$(2\leftrightarrow, 0\leftarrow, 4\rightarrow)$
UTlink SIX:	
Communication	Political Science
2 Com⇔infoLib	I PolSci⇔econ
4 Com⇔psych	2 PolSci⇔psych
5 Com⇔soc	3 POISCI⇔soc
6 Com→anth	4 PolSci←com
1 Com→econ	S POISC1←geog
3 Com→poliSci	6 POISCI (IntLib
$(3\leftrightarrow, 0\leftarrow, 3\rightarrow)$	$(3\leftrightarrow, 3\leftarrow, 0\rightarrow)$

UTlink SEVEN: Psychology 1 Psych \leftrightarrow anth 2 Psych \leftrightarrow com 3 Psych \leftrightarrow econ 4 Psych \leftrightarrow polSci 5 Psych \leftrightarrow soc 6 Psych \leftarrow geog 7 Psych \leftarrow infoLib (5 \leftrightarrow , 2 \leftarrow , 0 \rightarrow)

Sociology 1 Soc \leftrightarrow com 2 Soc \leftrightarrow econ 3 Soc \leftrightarrow geog 4 Soc \leftrightarrow infoLib 5 Soc \leftrightarrow polSci 6 Soc \leftrightarrow psych 7 Soc \rightarrow anth (6 \leftrightarrow , 0 \leftarrow , 1 \rightarrow)





Figure 33: 2009 Total percent/discipline graph



Figure 34: 2009 Cites subtracted from cited graph



	1979	1980	1981	1982	1983	2005	2006	2007	2008	2009	Average	Average	Average
											/9-83	05-09	10 yrs
ANTH	2	0	1	0	0	1	2	2	1	1	0.60	1.40	1.00
СОМ	3	3	4	3	3	4	1	3	6	6	3.20	4.00	3.69
ECON	2	3	3	3	3	4	4	1	3	3	2.80	3.00	2.98
GEOG	3	4	4	3	3	2	3	1	5	4	3.40	3.00	3.04
	-												
INF&LIBSCI	2	2	2	2	2	5	6	5	4	6	2.00	5.20	4.13
	-					_		-					
POLI SCI	2	1	2	3	3	4	3	4	3	3	2.20	3.40	3.18
PSYCH	4	4	5	4	4	4	7	5	4	5	4.20	5.00	4.69
SOC	6	6	5	6	6	5	5	6	6	7	5.80	5.80	5.84
average	3	2.875	3.25	3	3	3.625	3.875	3.375	4	4.375			
U U													
Sum (total # of													
links)	24	23	26	24	24	29	31	27	32	35			

Table 36: Cites Summary (Tout), all 10 years

	1979	1980	1981	1982	1983	2005	2006	2007	2008	2009	average 79-83	average 05-09	average 10 yrs
Anthropology	4	2	2	1	3	2	3	2	4	4	2.40	3.00	2.71
Communication	3	3	2	3	5	4	4	4	5	3	3.20	4.00	3.91
Economics	3	4	5	4	3	6	5	4	6	6	3.80	5.40	4.80
Geography	2	1	0	2	0	0	2	2	1	1	1.00	1.20	1.13
Info & Lib Sci	0	0	0	1	0	0	1	0	2	2	0.20	1.00	0.80
Political Sci	4	5	5	4	4	5	5	4	3	6	4.40	4.60	4.44
Psychology	4	4	5	4	3	6	5	5	6	7	4.00	5.80	5.09
Sociology	4	4	7	5	5	6	6	6	5	6	5.00	5.80	5.53
average	3	2.875	3.25	3	2.875	3.625	3.875	3.375	4	4.375			
Sum (total # of links)	24	23	26	24	23	29	31	27	32	35			

Table 37: Cited Summary (Tin), all 10 years

Mean # of links 1979-1983/year (total all possible=64, total any particular discipline=8): 24.2 (avg # of links=3.025)

Mean # of links 2005-2009/year (total possible=64, total any particular discipline=8): 30.8 (avg # of links=3.85)

Although the average # of links/discipline remained nearly the same for both five year time periods (3.025 in 1979-1983 and 3.85 in 2005-2009), the total average # of links for all disciplines increased from 24.2 to 30.8. Anthropology and Geography remained largely the same while overall links between other disciplines increased in proportion to their average # of links 1979-1983; that is, sociology and psychology had the most cross-disciplinary linkages 1979-1983 and they also had the most in 2005-2009. The discipline that developed the highest discrepancy IN/OUT linkages was library science. In the first 5 year span their IN/OUT linkage #s were similar; by 2005-2009, however, they were clearly citing others much more than others were citing them. Conversely, although the # of IN linkages for economics remained largely the same, the number of OUT linkages increased dramatically. Finally, both communication and political science increased overall in both IN and OUT linkages (although political science increased more than communication).

Geography and information/library science were cited the least in all years except 2009 (in 2009 info/libSci moved up to the 4th least cited position). In the 2005-2009 cited percentages, the most cited rankings were less variable than they had been in 1979-1983; that is, in all years except 2006 the 4 disciplines cited the most (by percentage) were economics, political science, psychology, and sociology. It should also be noted that both economics and psychology were consistently cited by others more than they cited others in the second 5 yr set; this had not been consistently true 1979-1983. Sociology was closer to even; their citing others and cited by others percentages were often nearly the same.

When mutual linkages between disciplines are considered, the pattern is even more consistent; sociology and psychology have the most mutual linkages in all years except 1983 (in 1983 sociology still had the most mutual linkages but psychology, with two mutual linkages, was



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overtaken by communication and political science, each with three mutual linkages). Info/libSci did not have any mutual linkages at all until 2006, 2008 and 2009; they had a single mutual linkage with psychology in 2006 and two mutual linkages 2008-2009 (between communication and psychology in 2008, communication and sociology in 2009).

Discussion

Psychology and sociology were consistently cited by the most other disciplines all 10 years, economics and political science were frequently cited by most other disciplines (2005-2009 more than 1979-1983), anthropology generally cited themselves or science disciplines (not the social science disciplines investigated here), geography was sometimes cited and sometimes not, communication was sometimes cited and sometimes not (most often it was cited when the interdisciplinary journal *Public Opinion Quarterly* was in a top 5 impact factor journal), and information and library science was rarely cited (some years never)—this was ironic as both communication and information and library science frequently cited others.

Overall there were more interdisciplinary citations in all disciplines 2005-2009 as compared to 1979-1983 but the citation pattern largely remained; for example in 1979-1983 information and library science's total TIN score was 1 and in 2005-2009 it was only 5 (with two year with no interdisciplinary citations at all)–yet their total TOUT score for 1979-1983 was 10 and for 2005-2009 was 26. Psychology and Sociology, the disciplines who were cited the most 2005-2009, had a total TIN of 29 and total TOUTS of 25 and 29 respectively. So it appears that it is the TIN score, rather than the TOUT score, that has continued to relegate library and information science to the lower tier.⁴⁴

⁴⁴ In unpublished research from 1989 comparing interdisciplinary citations for journals in 1984, Barnett and Fink also indicate that information science came close to being a social isolate and



Exceptions to the 1979-1983 pattern are seen in the mid-range disciplines, especially in political science and economics. Although the TIN order of the lower four disciplines (Information and library science, geography, communication, and anthropology) did not change from the 1979-1983 period in 2005-2009 and sociology remained the discipline most cited, psychology and political science changed their TIN rank order; in 1979-1983 psychology was sixth and political science was seventh whereas in 2005-2009 psychology was seventh and political science was only fifth—and economics moved from fifth rank order in 1979-1983 to sixth in 2005-2009. So psychology was cited by others more than political science in 2005-2009 and economics was also cited much more in 2005-2009 than it had been in 1979-1983.

Total TOUT patterns also displayed similarity between the two time periods with sociology and psychology citing the most other disciplines and anthropology citing the least. Again some of the mid-ranked disciplines, however, changed from one period to the next. Information and library science changed the most; in 1979-1983 they were ranked second lowest but in 2005-2009 they were ranked fifth. Geography, although their own TOUT average percentage stayed the same between the two time periods, moved from ranking sixth (so highest next to psychology and sociology) in 1979-1983 to a tie for second/third rank from the bottom position in 2005-2009; even though their own TOUT average stayed nearly the same, the averages of communication, information and library science, and political science increased (although it should once again be noted that for two year 2005-2009 communication and political science were both citing the same shared journal, *Public Opinion Quarterly*, heavily).

the most central disciplines were sociology, general psychology, and social psychology (Barnett & Fink, 1989).



It should be noted that the TOUT and TIN measures developed almost always correspond with the up/down bar graphs unless cited/cites numbers are the same. Also, most anthropology comparisons cited/cites are rather moot as there were so few citations to compare when self citations are exclude; a very small part of small remains exceptionally small. By comparison it is something but perhaps not something notable, rather like how the percents for information and library science in years no one cited them are not meaningful—but we know obviously if no one cited them at all they were more likely to cite than be cited (no matter what the percents say).

Power was controlled for by holding journal choices constant for each field (5 journals for each discipline were investigated no matter how many were available). It is of interest that, despite that, the TIN disciplinary order ranking for 2005-2009 was so similar to the total number of interdisciplinary journals available in each discipline (refer back to Figure 1 on page 15)— even though generally none of the top 5 impact factor journals were interdisciplinary journals (with the exception of *Public Opinion Quarterly* noted earlier). Anthropology and sociology also had an interdisciplinary journal (*Social Networks*) in their top 5 impact factor journals, but by and large neither cited it heavily. This, combined with the fact that their interdisciplinary journal rank pattern does not match with their TIN order ranking, perhaps further strengthens the idea that anthropology at this point in time may be better considered not as a social science. The other difference between the interdisciplinary journal rank pattern and the TIN order ranking is that information and library science doesn't match at all—having the most interdisciplinary journals with non-social science disciplines such as management.

Future research may therefore usefully compare journals in non-social science disciplines. It is probable that the aggregate journal ranking method proposed on page 16 may be



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more useful than impact factor for this. Given the time involved to generate such a ranking, however, it is now recommended it is not necessarily useful in this line of research; continuing to use impact factor journal ranking will also allow future work to be compared to this present work—although it still seems for work within a particular disciplinary field the aggregate journal ranking would be preferable. Future research in interdisciplinary citation may also find it useful to compare journals lower in the impact factor rankings, rather than the top 5 journals, as those lower in the rankings are potentially more likely to bridge multiple disciplines (Barnett & Fink, 1989). This might further elucidate the interaction observed in this study between communication and political science (which shared the journal *Public Opinion Quarterly*). Future research might also examine whether the pattern of average citation counts, rather than actual citation counts, simply scales the rank order smaller or changes it in other ways.

From this initial study it is clear that the interdisciplinary citation patterns observed are anisotropic. This is most clearly illustrated with information and library science as an extreme example since they consistently cite almost all other disciplines but are rarely cited by others. The fact that the original count matrix was largely asymmetric, rather than a symmetric matrix as would be expected if information was being shared evenly between the disciplines, also shows the interaction between the disciplines to be anisotropic.

These asymmetries in the information flow of citation data are regarded as indicators of gravitational gradients (making movement in some directions "easier" than others). Accordingly, it appears movement of ideas from sociology or psychology to other social science disciplines is the most likely and movement of ideas from geography, anthropology, and information and library science is the least likely. Therefore it appears sociology and psychology continue to exert more influence on other social sciences, although limited influence over each other, than



any of the other social sciences exert over them. Most of the other social sciences are historically newer as academic disciplines; nonetheless the rank order of the total interdisciplinary journals' close mirroring of the TOUT rank order suggests this interaction pattern is no longer based merely on historical happenstance.



	T o t a	Dr. Wo elf el	Washingt on State University	Wikipedia	National Science Foundation	Michigan State University	degree-finder.com	Academicinfo.net	International Encyclopedia of the Social Sciences (1968)	International Encyclopedia of the Social & Behavioral Science (2001)
	1									
Anthropology	8	J	W	Wik	nsf	MSUi	degree-finder.com		International Encyclopedia (1968)	International Encyclopedia (2001)
Economics	8	J	W	wik	nsf	MSU	degree-finder.com		International Encyclopedia (1968)	International Encyclopedia (2001)
Psychology; Clinical and Applied Psychology; Cognitive Psychology and Cognitive Science; Developmental, Social, Personality, and Motivational Psychology	8	J	W	wik	nsf	MSU	degree-finder.com	Academicinfo.net		International Encyclopedia (2001)
Sociology	7	J	W	wik	nsf	MSU		Academicinfo.net		International Encyclopedia (2001)+-
Political Science; Politics	6	J		Wik	Nsf		degree-finder.com		International Encyclopedia (1968)	International Encyclopedia (2001)
History	5	J	W			MSU	degree-finder.com	Academicinfo.net		
Criminal Justice; Criminology	4		W			MSU	degree-finder.com	Academicinfo.net		
Geography	4			wik	nsf	MSU	degree-finder.com			
Law; Legal Studies; Paralegal	4		W		nsf			Academicinfo.net	International Encyclopedia (1968)	
Archaeology	2			wik			degree-finder.com			
Communication(s)	2	J	W							
Cultural Studies and Ethnic Studies; Cultural and Global Studies	2			wik			degree-finder.com			
Library Science	2	J	W							
Public Affairs; Public Administration	2		W					Academicinfo.net		

Appendix A: Disciplines considered social science by nine sources

Note: disciplines suggested as social science by only a single source have been omitted from this table.



Appendix B: Listiac

Partial list of input data:
COMMUNICATION
HISTORY
ECONOMICS
SOCIOLOGY
PSYCHOLOGY
ANTHROPOLOGY
POLITICAL SCIENCE
LIBRARY SCIENCE
-1
ANTHROPOLOGY
ECONOMICS
POLITICAL SCIENCE
CLINICAL AND APPLIED PSYCHOLOGY
COGNITIVE PSYCHOLOGY AND COGNITIVE SCIENCE
DEVELOPMENTAL, SOCIAL, PERSONALITY, AND MOTIVATIONAL PSYCHOLOGY
SOCIOLOGY
-1
ANTHROPOLOGY
ECONOMICS
LAW
PENOLOGY
POLITICS
SOCIAL WORK
-1
CRIMINAL JUSTICE
FORENSIC SCIENCE
HISTORY
HOMELAND SECURITY
LAW
LEGAL STUDIES
PARALEGAL
POLITICAL SCIENCE
PSYCHOLOGY
PUBLIC ADMINISTRATION
PUBLIC SAFETY
SOCIOLOGY
-1
HISTORY
PHILOSOPHY
POLITICAL SCIENCE
PSYCHOLOGY
ANTHROPOLOGY
LINGUISTICS
ARCHEOLOGY
DEMOGRAPHIC STUDIES
CRIMINOLOGY
-

Partial list of output data:

	ACTIVATION	LEVEL :	- 1	0.0015
ARCHAEOLOGY	ACTIVATION	LEVEL :	= 1	0.0015
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COMMUNICATION	ACTIVATION	LEVEL :	. 1	9.0017
HISTORY	ACTIVATION	LEVEL .		9.9968
ECONOMICS	ACTIVATION	LEVEL .		1 0000
ECONOMICS COCIDE OCY	ACTIVATION	LEVEL	1	0.0000
SUCTOLOGY	ACTIVATION	LEVEL :	- !	0.0117
PSYCHOLOGY	ACTIVATION	LEVEL :	- 1	0.0116
ANTHROPOLOGY	ACTIVATION	LEVEL :	= 1	0.0165
POLITICAL SCIENCE	ACTIVATION	LEVEL :	= 1	0.0141
LIBRARY SCIENCE	ACTIVATION	LEVEL :	. (0.0017
CLINICAL AND APPLIED PSYCHOLOG	ACTIVATION	LEVEL +	. (0.0016
COGNITIVE PSYCHOLOGY AND COGNI	ACTIVATION	LEVEL -		9.0016
DEUELODMENTAL SOCIAL DEDSONA	ACTIVATION	LEVEL .	2	0 0016
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LAT DENO	ACTIVATION	LEVEL :		0.0042
PENULUGY	ACTIVATION	LEVEL :	- 1	0.0015
POLITICS	ACTIVATION	LEVEL :	• •	0.0015
SOCIAL WORK	ACTIVATION	LEVEL 1	. 1	0.0041
CRIMINAL JUSTICE	ACTIVATION	LEVEL :	. (0.0017
PUBLIC ADMINISTRATION	ACTIVATION	LEVEL :	. (0.0017
PHTLOSOPHY	ACTIVATION	LEVEL -	- 1	9.0016
LINGUISTICS	ACTIVATION	LEVEL .		0 0016
1000131103	ACTIVATION	LEVEL :		0.0010
ARCHEULUGY	ACTIVATION	LEVEL :	- !	0.0016
DEMOGRAPHIC STUDIES	ACTIVATION	LEVEL		0.0016
CRIMINOLOGY	ACTIVATION	LEVEL :	• •	0.0016
GOVERNMENT STUDIES	ACTIVATION	LEVEL :	- 1	0.0016
CULTURAL AND GLOBAL STUDIES	ACTIVATION	LEVEL :	- 1	0.0016
GEOGRAPHY	ACTIVATION	LEVEL :	- 1	0.000
LIRBAN & REGIONAL PLANNING	ACTIVATION	LEVEL -	. 1	9.0015
LABOD & INDUSTRIAL DELATIONS	ACTIVATION	LEVEL		0 001E
INTERDISCIPLINARY STUDIES IN C	ACTIVATION	LEVEL	1	0.0015
INTERDISCIPLINARY STUDIES IN S	ACTIVATION	LEVEL :	1	0.0015
GLUBAL AND AREA STUDIES	ACTIVATION	LEVEL :	• •	0.0015
FAMILY AND CHILD ECOLOGY	ACTIVATION	LEVEL :	- 1	0.0015
GENDER AND SEXUALITY STUDIES	ACTIVATION	LEVEL :	= 1	0.0015
CULTURAL STUDIES AND ETHNIC ST	ACTIVATION	LEVEL :	- 1	0.0015
AREA STUDIES	ACTIVATION	LEVEL :	. (0.0015
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Appendix C: Journal Citation Reports ®

Access:	C UB Restricted - Off-campus remote access to this resource requires a UBITName and password.					
Description:	Journal Citation Reports allows you to evaluate and compare scholarly journals in all areas of the sciences and socia sciences. Results can be used to determine which journals are the most important and influential in their respective disciplines.					
	Leads to analytical reports comparing the number of articles published in more than 8,000 academic journals, together with the number of times those articles have been cited by other scholars. Each report provides a variety of unique measurements for each journal, including its Impact Factor, Immediacy Index, Cited Half-Life, and Citing Half-Life.					
Dates Covered:	2000 to the present; updated annually.					
Print Counterpart:	Various older editions of Journal Citation Reports can be found in the following libraries:					
	Health Sciences Library Index Collection, shelved by title; 1980-88, 1992-97. Index Collection, Microfiche, 1998-2000.					
	Science & Engineering Library Periodical Collection, Per Q1 S354; 1975-1988 Reference CD-ROM, Z699.5 S65J68; 1998					
	Lockwood Library Reference Collection Z7161 S8; 1981-1988 Ref Microfiche Z7161 S8; 1992 and 1996 Newspaper Area, CD-ROM, Z699.5 S65J68; 1998					
Related Databases:	• Web of Science					
Contact:	<u>Mike Lavin</u>					
Last Update:	8/25/2008					



Appendix D: Screenshot of JCR database interface in 2009







Appendix E: Web of Science

Access:	UB Restricted - Off-campus remote access to this resource requires a UBITName and password.
Description:	The Web of Science is a collection of multidisciplinary databases. It includes • Arts & Humanities Citation Index • Science Citation Index • Social Sciences Citation Index
	You can search for specific articles by subject, author, and/or title in the indexes individually or at the same time. Because the information about each article includes the article's cited reference list (i.e., the bibliography), you can also search the databases for articles that cite a particular author or work. Searching for cited references often locates relevant articles that cannot be found through traditional searching techniques.
	Contains leads to citations with bibliographical references for articles from over 8,000 journals. Many of the references include author-prepared abstracts, as well as links to the full-text of articles if available.
Dates Covered:	Arts & Humanities Citation Index 1975 to the present; Updated weekly.
	Science Citation Index 1965 to the present; Updated weekly. Social Sciences Citation Index 1965 to the present; Updated weekly.
Print Counterpart:	Arts & Humanities Citation Index Library Annex CALL NUMBER: Z 5937 .A795, 1975-1998
	Science Citation Index UNDERGRAD-SCI/ENGR Reference CALL NUMBER: Q1.C5, 1961, 1964-1972 IN STORAGE 1973-1991 HEALTH SCIENCES Mezzanine Index Coll, 1961-1964, 1966-1969, 1985-1998
	Social Sciences Citation Index Lockwood Ref (Index Area) CALLNUMBER: Z 7161 .S8, 1956-1998
Related Databases:	Arts & Humanities Citation Index Science Citation Index Social Sciences Citation Index
Contact:	Don Hartman



	JOURNAL TITLE	ALL YEARS	1980 197	T0> 80+79	<s0u 1980</s0u 	RCE ITE	80479	FACTOR	CITATIONS IN 1981 TO 1981 ITEMS	SOURCE ITEMS IN 1981
1 1-	ECON J J CLIN PSYCHIAT	1087		118	47	52		1.192	21	66
: .	J MONETARY ECON	414	38 6	105	43	46	89	1.180	12	47.5
ł	J EXP SOC PSYCHOL	992	27 7	101	42	44	86	1.174	6	38
	SOC FORCES	1161	59 9	156	43	52 -	95 -	1.168	28 :	47
	AM BAR FOUND RES J		20	51 -	26	18 -	44 .	1.159	6	25
	DUKE LAW J	408	5		31	44 -	75	1.158	4	25
	J AM ACAD CHILD PSY-	592				50		1.143	6	7
	J HUM STRESS	217	16 3	48	23	19	42	1.143	2	19
	J FINANC	1510	67 147	.214	118	105 -	188	1 139	27	101
	ANNU REV ANTHROPOL MED CARE	201		236	21	23 -		1.136	1	15
:	ANIM LEARN BEHAV	616	8613	221 -	98	98 -	196 -	1.128	11	
	AM EDUC RES J	503		74 -			39	1.128	6	19
	J MARKETING RES	1282	42 109	151	. 68	67	135	1.119	10	50
	BEHAV SCI	646	20 51	71	30	- 34	- 64	1.109	5	32
	INQUIRY	298	13 30	92	20	44 -	83 -	1 108		64
	POPUL DEV REV	171		64 -	28	30 -	58 -	1 103 -	13	
	SOUTHERN CALIF LAW R	461		93 -	38	47 -		1.099		35
	INT ORGAN	255	2325	48 -	21	22	43	1.093	24	19
Ċ,	ARCH SEX BEHAV	418	38 47	85	39	39	78	1.090	5 5	39
	PROBL COMMUNISM	148	19 20	39	20	90 16	172 -	1:087 -		
3	PSYCHOMETRIKA	1404	27 54	80 -	41 -	33 -	74 -	1.081 -	6	41
	SOCIOLOGY		2729	56 -	30 -	22 -	52 -	1.077 -		30
	J MARKETING	555		84 -	40 -		79 -	1.075	20	36
	EDUC RES	· 214	11 24	35	- 14	19	33	1.061	1	19
	ACTA PSYCHIAT SCAND	1738	125 174	299	186	100	286	1:045	32	148
	LLOYDS BANK REV	70	18	27	0 -	12	23 -	1.043 -	5	12
	J CHILD PSYCHOL PSYC	622			42 -			1:038 -	2	39
2	J DIVORCE	107		36 -	29 -	6 -		1.029 -		5
	FAM PLANN PERSPECT	479	26 31	134 -	27	29		1:018	5	33
	BRIT J MATH STAT PSY	269	10 28	38	20	18	38	1.000	3	21
	J FAM HIST	106	14 30	44	. 23	21	44	1:000 ~	3	7
	IEEE T SYST MAN CYB	629	09	127	0 -	9 -	9 -	1.000 -		
	AM J POLIT SCI	334		80 -	41 -	41	82 -	0.976 -		42
	DAEDALUS	480		74 -	42 -		77 -	0:974		41
	REV ECON STUD	1370	16 32	48	22	28	50	0.960	ō	11
	EXCEPT CHILD	785	67 64	131	74	64	138	0.949	9	72
	J ABNORM CHILD PSYCH	433	33 45	78	41	42	36	0.944 -	0	34
	J STUD ALCOHOL	208	76 123				47	0.936 -		26
	NEW YORK U LAW REV	499	1539	54	31 -			0.931	54	17
	J AUTISM DEV DISORD	73		71	39 -		77	0.924	3	34
	AM ANTHROPOL	103	21 14	35	19	19	38	0.921	5	21
	LIBR J	413	100 35	135	62	85	147	0 918	64	61
	J CONFLICT RESOLUT	377	31 23			31	61	0.918 -	5	27
	DEMOGRAPHYECON GEOGR	539		64		41	70	0.914 -	6 :	44
	Q J ECON	1331	6372	135	101 -	48		0.906	12	43
	J INT ECON	230	2442	66	43	40	84	0.905	4	52
	GEORGE WASH LAW REV	440	14 39	53	29	30	59	0.898	8	21
	SOC PROBL	918	37 45	82	43	49	92	0.891	4	36
	AGGRESSIVE BEHAV	163	14 26	40	40 -	51	91	0.890	5	45
	AM BANKRUPT LAW J SOC NETWORKS	60	1212	24	12	15	27	0:889	4	13
	VA J INT LAW	174		39		22		0.886	3	15
	AM J ORTHOPSYCHIAT	1329		109		66		0.885	4	29
	J PSYCHOSOM RES PUBLIC OPIN QUART	1255	28 58	86	. 44	54	98	0.878	5	68
	ARTIF INTELL	271	20 14	34	29	10	39	0.876	13	25
	PERCEPTION	466	36 88		58	36	145	0.855	9	63
	J BUS	585		58	41	27	68	0.853	8	22
	CRIM LAW REV	220		74	43			0.851	4	15
	INT J CLIN EXP HYP	313		105			124	0.847	5	73
	GEOGR ANAL	116	15 12	27	16	16	32	0.844	5	30
	NAT RESOUR LAW	61	16 16	32	4	34	38	0.843	1	32
	AM HIST REV	382	14 23	64	39		76	0.842	6	48
	J PHONETICS	228		58	42	27	69	0.841	3	41
	CURR ANTHROPOL	587		135	77		161	0.840	24	33
	FOREIGN POLICY	255	115 33	148	92	86	178	0.831	8	7.9
	CATHOL U LAW REV	129	23 23	46	30	26	56	0.821	10	21
	POPUL STUD-LONDON	451	27 32	46	27		56	0.821		20
	J EPIDEMIOL COMMUN	162		67	47	35		0.817	11	52
	INT AFE		74 22	80	58	40	98	0.816	22	59

Appendix F: Part of 1981 SSCI (later renamed JCR) report ranking journals by impact factor

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Appendix G: Part of 1981 SSCI (later renamed JCR) index

ANNUAL

FULLY COVERED SOURCE PUBLICATIONS

ranged by Subject Category

A title may be repeated more than once when appropriate.

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Appendix H: Sample of Ulrich's Report on Library and Information Science

Title	Subjects	Publisher	Country	Start Y Language	Frequency
South African Journal of Library and Information Science	LIBRARY AND INFOR	N South African Bureau fo	South Africa	1933 Text and summaries	ir Quarterly
American Society for Information Science and Technology. Jo	ur COMP UTERS INFORT	MJohn Wiley & Sons, Inc.	United State	1938 Text in English	Mon thity
University of Chicago Studies in Library Science	LIBRARY AND INFOR	N University of Chicago	United State	1939 Text in English	Irregular
Aslib Proceedings	LIBRARY AND INFOR	N Emerald Group Publishi	r United King	1949 Text in English	Bi-monthly
Libri	LIBRARY AND INFOR	N De Gruyter Saur	Germany	1931 Text in English	Quarterly
Nippon Toshokan Joho Gakkai-shi	LIBRARY AND INFOR	N Nippon Toshokan Joho	(Japan	19.54 Text in Japanese Su	ur Quarte riy
Mousaion	LIBRARY AND INFOR	V UniSA Press	So uth Africa	1955 Text in Afrikaans Te	ex Semi-annually
Agricultural Information Worldwide	AG RIC ULTURE UBRA	F International Associatio	r United State	1955 Text in English	Quarte riy
Journal of Chemical Information and Modeling	CHEMISTRY COMPU	Ti American Chemical Soci	United State	1960 Text in English	Mon thity
Journal of Education for Library and Information Science	EDUCATION UBRAR	Y Association for Library a	United State	1960 Text in English	Quarte riy
Knygotyra	LIBRARY AND INFOR	N Vilniaus Universiteto Le	i Lithuania	1961 Text in Lithuanian	Te 2 times a year
Herald of Library Science	LIBRARY AND INFOR	N Scientific Publishers	India	1962 Text in English	Quarte riy
Information Processing & Management	LIBRARY AND INFOR	N Elsevier Ltd	United King	1963 Text in German Tex	xt 6 times a year
Library and Information Science	LIBRARY AND INFOR	N Mita Society for Library	Japan	19.63 Text in Japanese Te	ex Semi-annually
SRELS Journal of Information Management	COMPUTER APPLICA	Ti Sarada Ranganathan En	c India	1964 Text in English	B i-m onthly
P no gram	COMPUTER APPLICA	Ti Emerald Group Publishi	r United King	1966 Text in English	Quarte riy
University of Teheran. Central Library. Library Bulletin	LIBRARY AND INFOR	N University of Teheran *	Iran, Islamic	1966 Text in Persian, Mod	e Irregular
Pakistan Library & Information Science Journal	LIBRARY AND INFOR	N Library Promotion Bure	e Pakistan	1968 Text in Urdu	Quarterly
Information Technology and Libraries	COMPUTER APPLICA	Ti American Library Associ	United State	1968 Text in English	Quarterly
Journal of Librarianship and Information Science	LIBRARY AND INFOR	N Sage Publications Ltd.	United King	1969 Text in English	Quarte riy
International Information and Library Review	LIBRARY AND INFOR	N Elsevier Ltd	United King	1969 Text in English	Quarte riy
Han gug Mun heon Jeon gbo Haghoe ji	LIBRARY AND INFOR	N Han'gug Munheon Jeon	; Korea, Repu	1970 Text in Korean	Quarterly
Jiaoyu Ziliao yu Tushuguan xue	EDUCATION UBRAR	Y Tamkang University Pre	s Taiwan, Reș	1970 Text in Chinese Tex	ct Quarterly
VINE	COMPUTER APPLICA	Ti Emerald Group Publishi	r United King	1971 Text in English	Quarte riy
Health Information Management Journal	LIBRARY AND INFOR	N Health Information Mar	n Australia	1971 Text in English	3 times ayear
Multime dia Information & Technology	COMPUTER APPLICA	TI Chartered Institute of Li	i United King	1973 Text in English	Quarterly
Scientific and Technical Information Processing	LIBRARY AND INFOR	N Allerton Press, Inc.	United State	1974 Text in English	B i-monthly
Journal of Library & Information Science	LIBRARY AND INFOR	N National Taiwan Norma	l Taiwan, Rep	1975 Text in Chinese Tex	t Semi-annually Apr. & Oo
Canadian Journal of Information and Library Science	LIBRARY AND INFOR	N University of Toronto Pr	Canada	1976 Text in French Text	i Quarterly
Online Information Review	COMP UTERS INTERN	48 Emerald Group Publishi	r United King	1977 Text in English	B i-m onthly
Lecture Notes in Control and Information Sciences	LIBRARY AND INFOR	N Springer	Germany	1978 Text in German	Irregular
Library & Information Science Research	LIBRARY AND INFOR	N Pergamon	United King	1979 Text in English	4 times ayear
Behavioral & Social Sciences Librarian	LIBRARY AND INFOR	N Routledge	United State	1979 Text in English	Quarterly
Dansk Biblioteksforskning	LIBRARY AND INFOR	V Danmarks Bibliotekssko	I Denmark	1979 Text in Danish	3 times ayear
Science & Technology Libraries	LIBRARY AND INFOR	N Routledge	United State	1980 Text in English	Quarterly
International Journal of Information Management	COMMUNICATIONS	C Pergamon	United King	1980 Text in English	6 times ayear
Arab Journal of Library and Information Science	LIBRARY AND INFOR	N Dar Al-Mirrikh	Saud i Arabi	1980 Text in Arabic Text	ir Quarterly
The Information Society	COMPUTER APPLICA	Ti Taylor & Francis Inc.	United State	1981 Text in English	5 times ayear
Resource Sharing & Information Networks	LIBRARY AND INFOR	N Routledge	United State	1981 Text in English	Quarte riy
Journal of Enterprise Information Management	LIBRARY AND INFOR	V Emerald Group Publishi	r United King	1981 Text in English	B i-m onthly
Information Services & Use	COMP UTERS INFORT	MIO SPress	Netherland:	1981 Text in English	Quarte rly
Journal of Law and Information Science	COMPUTER APPLICA	Ti University of Tasmania	* Australia	1981 Text in English	Semi-annually
Information Technology and People	COMPUTER APPLICAT	Ti Emerald Group Publishi	r United King	1982 Text in English	Quarte ify
The Electronic Library	COMPUTER APPLICA	Ti Emieraldi Group Publishi	r United King	1982 Text in English	Birmonthly

Note: This report sample has been modified to fit into the text frame. The columns titleID, ISSN, serialType, format, Status, subtitle, contentType, and vatiantTitle have been hidden; results for journals that ceased printing or merged prior to 2011 or started after 1982 have also been hidden from this image.



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Appendix I: Part of JCR	journal repor	t sorted by subject
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			(2008) Total	Impact	5-Year	Immediacy	(2008)	Cited	Figenfactor	Article
discipline	Abbreviated Journal Title	ISSN	Cites	Factor	Factor	Index	Articles	Life	Score	e Score
educ.,SciDiscplines	ACAD MED	1040-2446	5422	1.867	2.337			6.8	0.02072	0.944
politicalSci	ACTA POLIT	0001-6810	157	0.667		0.059	17	4.2	0.00159	
psychology	ACTA PSYCHOL	0001-6918	2777	2.155	2.652	0.611	157	>10.0	0.00601	1.026
sociology	ACTA SOCIOL	0001-6993	354	0.957	0.873	0.059	17	>10.0	0.00095	0.419
psychology	ADAPT BEHAV	1059-7123	434	1.152	1.84	0.19	21	7.5	0.00093	0.447
psychology	ADDICT BEHAV	0306-4603	5389	1.846	2.272	0.286	185	7	0.01737	0.753
psychology	ADOLESCENCE	0001-8449	1511	0.72	1.443	0.035	57	>10.0	0.0023	0.442
psychology	ADV CHILD DEV BEHAV	0065-2407	289	1.222	1.911	0.5	10	7.6	0.00108	1.079
psychology	ADV EXP SOC PSYCHOL	0065-2601	2550	8.308	11.161	1.6	5	>10.0	0.00484	7.043
educ.,SciDiscplines	ADV HEALTH SCI EDUC	1382-4996	327	1.254	1.545	0.2	50	4.8	0.00136	0.501
educ.,SciDiscplines	ADV PHYSIOL EDUC	1043-4046	438	1.483	1.723	0.227	44	4.5	0.00134	0.38
anthropology	AFRICA	0001-9720	496	0.636	0.547	0.167	24	>10.0	0.00079	0.306
psychology	AGGRESS VIOLENT BEH	1359-1789	809	1.618	2.254	0.051	39	5.9	0.00315	0.785
psychology	AGGRESSIVE BEHAV	0096-140X	1454	2.056	2.129	0.245	53	8.8	0.00376	0.728
psychology	AGING NEUROPSYCHOL C	1382-5585	455	1.143	1.464	0.206	34	6.9	0.00159	0.519
economics	AGR ECON-BLACKWELL	0169-5150	777	0.484	0.91	0.263	76	6.9	0.0025	0.362
sociology	AGR HUM VALUES	0889-048X	520	1.186	1.319	0.064	47	7.2	0.00172	0.485
psychology	AIDS CARE	0954-0121	2601	1.466	2.197	0.168	167	5.5	0.00967	0.692
anthropology	AM ANTHROPOL	0002-7294	2019	1.218	1.332	0.179	28	>10.0	0.00322	0.568
anthropology	AM ANTIQUITY	0002-7316	1942	1.841	2.154	0.294	34	>10.0	0.00251	0.67
psychology	AM BEHAV SCI	0002-7642	1649	0.691	0.886	0.253	99	9.1	0.00449	0.443
educ.,SciDiscplines	AM BIOL TEACH	0002-7685	256	0.308	0.346	0.033	60	8.9	0.00044	0.095
economics	AM ECON REV	0002-8282	21672	2.285	3.775	0.33	185	>10.0	0.0916	4.668
anthropology	AM ETHNOL	0094-0496	925	0.888	1.033	0.19	42	>10.0	0.00276	0.687
psychology	AM INDIAN ALASKA NAT	0893-5394	100	0.227		0	10	>10.0	0.00023	
economics	AM J AGR ECON	0002-9092	3405	0.967	1.534	0.111	108	>10.0	0.00739	0.672
psychology	AM J CLIN HYPN	0002-9157	360	0.966	1.143	0.7	20	>10.0	0.00033	0.192
psychology	AM J COMMUN PSYCHOL	0091-0562	2697	1.198	2.313	0.719	57	>10.0	0.00497	0.89
psychology	AM J DRUG ALCOHOL AB	0095-2990	1330	1.094	1.536	0.16	81	8.6		0.474
economics	AM J ECON SOCIOL	0002-9246	283	0.349	0.364	0	39	9.7		0.128
sociology	AM J ECON SOCIOL	0002-9246	283	0.349	0.364	0	39	9.7		0.142
psychology	AM J FAM THER	0192-6187	282	0.491	0.455	0.062	32	>10.0		

Anthropology													
Abbreviated Journal Title	ISSN	2008 Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	2008 Articles	Cited Half-life	Eigenfactor [™] Score	Article Influence [™] Score				
J HUM EVOL	0047-2484	4519	3.550	4.310	1.336	137	8.6	0.00984	1.297				
EVOL ANTHROPOL	1060-1538	966	3.484	3.725	1.111	18	7.6	0.00298	1.475				
AM J PHYS ANTHROPOL	0002-9483	7241	2.353	2.690	0.456	147	>10.0	0.01257	0.829				
SOC NETWORKS	0378-8733	1276	2.068	2.929	0.276	29	>10.0	0.00318	1.270				
CURR ANTHROPOL	0011-3204	2413	2.032	2.718	0.412	51	>10.0	0.00682	1.314				

Appendix J-1: Top 5 impact factor journals, 2008

2 Communica	ation								
Abbreviated Journal Title	ISSN	2008 Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	2008 Articles	Cited Half-life	Eigenfactor [™] Score	Article Influence TM Score
J COMMUN	0021-9916	1816	2.266	2.365	0.122	41	9.9	0.00514	1.059
J HEALTH COMMUN	1081-0730	955	2.057	2.431	0.087	46	4.6	0.00580	0.999
PUBLIC OPIN QUART	0033-362X	2565	1.972	2.606	0.262	42	>10.0	0.00478	1.349
J COMPUT- MEDIAT COMM	1083-6101	803	1.901		0.250	36	4.6	0.00361	
HUM COMMUN RES	0360-3989	1339	1.689	2.112	0.423	26	>10.0	0.00271	1.055

3 Economics									
Abbreviated Journal Title	ISSN	2008 Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	2008 Articles	Cited Half-life	Eigenfactor TM Score	Article Influence [™] Score
Q J ECON	0033-5533	11723	5.048	8.716	0.756	41	>10.0	0.05419	11.981
J ECON LIT	0022-0515	4069	4.842	8.380	0.842	19	>10.0	0.01806	8.853
J ECON PERSPECT	0895-3309	4261	3.944	5.057	0.558	43	9.4	0.02487	5.341
ECONOMETRICA	0012-9682	17091	3.865	4.943	0.255	47	>10.0	0.04526	7.238
J POLIT ECON	0022-3808	13671	3.725	5.742	0.419	31	>10.0	0.04088	8.822

Abbreviated Journal Title	ISSN	2008 Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	2008 Articles	Cited Half-life	<i>Eigenfactor</i> ™ Score	Article Influence [™] Score
T I BRIT GEOGR	0020-2754	1581	3.967	4.600	0.455	33	7.3	0.00589	1.832
GLOBAL ENVIRON CHANG	0959-3780	1291	3.955	4.272	0.524	63	5.1	0.00564	1.611
PROG HUM GEOG	0309-1325	1889	3.482	4.305	0.575	40	6.0	0.00749	1.586
ECON GEOGR	0013-0095	1048	2.968	3.578	0.438	16	10.0	0.00224	1.218
J ECON GEOGR	1468-2702	763	2.932	4.557	0.576	33	4.8	0.00536	1.847



Appendix J-2: 5	Information &	Library Science
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5 Information &	Library S	Scienc	e						
Abbreviated Journal Title	ISSN	2008 Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	2008 Articles	Cited Half-life	Eigenfactor TM Score	Article Influence™ Score
MIS QUART	0276-7783	5684	5.183	11.586	0.778	36	9.7	0.01138	3.540
J AM MED INFORM ASSN	1067-5027	2574	3.428	3.886	0.560	100	5.2	0.00891	1.069
ANNU REV INFORM SCI	0066-4200	477	2.500	2.954	0.846	13	6.5	0.00138	0.956
INFORM SYST J	1350-1917	528	2.375	2.940	0.600	25	6.0	0.00133	0.711
INFORM MANAGE-AMSTER	0378-7206	2919	2.358	4.079	0.355	62	6.2	0.00625	0.826

6 Political Science

Abbreviated Journal Title	ISSN	2008 Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	2008 Articles	Cited Half-life	<i>Eigenfactor</i> ™ Score	Article Influence [™] Score
POLIT ANAL	1047-1987	644	4.780	3.283	0.263	19	5.0	0.00711	2.837
EUR J POLIT RES	0304-4130	1760	2.514	2.734	0.239	71	6.6	0.01038	1.638
AM J POLIT SCI	0092-5853	4416	2.397	3.363	0.322	59	>10.0	0.01976	3.084
POLIT GEOGR	0962-6298	1032	2.295	2.375	0.250	40	6.7	0.00453	1.063
EUR UNION POLIT	1465-1165	419	2.064	2.378	0.435	23	4.5	0.00303	1.232

7 Psychology

Abbreviated Journal Title	ISSN	2008 Total	Impact Factor	5-Year Impact	Immediacy Index	2008 Articles	Cited Half-life	<i>Eigenfactor</i> ™ Score	Article Influence™
ANNU REV PSYCHOL	0066-4308	6715	16.217	17.608	4.958	24	7.7	0.02280	8.568
BEHAV BRAIN SCI	0140-525X	5274	12.818	19.355	2.667	12	9.5	0.01173	8.536
PSYCHOL BULL	0033-2909	22965	12.568	18.037	1.026	38	>10.0	0.03458	8.253
PSYCHOL REV	0033-295X	17810	11.765	12.563	2.396	48	>10.0	0.02648	6.787
TRENDS COGN SCI	1364-6613	9143	10.981	13.826	1.086	70	5.3	0.05327	6.323

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Abbreviated Journal Title	ISSN	2008 Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	2008 Articles	Cited Half-life	<i>Eigenfactor</i> ™ Score	Article Influence™ Score
AM SOCIOL REV	0003-1224	9349	3.762	5.285	0.364	44	>10.0	0.01728	3.897
AM J SOCIOL	0002-9602	8629	2.808	5.046	0.444	45	>10.0	0.01476	3.804
ANNU REV SOCIOL	0360-0572	3665	2.273	4.954	0.364	22	>10.0	0.00804	3.358
SOC NETWORKS	0378-8733	1276	2.068	2.929	0.276	29	>10.0	0.00318	1.270
SOC PROBL	0037-7791	1832	2.059	2.677	0.154	26	>10.0	0.00511	1.731



Appendix K: Web of Knowledge & Web of Science download interface screenshots

Download interface for Web of Knowledge:

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Appendix	L-1a,	Anthropo	logy
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Abbreviated Journal Title	total times in top 5	(2008) Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	(2008) Article #	Cited Half-Life	Eigenfac- tor Score	Article Influence Score
CURR ANTHROPOL	7	1	1	1	1		1	1	1
AM J PHYS ANTHROPOL	6	1	1		1	1	1	1	
J HUM EVOL	6	1		1	1	1		1	1
J ARCHAEOL SCI	5	1	1		1	1		1	
EVOL ANTHROPOL	4		1	1	1				1
SOC NETWORKS	3		1	1					1
AM J HUM BIOL	2					1		1	
ANNU REV ANTHROPOL	2			1					1
AM ANTHROPOL	1	1							
AM ETHNOL	1						1		
COLLEGIUM ANTROPOL	1					1			
COMP STUD SOC HIST	1						1		
HUM ORGAN	1						1		
	40	5	5	5	5	5	5	5	5

13 journals in top 5 rankings











Appendix L -2a, Communication

1 COM journals sorted by total citations:

Abbreviated Journal Title PUBLIC OPIN	ISSN	(2008) Total Cites	Impact Factor	5-Year Impact Factor	Imme diacy Index	(2008) Article #	Cited Half- Life	Eigenfac- tor Score	Article Influence Score
QUART	0033-362X	2565	1.972	2.606	0.262	42	>10.0	0.00478	1.349
J COMMUN	0021-9916	1816	2.266	2.365	0.122	41	9.9	0.00514	1.059
COMMUN RES	0093-6502	1747	1.473	2.486	0.111	36	>10.0	0.0032	1.046
J ADVERTISING J ADVERTISING	0091-3367	1367	1	1.909	0.579	38	>10.0	0.00191	0.526
RES	0021-8499	1360	0.612	1.257	0.067	45	>10.0	0.00166	0.393

2 COM journals sorted by impact factor:

Abbreviated Journal	ISSN	(2008) Total Cites	Impact Factor	5-Year Impact Factor	Imme diacy Index	(2008} Article #	Cited Half-	Eigenfac-	Article Influence
		01103				#			00010
J COMMUN J HEALTH	0021-9916	1816	2.266	2.365	0.122	41	9.9	0.00514	1.059
COMMUN	1081-0730	955	2.057	2.431	0.087	46	4.6	0.0058	0.999
PUBLIC OPIN									
QUART	0033-362X	2565	1.972	2.606	0.262	42	>10.0	0.00478	1.349
J COMPUT-MEDIAT									
COMM	1083-6101	803	1.901		0.25	36	4.6	0.00361	
HUM COMMUN					0.20			0.00001	
RES	0360-3989	1339	1.689	2.112	0.423	26	>10.0	0.00271	1.055

3 COM journals sorted by 5 yr impact factor:

Abbreviated Journal Title	ISSN	(2008) Total Cites	Impact Factor	5-Year Impact Factor	Imme diacy Index	(2008) Article #	Cited Half- Life	Eigenfac- tor Score	Article Influence Score
QUART	0033-362X	2565	1.972	2.606	0.262	42	>10.0	0.00478	1.349
COMMUN RES J HEALTH	0093-6502	1747	1.473	2.486	0.111	36	>10.0	0.0032	1.046
COMMUN	1081-0730	955	2.057	2.431	0.087	46	4.6	0.0058	0.999
J COMMUN	0021-9916	1816	2.266	2.365	0.122	41	9.9	0.00514	1.059
COMMUN THEOR	1050-3293	521	1.422	2.146	0.125	24	6.5	0.00216	0.946

4 COM journals sorted by immediacy:

Abbreviated Journal Title	ISSN	(2008) Total Cites	Impact Factor	5-Year Impact Factor	lmme diacy Index	(2008) Article #	Cited Half- Life	Eigenfac- tor Score	Article Influence Score
J ADVERTISING	0091-3367	1367	1	1.909	0.579	38	>10.0	0.00191	0.526
J MEDIA ECON HUM COMMUN	0899-7764	120	0.522	0.571	0.5	10	8.3	0.00016	0.106
RES PUBLIC UNDERST	0360-3989	1339	1.689	2.112	0.423	26	>10.0	0.00271	1.055
SCI	0963-6625	564	1.286	1.605	0.423	26	8	0.0018	0.682
INTERACT STUD	1572-0373	113	1.359		0.346	26	2.8	0.00071	



Appendix L-2b, Communication

5 COM journals sorted by # of articles in 2008:

Abbreviated Journal Title CYBERPSYCHOL	ISSN	(2008) Total Cites	Impact Factor	5-Year Impact Factor	Imme diacy Index	(2008) Article #	Cited Half- Life	Eigenfac- tor Score	Article Influence Score
BEHAV	1094-9313	1256	1.295	2.01	0.094	139	4.8	0.00435	0.484
PUBLIC RELAT REV TELECOMMUN	0363-8111	385	0.507	0.575	0.083	72	7.4	0.00036	0.058
POLICY	0308-5961	629	1.244	1.534	0.074	54	5.9	0.00182	0.399
HEALTH COMMUN J HEALTH	1041-0236	623	1.154	1.599	0.22	50	5.9	0.00221	0.52
COMMUN	1081-0730	955	2.057	2.431	0.087	46	4.6	0.0058	0.999

6 COM journals sorted by cited half-life:

Abbreviated Journal Title	ISSN	(2008) Total Cites	Impact Factor	5-Year Impact Factor	Imme diacy Index	(2008) Article #	Cited Half- Life	Eigenfac- tor Score	Article Influence Score
J SOC PERS RELAT	0265-4075	1273	1.097	1.5	0.111	45	>10.0	0.00322	0.632
RES PUBLIC OPIN	0021-8499	1360	0.612	1.257	0.067	45	>10.0	0.00166	0.393
QUART	0033-362X	2565	1.972	2.606	0.262	42	>10.0	0.00478	1.349
J ADVERTISING	0091-3367	1367	1	1.909	0.579	38	>10.0	0.00191	0.526
COMMUN RES	0093-6502	1747	1.473	2.486	0.111	36	>10.0	0.0032	1.046

7 COM journals sorted by Eigenfactor Score:

Abbreviated Journal Title J HEALTH	ISSN	(2008) Total Cites	Impact Factor	5-Year Impact Factor	Imme diacy Index	(2008) Article #	Cited Half- Life	Eigenfac- tor Score	Article Influence Score
COMMUN	1081-0730	955	2.057	2.431	0.087	46	4.6	0.0058	0.999
J COMMUN PUBLIC OPIN	0021-9916	1816	2.266	2.365	0.122	41	9.9	0.00514	1.059
QUART CYBERPSYCHOL	0033-362X	2565	1.972	2.606	0.262	42	>10.0	0.00478	1.349
BEHAV J COMPUT-MEDIAT	1094-9313	1256	1.295	2.01	0.094	139	4.8	0.00435	0.484
COMM	1083-6101	803	1.901		0.25	36	4.6	0.00361	

8 COM journals sorted by Article Influence Score:

Abbreviated Journal Title	ISSN	(2008) Total Cites	Impact Factor	5-Year Impact Factor	Imme diacy Index	(2008) Article #	Cited Half- Life	Eigenfac- tor Score	Article Influence Score
QUART	0033-362X	2565	1.972	2.606	0.262	42	>10.0	0.00478	1.349
J COMMUN HUM COMMUN	0021-9916	1816	2.266	2.365	0.122	41	9.9	0.00514	1.059
RES	0360-3989	1339	1.689	2.112	0.423	26	>10.0	0.00271	1.055
COMMUN RES	0093-6502	1747	1.473	2.486	0.111	36	>10.0	0.0032	1.046
POLIT COMMUN	1058-4609	599	1.023	1.828	0.2	20	7.4	0.00258	1.004



Abbreviated Journal Title	total times in top 5	(2008) Total Cites	Impact Factor	5-Year Impact Factor	Imme diacy Index	(2008) Article #	Cited Half- Life	Eigenfac- tor Score	Article Influence Score
PUBLIC OPIN		1		1					
QUART	6	1	1	1			1	1	1
J COMMUN	5	1	1	1				1	1
COMMUN RES	4	1		1	1		1		1
J HEALTH COMMUN	4		1	1		1		1	
HUM COMMUN RES	3		1		1				1
J ADVERTISING	3	1			1		1		
J ADVERTISING RES	2	1					1		
J COMPUT-MEDIAT COMM	2		1					1	
CYBERPSYCHOL BEHAV	2					1		1	
COMMUN THEOR	1			1					
INTERACT STUD	1				1				
J MEDIA ECON	1				1				
J SOC PERS RELAT	1						1		
POLIT COMMUN	1								1
PUBLIC UNDERST SCI	1				1				
PUBLIC RELAT REV	1					1			
TELECOMMUN POLICY	1					1			
HEALTH COMMUN	1					1			
	40	5	5	5	5	5	5	5	5

Appendix L-2b, Communication

18 journals in top 5 rankings











Appendix L-3	a, Economics
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	total times in	(2008) Total	Impact	5-Year Impact	Imme diacy	(2008) Article	Cited Half-	Eigenfac-	Article Influence
Abbreviated Journal Title	top 5	Cites	Factor	Factor	Index	#	Life	tor Score	Score
J POLIT ECON	5	1	1	1				1	1
Q J ECON	5	1	1	1				1	1
ECONOMETRICA	4	1	1					1	1
J ECON LIT	4		1	1	1				1
AM ECON REV	3	1					1	1	
J FINANC ECON	3	1		1				1	
J ECON GROWTH	2			1					1
AM J AGR ECON	1						1		
APPL ECON	1					1			
APPL ECON LETT	1					1			
ECOL ECON	1					1			
ECON LETT	1					1			
ECON PHILOS	1				1				
ECONOMET REV	1				1				
J BANK FINANC	1					1			
J ECON PERSPECT	1		1						
J ECON THEORY	1						1		
J ECONOMETRICS	1						1		
OXFORD REV ECON POL	1				1				
PUBLIC CHOICE	1						1		
REV ECON STUD	1				1				
	40	5	5	5	5	5	5	5	5

21 journals in top 5 rankings









Appendix L-4a, Geography

	total times	(2008) Total	Impact	5-Year Impact	Immediacy	(2008) Article	Cited Half-	Eigenfac-	Article Influence
Abbreviated Journal Title	In top 5	Cites	Factor	Factor	Index	#	Life	tor Score	Score
PROG HUM GEOG	5	1	1	1				1	1
ENVIRON PLANN A	4	1			1	1		1	
J ECON GEOGR	4		1	1	1				1
T I BRIT GEOGR	4		1	1				1	1
ANN ASSOC AM GEOGR	3	1					1	1	
ECON GEOGR	3		1	1					1
GLOBAL ENVIRON CHANG	3		1	1					1
LANDSCAPE URBAN PLAN	3	1				1		1	
REG STUD	2	1				1			
B ASOC GEOGR ESP	1					1			
CAN GEOGR-GEOGR CAN	1						1		
EURASIAN GEOGR ECON	1				1				
GEOFORUM	1					1			
GEOGR ANN B	1				1				
GEOGR J	1						1		
GEOGR REV	1						1		
GEOGRAPHY	1						1		
SINGAPORE J TROP GEO	1				1				
	40	5	5	5	5	5	5	5	5

of times journal is in top5 journal sort:

18 journals In top 5 rankings











Abbrovioted Journal Title	total times	(2008) Total	Impact	5-Year Impact	Immed iacy	(2008)	Cited Half-	Eigenf actor	Article Influence
Abbreviated Journal Title		Cites	Factor	Factor	Index	Article #	Life	Score	Score
J AM MED INFORM ASSN	1	1	1	1	1	1		1	1
MIS QUART	7	1	1	1	1		1	1	1
INFORM MANAGE-	4	1	1	1				4	
AWSTER	4	1	1	1					4
INFORM SYST RES	3	1		1					1
J AM SOC INF SCI TEC	3	1				1		1	
ANNU REV INFORM SCI	2		1		1				
INFORM SYST J	2		1		1				
J MANAGE INFORM									
SYST	2			1					1
SCIENTOMETRICS	2					1		1	
INFORM PROCESS									
MANAG	1					1			
INTERLEND DOC									
SUPPLY	1				1				
J HEALTH COMMUN	1								1
LAW LIBR J	1						1		
LIBR J	1					1			
LIBR QUART	1						1		
PROGRAM-ELECTRON									
LIB	1						1		
SOC SCI INFORM	1						1		
	40	5	5	5	5	5	5	5	5

Appendix L-5a, Information & Library Science

17 journals in top 5 rankings





Appendix L-5b





Appendix	L-6a,	Political	Science
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	r	1	1	r	1	r	r	1	1
Abbreviated Journal Title	total times in top 5	(2008) Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	(2008) Article #	Cited Half-Life	Eigenfactor Score	Article Influence Score
AM J POLIT SCI	6	1	1	1			1	1	1
AM POLIT SCI REV	5	1		1	1			1	1
EUR J POLIT RES	4	1	1	1				1	
J POLIT	4	1					1	1	1
POLIT ANAL	4		1	1				1	1
NEW REPUBLIC	2					1	1		
PUBLIC CHOICE	2					1	1		
PUBLIC OPIN QUART	2	1		1					
ANNU REV POLIT SCI	1								1
COMMENTARY	1						1		
EUR UNION POLIT	1		1						
INT POLITIK	1					1			
J CONFLICT RESOLUT	1				1				
J PEACE RES	1				1				
NATION	1					1			
OSTEUROPA	1					1			
POLIT GEOGR	1		1						
PUBLIUS J FEDERALISM	1				1				
WEST EUR POLIT	1				1				
	40	5	5	5	5	5	5	5	5

19 journals in top 5 rankings






Appendix L-6a



Appendix L-7a, Ps	sychology
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Abbreviated Journal Title	total times	(2008) Total Cites	Impact Factor	5-Year Impact Factor	Immediacy	(2008) Article #	Cited	Eigenfactor	Article Influence
PSYCHOL REV	5	1	1	1	1				1
ANNU REV PSYCHOL	4		1	1	1				1
BEHAV BRAIN SCI	4		1	1	1				1
PSYCHOL BULL	4	1	1	1					1
J PERS SOC PSYCHOL	3	1					1	1	
TRENDS COGN SCI	3		1	1				1	
J CLIN PSYCHIAT	2					1		1	
NEUROPSYCHOLOGIA	2					1		1	
ACTA PSYCHOL	1						1		
ADV EXP SOC PSYCHOL	1								1
CHILD DEV	1	1							
COGNITION	1					1			
DEV PSYCHOL	1						1		
DEV REV	1				1				
J CONSULT CLIN PSYCH	1	1							
J CONSUM PSYCHOL	1				1				
PERCEPT MOTOR SKILL	1						1		
PERS INDIV DIFFER	1					1			
PHYSIOL BEHAV	1					1			
PSYCHOL REP	1						1		
PSYCHOL SCI	1							1	
	40	5	5	5	5	5	5	5	5

21 journals in top 5 rankings











Appendix L-8a, Sociology

Abbreviated Journal Title	total times in top 5	(2008) Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	(2008) Article #	Cited Half- Life	Eigenfac-tor Score	Article Influence Score
AM J SOCIOL	6	1	1	1			1	1	1
AM SOCIOL REV	6	1	1	1			1	1	1
ANNU REV SOCIOL	5	1	1	1				1	1
J MARRIAGE FAM	4	1				1	1	1	
SOC FORCES	4	1				1	1	1	
SOC NETWORKS	2		1	1					
SOC PROBL	2		1						1
SOCIOL HEALTH ILL	2			1	1				
SOCIOL METHOD RES	2				1				1
ECON SOC	1				1				
GENDER SOC	1				1				
J SCI STUD RELIG	1						1		
SOC INDIC RES	1					1			
SOC SCI RES	1					1			
SOCIOL RURALIS	1				1				
SOTSIOL ISSLED+	1					1			
	40	5	5	5	5	5	5	5	5

16 journals in top 5 rankings











Appendix M-1A

First Download Procedure: 2008 test data using Web of Knowledge®

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1. Enter "Publication Name" and year. Note that at first "Timespan" was used; it was subsequentially determined, however, that entering the year in a search field as "Year Published" is preferable as at times using "timespan" selection criteria will also download items from the final journal of the previous year.



Appendix M-2A

First Download Procedure: 2008 test data using Web of Knowledge®



2. The first article is opened.



Appendix M-3A

First Download Procedure: 2008 test data using Web of Knowledge®



3a-c were initial procedures developed for *Web of Knowledge* to download citations for each article (before it was discovered *Web of Science* allowed citation download as a choice for all items in found set).



Appendix M-4A

First Download Procedure: 2008 test data using Web of Knowledge®

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3b. Download settings used to get citations for each article using *Web of Knowledge*. Appendix K shows download checkbox setting for *Web of Science* to download all items in a found set at once (this was not done initially with the 2008 test dataset).



Appendix M-5A

First Download Procedure: 2008 test data using Web of Knowledge®



3c Information is downloaded to a temporary file named "savedrec.txt"



Appendix M-6A

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First Download Procedure: 2008 test data using Web of Knowledge®

4a-c. Show text modification prior to copying to excel spreadsheet. First, temporary file savedrecs.txt is opened in notepad on pc computers (or TextEdit on macs).



Appendix M-7A

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	16	potential for viewers' exclail learning of risky heilth behaviors from TV programming. There has been relatively little effort to test behavioral modeling predictions. That	
	1 Long	is it is not clear whether televised depictions Of negatively reinforced undesirable . Debayions (e.g. unsafe sea) in fact, influence the value viewers attach to those	
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6		COMMEN RES. V15, P107; SHERIF M. 1961, SOCIAL JUDGEMENT ANS; STIFF JB, 1986, PERSUASIVE COMMUNICA; WARD IM, 2003, J TOUTH ADDIESCENCE, V31, P1, WARD IM, 2003, DEV PEV, W32, P147, DOI: 10.1016/s0232.2302/03100012-3, WARD IM, 2004, J RES. ADDIESCENCE	
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First Download Procedure: 2008 test data using Web of Knowledge®

4b Second, text portions of record above citations are deleted.



Appendix M-8A



First Download Procedure: 2008 test data using Web of Knowledge®

4c Third, text portions of record below citations are deleted.



Appendix M-9A



First Download Procedure: 2008 test data using Web of Knowledge®

5. Temporary file is now saved as a new text file named to indicate year, journal name, and journal volume & issue.

In later project stages (i.e. non-test data), after using *Web of Science* to procure information for entire found set, the text file was opened in excel and the "text to columns" command (see Appendix Z for screen shots of this) was then used to modify format.

This consistently placed citation information in column Z (header CR from original data). The excel file was then renamed as follows: discipline abbreviation (ANTH, COM, ECON, GEOG, LIBSCI, POLSCI, PSYCH, or SOC), year found, journal name, # of total items downloaded. For example: ECON09jEconLit109.xls was the set found for Economics in 2009 from the Journal of Economic Literature and there were 109 items.



Appendix M-1B

Second Download Procedure: 2008 test data using Web of Science®



**be sure to click "full record" and "plus cited references". Usually if your results don't seem like what you expect this was the problem.

To open download text file in Excel: data->getExternalData->import text file

In text import wizard: choose delimited and press next, set delimiter as Tab and press next, press finish.

To delete non-citation bits in excel document go to column headed "CR" (column Z) and...

1. choose "Data"-> "text to columns"

2. set delimiter to semicolon

3. when it says "do you want to replace the contents of the destination cells?" say yes. It is ok to copy over this data because you will still have it available in the .txt file if you ever wish to see it but leaving it here will mess up your find/replacing as the journal title abbreviation often appears in later columns (ex columns AI and AJ for communication)

Note: if there are more than 71 citations then this will make your document have too many columns for .xls 2003 on a pc. Use the Mac and/or transpose (so columns are rows) or download in batches and then reassemble into single excel file.



Appendix N

Third (final) Download Procedure: Non-text data Web of Science®

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Note that "conference proceedings" is now a choice. The same dataset will be found, however, if you leave all the default choices checked or not; accordingly all default choices were left unmodified (so "conference proceedings" was now checked)

- 1. Download full journal citation found set at once using Web of Science (as shown in Appendices K and M-1B).
- 2. On Mac, right click the .txt file created and open with Excel. Use data-> text to columns.

Since after 2008 all data was counted using an Excel count sheet, rather than find/replace command to get count and change color for top 5 journals in all 8 disciplines, the citation acquisition procedure is now done.

All citations will be in column Z (header CR) and it will not matter if the journal name also appears in other columns; the new excel count sheet will only search column Z. This allows all downloaded information to be retained and available later if desired—as well as minimizes potential for accidental error in previous text modification procedures.



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Appendix O: 2008 test data citation counts

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67 abbreviated and the other perhaps indicating the electronic version of j commun)



Count worksheet example for Library and Information Science 2006 (screenshot from Excel)

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LISA	JOURNAL OF MANAGEMENT INFORMATION SYSTEMS	J MANAGE INFORM SYST	33								
8		total US		351						13-34	
9											
POLSCI1	SCIENCE REVIEW	AM POLIT SCI REV	0								
	AMERICAN JOURNAL OF	AM J POLIT SCI	1							1991	
100002	EUROPEAN JOURNAL OF	EUR J POUT RES	1								
2 POLSCI3	POLITICAL RESEARCH	EOR'S POLITIKED	0								
3 POLSCI4	RESOLUTION	J CONFLICT RESOLUT	1								
POLSCIS	JOURNAL OF PEACE RESEARCH	J PEACE RES	0								
5		total Political Science		2							
5	NEW COLORADO COLORADO DE LA COLORADO										
7 PSYCH1	BEHAVIORAL AND BRAIN SCIENCES	BEHAV BRAIN SCI	1							117	
B PSYCH2	PSYCHOLOGICAL BULLETIN	PSYCHOL BULL	9	22							
PSYCHE	ANNUAL REVIEW OF PSYCHOLOGY	ANNU REV PSYCHOL	7								
PSYCH4	PSYCHOLOGICAL INQUIRY	PSYCHOL IND	1								
normer	TRENDS IN COGNITIVE	TRENDS COGN SCI		10							
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PSPCHS										_	Ļ
PSTCHS	ANNUAL DEVIEW OF									11	
SOC1	ANNUAL REVIEW OF SOCIOLOBY	ANNU REV SOCIOL									
5 SOC1	ANNUAL REVIEW OF SOCIOLOGY AMERICAN SOCIOLOGICAL REVIEW	ANNU REV SOCIOL AM SOCIOL REV								1.1	
5 SOC1	ANNUAL REVIEW OF SOCIOLOGY AMERICAN SOCIOLOGICAL REVIEW AMERICAN JOURNAL OF	ANNU REV SOCIOL AM SOCIOL REV	6			1-1				111	
5 SOC1 5 SOC2 7 SOC3	ANNUAL REVIEW OF SOCIOLOGY AMERICAN SOCIOLOGICAL REVIEW AMERICAN JOURNAL OF SOCIOLOGY SOCIOLOGY	ANNU REV SOCIOL AM SOCIOL REV AM J SOCIOL	6								
5 SOC1 5 SOC2 7 SOC3 5 SOC4	ANNUAL REVIEW OF SOCIOLOGY AMERICAN SOCIOLOGICAL REVIEW AMERICAN JOURNAL OF SOCIOLOGY SOCIOLOGY RESEARCH	ANNU REV SOCIOL AM SOCIOL REV AM J SOCIOL SOCIOL METHOD RES	6 4 0								
2 3 3 4 5 SOC1 5 SOC2 7 SOC3 4 SOC4 9 SOC5	ANNUAL REVIEW OF SOCIOLOGY AMERICAN SOCIOLOGICAL REVIEW AMERICAN JOURNAL OF SOCIOLOGICAL WETHODS & RESEARCH SOCIOLOGICA WETHODS & RESEARCH	ANNU REV SOCIOL AM SOCIOL REV AM J SOCIOL SOCIOL METHOD RES SOCIOL RURALIS	6 4 0 0								
2 30C1 5 50C1 5 50C2 7 50C3 8 50C4 9 50C5 7	ANNUAL REVIEW DF SOCIOLOGY AMERICAN SOCIOLOGICAL REVIEW AMERICAN JOURNAL DF SOCIOLOGICAL METHODS & RESEARCH SOCIOLOGICAL METHODS & RESEARCH SOCIOLOGIA RURALIS	ANNU REV SOCIOL AM SOCIOL REV AM J SOCIOL SOCIOL METHOD RES SOCIOL RURALIS total Sociology	6 4 0 0	15							



Count worksheet example w/formulas for Library and Info Science 2006 (screenshot from Excel)

2	A	B	C	D	E	F	
73	anthet	JOUNDAL OF HUMAN EVOLUTION	AND THE REAL	-SUMPRODUCTURENDE 25301, LENISCRISTITUTEZH 2530, 1 HUM SVDC 1111, 25501 HUM SVDC		note: CANADIAN J COMMUNICA, INT J	
		VENDORS OF DEPENDING AND AND AND AND	VEAR DUT AN UNDER	-some epoch finalizzabel, confactor and constrained and a main race to		COMMUNICATION, EUROPEAN J COMMUNICA, EUR J COMMUNICA, AM J COMMUN PSYCHOL were excluded	2
.74	ANTH2	Tarrende an interest an inter-score	Turner and a second contract spa	-SUMPRODUCT((LEN(21-2170) - LEN(SUBSTITUTE[21:2170, "YEARB PHYS ANTHROPOL", ""))) / LEN("YEARB PHYS ANTHROPOL", "N))) / LEN("YEARB PHYS ANTHROPOL", ""))) / LEN("YEARB PHYS ANTHROPOL", "N))) / LEN("YEARB PHYS ANTHROPOL", "N))) / LEN("YEARB PHYS ANTHROPOL", "N))) / LEN("YEARB PHYS ANTHROPOL", "N)))) / LEN("YEARB PHYS ANTHROPOL", "N))) / LEN("YEARB PHYS ANTHROPOL", "N)) / LEN("N)) / LEN("YEARB PHYS ANTHROPOL", "N)) / LEN("YEARB PHYS ANTHROPOL", "N)) / LEN("YEARB PHYS ANTHROPOL", "N)) / LEN("N)) / LEN("N		from count. Citations abbreviated as J COMMUNICATION	
75	ANTHS	MININGROUDDY	ARE J. PHYSICAN THROPODE	-SUMPRODUCT/ ILENIZI-21701 - LENISUBSTITUTEIZI 2170 *AM / PHYS ANTHROPOL*, "TIII / LENI*AM		jwere left in the court as this was felt to possibly be an intermal abbreviation of LCOMMUN: also LCOMMUNCA.	
76	ANTH4	DOCAL MEYWORKS	SOC NETWORKS	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "SOC NETWORKS", ""))) / L		IN PRESS was left in count. Finally instances of ELECT J	
77	ANTHS	EVOLUTION/RY ANTHROPID.05/Y	EVOL MITHROPPA.	«SUMPRODUCT([LEN[21-2170] - LEN[SUBSTITUTE[21-2170, "EVOL ANTHROPOL", ""]]] / LEN("EVOL AN			
78			tale with manage		-50M(0173:0177)	1	
.79	2018	INTERNETIONAL JOURNAL OF LAMELABLE &	and the same strategies and	en Terre en al server a la serve de server en sales a la merer en activitation de la server de la server en serve			
.80	COMI	COMMUNICATION DISCRIDERS	No. of Sold Closed Line	-SUMPRODUCT([LEN[21:2170] - LEN[SUBSTITUTE[21:2170, "INT J LANG COMM DIS", ""]]) / LEN("INT J		I Journals counted as J COMMUN and then deleted:	
81	COM2	PUBLIC OPINION GLOWICINGY	HURLE OVE DUANT	-SUMPRODUCT([LEN[21:2170] - LEN[SUBSTITUTE[21:2170, "PUBLIC OPIN QUART", ""]]) / LEN]"PUBLIC	-SUMPRODUCT([LEN]	CANADIAN J COMMUNICA	-SUMPRODUCT([LEN]21
82	COMB	JOUNDAL OF HEALTH COMMONDATION	1-EALTH COUNCIL	-SUMPRODUCT([LEN]21-2170] - LEN[SUBSTITUTE[21-2170,") HEALTH COMMUN", ""\" / LEN["1 HEALT		INT J COMMUNICATION	-SUMPRODUCT([LEN[21
83	COM4	HUMAN ECONOLINICATION RESEARCH	HUM CONNEN RES	-SUMPRODUCT((LEN(21-21/0) - LEN(SUBSTITUTE(21-21/0, "HUM COMMUN RES", ""))) / LEN("HUM C		EUROPEAN / COMMUNICA	-SUMPRODUCT((LEN)21
84	CDM5	HEALTH COMMUNICATION	HEALTH COMPLEX	-SUMPRODUCT([LEN(21-2170) - LEN(SUBSTITUTE(21-2170, "HEALTH COMMUN", "")]) / LEN("HEALTH (ELECT J COMMUNICATIO	~SUMPRODUCT((LEN(21
85			2000aci 100-01 (004		-MAX[0,E181-G188]	EUR J COMMUNICA	-SUMPRODUCT([LEN]21
87	3		THE OWN & LEAD		-penile sectoral	EUR J COMMUN	-SUMPRODUCT([LEN]21
88	ECON1	JOUNNAL OF RECENTING LITERATURE	2 ROOM LIT	-SUMPRODUCT((LEN(21-2170) - LEN(SUBSTITUTE(21-2170, ") ECON LIT", ""))) / LEN(") ECON LIT")		total "bits" (subtracted in D185)	-5UM(G181:G187)
89	ECONZ	QUARTERLY JOLIHING OF LOOKONICS	Quration .	-SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, *Q.) ECON*, **))) / LEN(*Q			
90	ECON3	JOURNAL OF ACCOUNTING & DOWOWCO	LACCIDUNT (LEIN	-SUMPRODUCT([LEN[21-2170] - LEN[SUBSTITUTE[21-2170, *) ACCOUNT ECON*, ***]]) / LEN[*] ACCOUNT			
91	SCON4	JOURNAL DE ECCENTREE SREAMEN	J ECON SHOWTH	«SUMPRODUCT([LEN[21-2170] - LEN[SUBSTITUTE[21:2170; *] ECON GROWTH*, **]]) / LEN(*) ECON GR		comm is part of commun (although J comm will work the	
92	ECONS	JOURNA, OF POLITICAL ECONOMY	J POUT REON	-SUMPRODUCT([LEN[21:2170] - LEN[SUBSTITUTE[21:2170, "1 POLIT ECON", "")]] / LEN["1 POLIT ECON			
93			Subal assessment		-SUM(D188:D192)		
	1 0	TRANSACTIONS OF THE INSTITUTE OF BRIDER	and the second second	7	-		
95	GEOG1	GEODRAPHERE	CLINNE GEORM	-SUMPRODUCT([LEN[21:2170] - LEN[SUBSTITUTE[21:2170, "T BRIT GEOGR", ""]]] / LEN["T BRIT GEO	-SUMPRODUCT((LEN)	1	
96	GEDG2	PROGRESS IN FLOREN GEODRAPHY	PHDE-SAVINEDS	-SUMPRODUCT([LEN[21-2170] - LEN[SUBSTITUTE[21:2170, "PROG HUM GEOG", ""]]] / LEN["PROG HU		Other journals incorrectly counted and then deleted:	
		OLOBR. SINVACIMIN/ALCHANGE-SLANN MIT	GLOW, MOTHER LOWING			1	
97	GEDG3	POLICY UNENDONS	1999 (1999) 1999 (1999)	-SUMPRODUCT([LEN[21:2170] - LEN[SUBSTITUTE[21:2170], "GLOBAL ENVIRON CHANG", ""]]] / LEN["G			
.98	GEDG4	JOLNING, OF ECONOMIC DODGRAPHY	LECON DECKA	-SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, *) ECON GEOGR*, **))) / L		counted: PSYCHOL REV (0219):	
00	nenne	ANALS OF THE ASSOCIATION OF AMERICAN GEOGRAPHERS	ANN ABOOC MATURADE	-SUMPROPERTY (LEW/21-21-20) - LEW/SURCTITUTE/21-21-20 - AMM ASSOC AM CED/26	-DIMORODI STUDIENI	Advent DEPS STOL DEPENDENT SECURITIES	-6184080/01/11/01/01/11
00	acous		must according to the same gauge	-summobile(((tem(c11170) - LEN(SOBSTITUTE(c12170), ANN ASSOC AM GEOGR	-MAX[0,E199-E195]		-service of treates
01			Sild phops and		-SUM[D196+D195+D1	9	
03	ust	Inth Qualifierary	se quar	-SUMPRODUCTI (LEN(21-2170) - LEN(SUBSTITUTE[21-2170, "MIS QUART", "TIL/ LEN("MIS QUART"))		counted: ECON GEOGR (D198).	
10.12	100	and the set of the set	secondar.				
04	1165	INFORMATICE ABROCIATION	J AM MEL NEDRA ASON	ALMARKADI MTU DI SMITH 21201 - LEMISLIKSTITUTISTITI 2120 PLANA MED INSPRANASSANT PTUL / LEMITU		delegand 1 ECON GEOGR	SUBARRADINE ATTL D EN124
05	LIFE	NFORMON STREND RESERVEN	mFORMSYST RES	-DINEDOWNYY / EN/24 2420 - LEVEL DOT THE 224 2420 - BECOM OVER DOA 100			-senter the section of the sector
05		INFORMUTION & MANAGEMENT	ALL DRAWNING AND THE	-Some Roccool ((LEN(21210)) - LEN(Subornitoria) (2010) - LEN(Subornitoria) (2010)			
UO	U55		1000 01790 001720	 SUMPRODUCT[[LEN[21:21:0] - LEN[SUBSTITUTE[21:21:0], "INFORM MANAGE-AMSTER", "]]]/ LEN[" 	-		
07	LI54	STOTIME OF BOARD STOTICS.	JAMARAGE INFORM SYST	-SUMPRODUCT((LEN(21:2170) - LEN(SUBSTITUTE(21:2170), "J MANAGE INFORM SYST", ""))) / LEN("J M			
08			seech.		-5UM(0203:0207)		
109	10.000	address an electric schement initiation	ALL OF A DOLLARS	ter 1945 - Alexandre A. and a state of the construction of the construction of the state of the state of the state 1946 - Alexandre A. and a state of the construction of the construction of the state of the state of the state			
10	POLSCI1		NU COLUMN DU DU	-SUMPRODUCT((LEN(21-2170) - LEN(SUBSTITUTE(21-2170, "AM POUT SCI REV", ")() / LEN("AM POLI			-
11	POLSCIZ	MARCAN SCIMME OF POLITICAL SCIENCE	All 1 POLY 3L1	-SUMPRODUCT([LEN[21:2170] - LEN[SUBSTITUTE[21:2170, "AM J POUT SCI", ""J]] / LEN["AM J POUT SCI ""]] / LEN["]] / LEN["]] / LEN["]] / LEN["]]		1	
12	POLSC13	ILTERNATION TO ANY ID-NOTION HISTORYCH	stak (POCO NES	SUMPRODUCT([LEN[21:2170] - LEN[SUBSTITUTE[21:2170], "EUR J POLIT RES", ""]]] / LEN("EUR J POLIT	-		
13	POLSCI4	JOURNAL OF CONFLICT RESOLUTION	2 CONFLECT HEBOLUT	-SUMPRODUCT([LEN[21-2170] - LEN[SUBSTITUTE[21:2170, "1 CONFLICT RESOLUT", ""]]) / LEN["J CONF	-		
14	POLSCIS	JOURDAL OF REACE RESIGNED.	JPEACE REE	-SUMPRODUCT((LEN(21-2170) - LEN(SUBSTITUTE(21-2170, ") PEACE RES", "'))) / LEN(") PEACE RES")			
15			total Political Science		-5UM(0210:0214)		
17	PSYCHI	ILLINGRA AND BRAT SCIENCIS	SERVICE BRANCHES	-SUMPRODUCTI (LEN(21-2170) - LEN(SUBSTITUTE(21-2170, "BEHAV BRA/N SCI", "TI) / LEN("BEHAV BR		1	
18	PSYCH2	PEYDHOLOGICAL BULLETIN	PAYCHELELAL	_F222	-SUMPRODUCTURENT	1	
10	acurus	NWUKL KEINEIT DE PUTCHOLOXIT	ANNU REV PERCHOL	-CLM2BODUCT(() EN(71-7170) - LEN/CUBSTITUTE(71-7170, *ANNU-BEV DEVCL	-some wooden (faire	1	
20	PSILITS	POPONDOLOGIA, MOURY	RIVOR. NO	-SUMPRODUCT (CEN(21.2170) - LEN(SUBSTITUTE(21.2170, NRNG REV FSTC	-	1	
21	Instrume.	TACINES IN COORDING SCREWES	Netwice processory	=SUMPRODUCT((LEN(21:2170) - LEN(SUBSTITUTE(21:2170, FSTCHOL INC,		1	
22	PSYCH5		man Fifth Sci. Physica, Mar.	-SUMPRODUCT (LEN(21:21/0) * LEN(SUBSITIUTE(21:21/0, *TRENDS COGN S	-MAXI0.6221-G1991	1	
23			ine making		-5UM(0217:0221)		
24		Land and the second second	COLUMN AND			1	
25	SOC1	WWWCRENER OF BOCIELODY	AND NO SOUCK	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "ANNU REV SOCIOL", ")))			
26	\$002	MIERICAN SIDCESUSSIEN, HEVRW	AN SCOOL WY	-SUMPRODUCT[(LEN(21-2170) - LEN(SUBSTITUTE[21-2170, "AM SOCIOL REY", ""]]] / LEN("AM SOCIOL	-		
27	50C3	MIRROW JOURNLOF SOCIOLOGY	AM J SCOOL	-SUMPRODUCT([LEN[21:2170] - LEN[SUBSTITUTE[21:2170, "AM / SOCIOL", ""]]] / LEN("AM / SOCIOL")		1	
28	5004	SOCIALOGICAL NETHODS & RESIMACI	SOCIEL WE'T-OD REE	-SUMPRODUCT([LEN[21:2170] - LEN[SUBSTITUTE[21:2170, "SOCIOL METHOD RES", ""]]) / LEN("SOCIO			
29	soc5	SOCIEL/OUN RURALS	ROCES, HURALE	-sumproduct((LEN(21.2170) - LEN(SUBSTITUTE(21.2170, "SOCIOL RURAUS", ""))) / LEN("SOCIOL RU	-4UMI0325-0329		
31			and another it				
32	1		ALL TOTAL CITES:		-SUM[E215+E230+E22	i	C C

*To show all formulas in a worksheet at once, press control + ~ (tilde) key; note that there is no need to shift before pressing the ~ key.



117

Top 5 impact factor journals for disciplines by year, 2005-2009

shading=Journals in top 5 ranking all 5 years Re: result totals reported:

- 1 ECON GEOGR totals have had J ECON GEOGR totals subtracted
- 2 J COMMUN totals have had CANADIAN J COMMUNICA, INT J COMMUNICA, EUR J COMMUNICA, AM J COMMUN PSYCHOL, AND EUR J COMMUN totals subtracted [WESTERN J COMM is not found searching for j commun even though comm is part of commun--although J comm will work the other way and find all j commun)
- 3 PSYCHOL REV totals have had PERS SOC PSYCHOL REV subtracted

Re: counting:

1 For 2005 Psychology citations range was increased [example formula: =SUMPRODUCT((LEN(Z1:Z366) - LEN(SUBSTITUTE(Z1:Z366, "J HUM EVOL", ""))) / LEN("J HUM EVOL"))]

2 For 2005 Sociology citations range was increased [=SUMPRODUCT((LEN(Z18:Z187) -

LEN(SUBSTITUTE(Z18:Z187, "EVOL ANTHROPOL", ""))) / LEN("EVOL ANTHROPOL"))]

Re: article # vs. record #

All possible records were downloaded from web of science. Many of these were editorial reviews (for example in Behavioral and Brain Sciences), book reviews (for example in AM J PYS ANTHROPOL), and proceedings papers (for example in American Journal of Sociology), etc.; they usually had citations though so it was felt they should be included to gain the most complete picture of possible interdisciplinary citations possible. Meeting abstracts did not include citations (for example in AM J PHYS ANTHROPOL) but were also downloaded since lack of citations did not harm results and otherwise unnecessary errors were easily introduced (Web of Science sorting by document type was not entirely reliable; this was verified in 2010 by Joseph Petrick, librarian at Alfred State University).

1 Anthropology

	Abbreviated Journal Title		JCR Data 🕦							
Rank	(linked to journal information)	ISSN	Total Cites	Impact Factor	Immediacy Index	Articles	Cited Half-life			
1	J HUM EVOL	0047-2484	2491	3.077	0.493	67	8.1			
2	EVOL ANTHROPOL	1060-1538	630	2.391	0.429	14	6.0			
3	CURR ANTHROPOL	0011-3204	1690	2.289	0.431	51	9.8			
4	AM J PHYS ANTHROPOL	0002-9483	5221	2.104	0.375	160	>10.0			
5	ANNU REV ANTHROPOL	0084-6570	944	1.644	0.086	35	>10.0			

	Anthropology,	top 5 impa	ct factor 2005
Journal name	Journal	# of	Excel count formula
	Abbrev.	records	
JOURNAL OF HUMAN EVOLUTION	J HUM EVOL	95	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "J HUM EVOL", ""))) / LEN("J HUM EVOL"))
EVOLUTIONARY ANTHROPOLOGY	EVOL ANTHROPOL	44	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "EVOL ANTHROPOL", ""))) / LEN("EVOL ANTHROPOL"))
CURRENT ANTHROPOLOGY	CURR ANTHROPOL	113	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "CURR ANTHROPOL", ""))) / LEN("CURR ANTHROPOL"))
AMERICAN JOURNAL OF PHYSICAL ANTHROPOLOGY.	AM J PHYS ANTHROPOL	857	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "AM J PHYS ANTHROPOL", ""))) / LEN("AM J PHYS ANTHROPOL"))
ANNUAL REVIEW OF ANTHROPOLOGY	ANNU REV ANTHROPOL	36	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "ANNU REV ANTHROPOL", "")))



20	006:			-				
		Abbreviated Journal Title				JCR Data 🕕		
Rank	(linked to journal information)	ISSN	Total Cites	Impact Factor	Immediacy Index	Articles	Cited Half-life	
	1	J HUM EVOL	0047-2484	3003	3.267	0.759	79	8.3
	2	YEARB PHYS ANTHROPOL	0096-848X	522	2.143	0.000	4	>10.0
	3	AM J PHYS ANTHROPOL	0002-9483	6007	2.136	0.462	173	>10.0
	4	SOC NETWORKS	0378-8733	775	1.919	0.000	25	>10.0
	5	EVOL ANTHROPOL	1060-1538	648	1.875	0.467	15	6.5

	Anthropology, top 5 impact factor 2006								
journal name	Journal Abbrev.	# of	Excel count formula						
		records							
JOURNAL OF HUMAN EVOLUTION	J HUM EVOL	102	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "J HUM EVOL", ""))) / LEN("J HUM EVOL"))						
YEARBOOK OF PHYSICAL ANTHROPOLOGY	YEARB PHYS ANTHROPOL	4	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "YEARB PHYS ANTHROPOL", ""))) / LEN("YEARB PHYS ANTHROPOL"))						
AMERICAN JOURNAL OF PHYSICAL ANTHROPOLOGY.	AM J PHYS ANTHROPOL	773	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "AM J PHYS ANTHROPOL", ""))) / LEN("AM J PHYS ANTHROPOL"))						
SOCIAL NETWORKS	SOC NETWORKS	28	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "SOC NETWORKS", ""))) / LEN("SOC NETWORKS"))						
EVOLUTIONARY ANTHROPOLOGY	EVOL ANTHROPOL	36	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "EVOL ANTHROPOL", ""))) / LEN("EVOL ANTHROPOL"))						

2007	007.									
2001			JCR Data 🕦					Eigenfactor ¹⁷ Metrics ()		
Rank	Abbreviated Journal Title (linked to journal information)	ISSN	Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	Articles	Cited Half-life	Eigenfactor TM Score	Article Influence TM Score
1	EVOL ANTHROPOL	1060-1538	807	3.138	2.136	0.250	16	7.3	0.00437	1.278
2	J HUM EVOL	0047-2484	3148	2.712	3.251	1.014	71	8.5	0.01087	1.466
3	CURR ANTHROPOL	0011-3204	2032	2.312	2.432	0.229	48	>10.0	0.00808	1.485
4	AM J PHYS ANTHROPOL	0002-9483	6292	2.273	2.624	0.323	158	>10.0	0.01480	1.021
5	GLOBAL NETW	1470-2266	269	1.886		0.080	25	4.0	0.00213	

	Anthropology, top 5 impact factor 2007								
Journal name	Journal Abbrev.	# of records	Excel count formula						
EVOLUTIONARY ANTHROPOLOGY	EVOL ANTHROPOL	42	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "EVOL ANTHROPOL", ""))) / LEN("EVOL ANTHROPOL"))						
JOURNAL OF HUMAN EVOLUTION	J HUM EVOL	122	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "J HUM EVOL", ""))) / LEN("J HUM EVOL"))						
CURRENT ANTHROPOLOGY	CURR ANTHROPOL	90	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "CURR ANTHROPOL", ""))) / LEN("CURR ANTHROPOL"))						
AMERICAN JOURNAL OF PHYSICAL ANTHROPOLOGY.	AM J PHYS ANTHROPOL	1064	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "AM J PHYS ANTHROPOL", ""))) / LEN("AM J PHYS ANTHROPOL"))						
GLOBAL NETWORKS-A JOURNAL OF TRANSNATIONAL AFFAIRS	GLOBAL NETW	28	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "GLOBAL NETW", ""))) / LEN("GLOBAL NETW"))						



200	2008:										
			JCK Data ()						Eigenfactor Metrics ()		
Ran	k (linked to journal information)	ISSN	Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	Articles	Cited Half-life	Eigenfactor TM Score	Article Influence TH Score	
1	J HUM EVOL	0047-2484	4519	3.550	4.310	1.336	137	8.6	0.00983	1.297	
2	EVOL ANTHROPOL	1060-1538	966	3.484	3.725	1.111	18	7.6	0.00298	1.475	
3	AM J PHYS ANTHROPOL	0002-9483	7241	2.353	2.690	0.456	147	>10.0	0.01258	0.830	
4	SOC NETWORKS	0378-8733	1276	2.068	2.929	0.276	29	>10.0	0.00318	1.269	
5	CURR ANTHROPOL	0011-3204	2413	2.032	2.718	0.412	51	>10.0	0.00681	1.313	

	Anthropology, top 5 impact factor 2008								
Journal name	Journal Abbrev.	# of records	Excel count formula						
JOURNAL OF HUMAN EVOLUTION	J HUM EVOL	169	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "J HUM EVOL", ""))) / LEN("J HUM EVOL"))						
EVOLUTIONARY ANTHROPOLOGY	EVOL ANTHROPOL	37	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "EVOL ANTHROPOL", ""))) / LEN("EVOL ANTHROPOL"))						
AMERICAN JOURNAL OF PHYSICAL ANTHROPOLOGY.	AM J PHYS ANTHROPOL	940	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "AM J PHYS ANTHROPOL", ""))) / LEN("AM J PHYS ANTHROPOL"))						
SOCIAL NETWORKS	SOC NETWORKS	29	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "SOC NETWORKS", ""))) / LEN("SOC NETWORKS"))						
CURRENT ANTHROPOLOGY	CURR ANTHROPOL	109	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "CURR ANTHROPOL", ""))) / LEN("CURR ANTHROPOL"))						

					JCR I	Eigenfactor ¹ Metrics ()				
Rank	(linked to journal information)	ISSN	Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	Articles	Cited Half-life	Eigenfactor TM Score	Article Influence TM Score
1	EVOL ANTHROPOL	1060-1538	1235	3.382	3.864	0.714	14	8.5	0.00340	2.012
2	CULT ANTHROPOL	0886-7356	962	3.350	3.097	0.810	21	9.3	0.00293	1.365
3	J HUM EVOL	0047-2484	5242	2.987	4.077	1.273	99	8.9	0.01486	1.664
4	AM J PHYS ANTHROPOL	0002-9483	7924	2.756	2.903	0.665	170	>10.0	0.01473	0.978
5	SOC NETWORKS	0378-8733	1485	2.349	3.328	0.370	27	>10.0	0.00357	1.369

	Anthropology, top 5 impact factor 2009								
Journal name	Journal Abbrev.	# of records	Excel count formula						
EVOLUTIONARY ANTHROPOLOGY	EVOL ANTHROPOL	52	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "EVOL ANTHROPOL", ""))) / LEN("EVOL ANTHROPOL"))						
CULTURAL ANTHROPOLOGY	CULT ANTHROPOL	25	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "CULT ANTHROPOL", ""))) / LEN("CULT ANTHROPOL"))						
JOURNAL OF HUMAN EVOLUTION	J HUM EVOL	119	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "J HUM EVOL", ""))) / LEN("J HUM EVOL"))						
AMERICAN JOURNAL OF PHYSICAL ANTHROPOLOGY	AM J PHYS ANTHROPOL	1180	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "AM J PHYS ANTHROPOL", ""))) / LEN("AM J PHYS ANTHROPOL"))						
SOCIAL NETWORKS	SOC NETWORKS	27	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "SOC NETWORKS", ""))) / LEN("SOC NETWORKS"))						



2 Communication

2005:

	Abbreviated Journal Title (linked to journal information)	ISSN	JCR Data ()						
Rank			Total Cites	Impact Factor	Immediacy Index	Articles	Cited Half-life		
1	PUBLIC OPIN QUART	0033-362X	1700	1.509	0.324	34	>10.0		
2	COMMUN THEOR	1050-3293	220	1.472	0.182	22	6.6		
3	RES LANG SOC INTERAC	0835-1813	245	1.357	0.500	14	7.4		
4	POLIT COMMUN	1058-4609	347	1.261	0.074	27	5.7		
5	COMMUN RES	0093-6502	990	1.255	0.214	28	>10.0		

	Communication, top 5 impact factor 2005									
Journal name	Journal Abbrev.	# of	Excel count formula							
		records								
PUBLIC OPINION	PUBLIC OPIN	67	=SUMPRODUCT((LEN(Z1:Z170) -							
QUARTERLY	QUART									
		05	QUART, "))) / LEN("PUBLIC OPIN QUART"))							
COMMUNICATION THEORY	COMMUN THEOR	25								
			THEOR", ""))) / LEN("COMMUN THEOR"))							
RESEARCH ON LANGUAGE	RES LANG SOC	15	=SUMPRODUCT((LEN(Z1:Z170) -							
AND SOCIAL INTERACTION	INTERAC		LEN(SUBSTITUTE(Z1:Z170,"RES LANG SOC							
			INTERAC"))							
POLITICAL	POLIT COMMUN	57	=SUMPRODUCT((LEN(Z1:Z170) -							
COMMUNICATION			LEN(SUBSTITUTE(Z1:Z170, "POLIT							
			COMMUN", ""))) / LEN("POLIT COMMUN"))							
COMMUNICATION	COMMUN RES	29	=SUMPRODUCT((LEN(Z1:Z170) -							
RESEARCH			LEN(SUBSTITUTE($\angle 1$: $\angle 1$ 70,"COMMUN RES",							
			("COMMUN RES"))							

	Abbreviated Journal Title (linked to journal information)	ISSN	JCR Data ()						
Rank			Total Cites	Impact Factor	Immediacy Index	Articles	Cited Half-life		
1	INT J LANG COMM DIS	1368-2822	340	1.612	0.135	37	5.2		
2	PUBLIC OPIN QUART	0033-362X	1970	1.550	0.212	33	>10.0		
3	J HEALTH COMMUN	1081-0730	550	1.387	0.161	62	4.4		
4	HUM COMMUN RES	0360-3989	923	1.372	0.143	21	>10.0		
5	HEALTH COMMUN	1041-0236	414	1.169	0.208	53	6.6		

	Communication, top 5 i	mpact fact	or 2006
Journal name	Journal Abbrev.	# of	Excel count formula
		records	
INTERNATIONAL JOURNAL OF	INT J LANG COMM	55	=SUMPRODUCT((LEN(Z1:Z170) -
LANGUAGE &	DIS		LEN(SUBSTITUTE(Z1:Z170, "INT J LANG
COMMUNICATION DISORDERS			COMM DIS", ""))) / LEN("INT J LANG COMM
PUBLIC OPINION	PUBLIC OPIN	52	=SUMPRODUCT((LEN(Z1:Z170))-
QUARTERLY	QUART		LEN(SUBSTITUTE(Z1:Z170, "PUBLIC OPIN
			QUART", ""))) / LEN("PUBLIC OPIN QUART"))
JOURNAL OF HEALTH	J HEALTH COMMUN	88	=SUMPRODUCT((LEN(Z1:Z170) -
COMMUNICATION			LEN(SUBSTITUTE(Z1:Z170,"J HEALTH
			COMMUN", ""))) / LEN("J HEALTH COMMUN"))
HUMAN COMMUNICATION	HUM COMMUN RES	21	=SUMPRODUCT((LEN(Z1:Z170) -
RESEARCH			LEN(SUBSTITUTE(Z1:Z170, "HUM COMMUN
RESEARCH			RES", ""))) / LEN("HUM COMMUN RES"))
HEALTH COMMUNICATION	HEALTH COMMUN	62	=SUMPRODUCT((LEN(Z1:Z170) -
			LEN(SUBSTITUTE(Z1:Z170,"HEALTH
			COMMUN". ""))) / LEN("HEALTH COMMUN"))



20	2007:											
				JCR Data 🕕						Eigenfactor TM Metrics ()		
Ri	ink	Abbreviated Journal Title (linked to journal information)	ISSN	Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	Articles	Cited Half-life	<i>Eigenfactor</i> ™ Score	Article Influence TM Score	
	1	PUBLIC OPIN QUART	0033-362X	2189	2.030	2.349	0.658	38	>10.0	0.00498	1.467	
	2	J HEALTH COMMUN	1081-0730	709	1.836	2.021	0.136	44	4.0	0.00433	0.773	
	3	AUGMENT ALTERN COMM	0743-4618	557	1.591		0.889	27	9.0	0.00058		
	4	COMMUN MONOGR	0363-7751	651	1.512	1.491	0.121	33	>10.0	0.00154	0.613	
	5	COMMUN RES	0093-6502	1305	1.481	2.191	0.103	29	>10.0	0.00329	1.041	

Communication, top 5 impact factor 2007										
Journal name	Journal Abbrev.	# of records	Excel count formula							
PUBLIC OPINION QUARTERLY	PUBLIC OPIN QUART	53	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "PUBLIC OPIN QUART", ""))) / LEN("PUBLIC OPIN QUART"))							
JOURNAL OF HEALTH COMMUNICATION	J HEALTH COMMUN	64	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170,"J HEALTH COMMUN", ""))) / LEN("J HEALTH COMMUN"))							
AUGMENTATIVE AND ALTERNATIVE COMMUNICATION	AUGMENT ALTERN COMM	32	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170,"AUGMENT ALTERN COMM", ""))) / LEN("AUGMENT ALTERN COMM"))							
COMMUNICATION MONOGRAPHS	COMMUN MONOGR	35	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "COMMUN MONOGR", ""))) / LEN("COMMUN MONOGR"))							
COMMUNICATION RESEARCH	COMMUN RES	29	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170,"COMMUN RES", ""))) / LEN("COMMUN RES"))							

	Abbreviated Journal Title (linked to journal information)	ISSN	JCR Data ()						Eigenfactor TM Metrics ()	
Rank			Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	Articles	Cited Half-life	Eigenfactor TH Score	Article Influence TH Score
1	J.COMMUN	0021-9916	1816	2.266	2.365	0.122	41	9.9	0.00514	1.059
2	J HEALTH COMMUN	1081-0730	955	2.057	2.431	0.087	46	4.6	0.00579	0.998
3	PUBLIC OPIN QUART	0033-362X	2565	1.972	2.606	0.262	42	>10.0	0.00482	1.360
4	J COMPUT-MEDIAT COMM	1083-6101	803	1.901	2	0.250	36	4.6	0.00360	
5	HUM COMMUNIRES	0360-3989	1339	1.689	2.112	0.423	26	>10.0	0.00271	1.054

Communication, top 5 impact factor 2008										
Journal name	Journal Abbrev.	# of records								
JOURNAL OF COMMUNICATION	J COMMUN	57	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "J COMMUN", ""))) / LEN("J COMMUN"))							
JOURNAL OF HEALTH COMMUNICATION	J HEALTH COMMUN	64	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "J HEALTH COMMUN", ""))) / LEN("J HEALTH COMMUN"))							
PUBLIC OPINION QUARTERLY	PUBLIC OPIN QUART	62	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "PUBLIC OPIN QUART", ""))) / LEN("PUBLIC OPIN QUART"))							
JOURNAL OF COMPUTER- MEDIATED COMMUNICATION	J COMPUT- MEDIAT COMM	38	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "J COMPUT-MEDIAT COMM", "")							
HUMAN COMMUNICATION RESEARCH	HUM COMMUN RES	26	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "HUM COMMUN RES", ""))) / LEN("HUM COMMUN RES"))							



2009	2009:											
			JCR Data (j						Eigenfact	tor''' Metrics ()		
Rank	Abbreviated Journal Title (linked to journal information)	ISSN	Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	Articles	Cited Half-life	Eigenfactor TM Score	Article Influence TM Score		
1	J COMPUT-MEDIAT COMM	1083-6101	1279	3.639		0.017	60	4.6	0.00457			
2	J COMMUN	0021-9916	2188	2.415	2.765	0.189	37	>10.0	0.00557	1.230		
3	HUM COMMUN RES	0360-3989	1466	2.200	2.482	0.207	29	>10.0	0.00266	1.120		
4	PUBLIC UNDERST SCI	0963-6625	670	1.981	2.124	0.104	48	8.1	0.00254	1.004		
5	CYBERPSYCHOL BEHAV	1094-9313	1940	1.591	2.472	0.150	100	5.2	0.00565	0.576		

Communication, top 5 impact factor 2009									
Journal name	Journal Abbrev.	# of	Excel count formula						
		records							
JOURNAL OF COMPUTER- MEDIATED COMMUNICATION	J COMPUT- MEDIAT COMM	60	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "J COMPUT-MEDIAT COMM", ""))) / LEN("J COMPUT-MEDIAT COMM"))						
JOURNAL OF COMMUNICATION	J COMMUN	69	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "J COMMUN", ""))) / LEN("J COMMUN"))						
HUMAN COMMUNICATION RESEARCH	HUM COMMUN RES	29	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170,"HUM COMMUN RES", ""))) / LEN("HUM COMMUN RES"))						
PUBLIC UNDERSTANDING OF SCIENCE	PUBLIC UNDERST SCI	54	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "PUBLIC UNDERST SCI", ""))) / LEN("PUBLIC UNDERST SCI"))						
CYBERPSYCHOLOGY & BEHAVIOR	CYBERPSYCHOL BEHAV	286	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170,"CYBERPSYCHOL BEHAV", ""))) / LEN("CYBERPSYCHOL BEHAV"))						

3 Economics

	Abbreviated Journal Title (linked to journal information)		JCR Data ()							
Rank		ISSN	Total Cites Impact Imme Factor Inc		Immediacy Index	Index Articles				
1	Q J ECON	0033-5533	6947	4.775	0.500	40	>10.0			
2	J ECON LIT	0022-0515	2649	4.054	0.529	17	8.6			
3	J ECON GEOGR	1468-2702	270	3.222	0.370	27	2.8			
4	J HEALTH ECON	0167-6296	1909	2.708	0.316	57	6.8			
5	J ECON PERSPECT	0895-3309	2713	2.634	0.385	39	8.4			

Economics, top 5 impact factor 2005										
Journal name	Journal Abbrev.	# of	Excel count formula							
		records								
QUARTERLY JOURNAL OF	Q J ECON	40	=SUMPRODUCT((LEN(Z1:Z170) -							
ECONOMICS			/ LEN("Q J ECON"))							
JOURNAL OF ECONOMIC	J ECON LIT	120	=SUMPRODUCT((LEN(Z1:Z170) -							
LITERATURE			LEN(SUBSTITUTE(Z1:Z170, "Q J ECON", "")))							
		0.4								
JOURNAL OF ECONOMIC	J ECON GEOGR	34	=50MPRODUCT((LEN(21:2170))-							
GEOGRAPHY										
JOURNAL OF HEALTH	J HEALTH ECON	63	=SUMPRODUCT((LEN(21:2170)-							
ECONOMICS			LEN(SUBSTITUTE(Z1:Z170, "J HEALTH							
			ECON", ""))) / LEN("J HEALTH ECON"))							
JOURNAL OF ECONOMIC	J ECON	59	=SUMPRODUCT((LEN(Z1:Z170) -							
PERSPECTIVES	PERSPECT		LEN(SUBSTITUTE(Z1:Z170, "J ECON							
			PERSPECT", ""))) / LEN("J ECON							
			PERSPECT"))							



2006:		11								
	Abbreviated Journal Title (linked to journal information)		JCR Data (j)							
Rank		ISSN	Total Cites	Impact Factor	Immediacy Index	Articles	Cited Half-life			
1	J ECON LIT	0022-0515	2845	4.667	0.650	20	9.1			
2	Q J ECON	0033-5533	7962	3.938	0.750	40	>10.0			
3	J ACCOUNT ECON	0165-4101	1788	3.360	0.485	33	9.1			
4	J ECON GROWTH	1381-4338	579	3.240	0.000	12	6.6			
5	J POLIT ECON	0022-3808	10150	3.194	0.405	37	>10.0			

	Economics, top 5 impact factor 2006										
Journal name	Journal	# of	Excel count formula								
	Abbrev.	records									
JOURNAL OF ECONOMIC	J ECON	92	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "LECON LIT" ""))) / LEN("LECON LIT"))								
LITERATURE											
QUARTERLY JOURNAL	Q J ECON	40	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170,								
OF ECONOMICS			"Q J ECON", ""))) / LEN("Q J ECON"))								
JOURNAL OF	J	34	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170,								
ACCOUNTING &	ACCOUNT		"J ACCOUNT ECON", ""))) / LEN("J ACCOUNT ECON"))								
ECONOMICS	ECON										
JOURNAL OF ECONOMIC	J ECON	12	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170,								
GROWTH	GROWTH		"J ECON GROWTH", ""))) / LEN("J ECON GROWTH"))								
JOURNAL OF POLITICAL	J POLIT	38	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170,								
ECONOMY	ECON		"J POLIT ECON", ""))) / LEN("J POLIT ECON"))								

2007	.007:											
			JCR Data 🕦						Eigenfactor TM Metrics ()			
Rank	(linked to journal information)	ISSN	Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	Articles	Cited Half-life	<i>Eigenfactor</i> ™ Score	Article Influence TM Score		
1	J POLIT ECON	0022-3808	10878	4.190	4.800	0.889	27	>10.0	0.04803	9.181		
2	J ECON LIT	0022-0515	3201	3.973	7.161	0.667	18	9.8	0.01805	8.347		
3	Q J ECON	0033-5533	8713	3.688	7.135	0.773	44	>10.0	0.05227	11.241		
4	J ACCOUNT ECON	0165-4101	1784	3.034	3.417	0.412	34	9.0	0.02529	7.824		
5	J FINANC ECON	0304-405X	6980	2.988	4.084	0.573	103	>10.0	0.04276	5.123		

Economics, top 5 impact factor 2007										
Journal name	Journal Abbrev.	# of	Excel count formula							
		records								
JOURNAL OF POLITICAL	J POLIT ECON	35	=SUMPRODUCT((LEN(Z1:Z170))-							
ECONOMY			LEN(SUBSTITUTE(Z1:Z170, "J POLIT ECON",							
JOURNAL OF ECONOMIC LITERATURE	J ECON LIT	106	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "J ECON LIT", ""))) / LEN("J ECON LIT"))							
QUARTERLY JOURNAL OF ECONOMICS	Q J ECON	44	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "Q J ECON", ""))) / LEN("Q J ECON"))							
JOURNAL OF ACCOUNTING & ECONOMICS	J ACCOUNT ECON	34	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "J ACCOUNT ECON", ""))) / LEN("J ACCOUNT ECON"))							
JOURNAL OF FINANCIAL ECONOMICS	J FINANC ECON	105	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "J FINANC ECON", ""))) / LEN("J FINANC ECON"))							



200	2008:											
					JCR	Eigenfactor TM Metrics ()						
Ran	k Abbreviated Journal Title (linked to journal information)	ISSN	Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	Articles	Cited Half-life	Eigenfactor TM Score	Article Influence TM Score		
1	Q J ECON	0033-5533	11723	5.048	8.716	0.756	41	>10.0	0.05416	11.978		
2	J ECON LIT	0022-0515	4069	4.842	8.380	0.842	19	>10.0	0.01805	8.852		
3	J ECON PERSPECT	0895-3309	4261	3.944	5.057	0.558	43	9.4	0.02485	5.340		
4	ECONOMETRICA	0012-9682	17091	3.865	4.943	0.255	47	>10.0	0.04527	7.243		
5	J POLIT ECON	0022-3808	13671	3.725	5.742	0.419	31	>10.0	0.04086	8.821		

Economics, top 5 impact factor 2008										
Journal name	Journal Abbrev.	# of	Excel count formula							
		records								
QUARTERLY JOURNAL OF	Q J ECON	41	=SUMPRODUCT((LEN(Z1:Z170) -							
ECONOMICS			LEN("Q J ECON"))							
JOURNAL OF ECONOMIC	J ECON LIT	88	=SUMPRODUCT((LEN(Z1:Z170)-							
LITERATURE			LEN(SUBSTITUTE(Z1:Z170, "Q J ECON", "")))7 LEN("Q .LECON"))							
JOURNAL OF ECONOMIC PERSPECTIVES	J ECON PERSPECT	52	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "J ECON PERSPECT", ""))) / LEN("J ECON PERSPECT"))							
ECONOMETRICA	ECONOMETRICA	49	=SUMPRODUCT((LEN(Z1:Z170) -							
			"))) / LEN("ECONOMETRICA")							
JOURNAL OF POLITICAL	J POLIT ECON	32	=SUMPRODUCT((LEN(Z1:Z170) -							
ECONOMY			LEN(SUBSTITUTE(ZT:ZT/0, "J POLIT ECON", ""))) / LEN("J POLIT ECON"))							

	Abbreviated Journal Title (linked to journal information)	ISSN			JCR I	Eigenfactor TM Metrics ()				
Rank			Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	Articles	Cited Half-life	Eigenfactor TH Score	Article Influence TH Score
1	J.ECON.LIT	0022-0515	5018	6.919	8.922	1.000	18	>10.0	0.01568	8.354
2	Q J ECON	0033-5533	13985	5.647	8.171	0.953	43	>10.0	0.05051	11.811
3	J.FINANC.ECON	0304-405X	12058	4.020	5.675	0.376	93	>10.0	0.06032	6.572
4	ECONOMETRICA	0012-9682	20643	4.000	5.321	0.246	61	>10.0	0.04312	7.712
5	J ECON GEOGR	1468-2702	1146	3.937	4.705	0.543	35	5.2	0.00515	1.691

Economics, top 5 impact factor 2009											
Journal name	Journal Abbrev.	# of	Excel count formula								
		records									
JOURNAL OF ECONOMIC	J ECON LIT	109	=SUMPRODUCT((LEN(Z1:Z170) -								
LITERATURE			""))) / LEN("Q J ECON"))								
QUARTERLY JOURNAL OF	Q J ECON	44	=SUMPRODUCT((LEN(Z1:Z170) -								
ECONOMICS			LEN(SUBSTITUTE(Z1:Z170, "Q J ECON", ""))) / LEN("Q J ECON"))								
JOURNAL OF FINANCIAL	J FINANC ECON	94	=SUMPRODUCT((LEN(Z1:Z170) -								
ECONOMICS			LEN(SUBSTITUTE(Z1:Z170, "J FINANC ECON", ""))) / LEN("J FINANC ECON"))								
ECONOMETRICA	ECONOMETRICA	63	=SUMPRODUCT((LEN(Z1:Z170) -								
			LEN(SUBSTITUTE(Z1:Z170,								
			LEN("ECONOMETRICA", "))) /								
	LECON GEOGR	47	=SUMPRODUCT((LEN(Z1:Z170) -								
GEOGRAPHY			LEN(SUBSTITUTE(Z1:Z170, "J ECON								
			GEOGR", ""))) / LEN("J ECON GEOGR"))								



4 Geography

2005:

	Abbreviated Journal Title				JCR Data i)							
Rank	(linked to journal information)		ISSN	Tota	l Cites	Impact Factor	Immediacy Index	Articles	Cited Half-life			
1	J ECON GEOGR		1468-2702		270	3.222	0.370	27	2.8			
2	PROG HUM GEOG		0309-1325		1069	2.616	0.286	42	5.0			
3	T I BRIT GEOGR		0020-2754		986	2.218	0.400	30	8.7			
4	GLOBAL ENVIRON CHANG		0959-3780		615	1.952	0.862	29	4.8			
5	ECON GEOGR		0013-0095		661	1 1.757 0.200			9.1			
		Ge	ography, top	5 imp	act fact	or 2005						
	Journal name	Jo	urnal Abbrev.		# of		Excel count	t formula				
				re	cords							
JOURNAL OF ECONOMIC J E GEOGRAPHY			CON GEOGR		÷	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "J ECON GEOGR", ""))) / LEN("J ECON GEOGR"))						
PROG GEOG	GRESS IN HUMAN GRAPHY	PR(GE(OG HUM 126 OG			=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "GLOBAL ENVIRON CHANG", ""))) / LEN("GLOBAL ENVIRON CHANG"))						
TRANSACTIONS OF THE T I INSTITUTE OF BRITISH GEOGRAPHERS		TI	BRIT GEOGR	₹ 43	\$	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "T I BRIT GEOGR", ""))) / LEN("T I BRIT GEOGR"))						
GLOBAL ENVIRONMENTALGLOBALCHANGE-HUMAN ANDENVIRONPOLICY DIMENSIONSCHANG			37	,	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "GLOBAL ENVIRON CHANG", ""))) / LEN("GLOBAL ENVIRON CHANG"))							
ECON	IOMIC GEOGRAPHY	ECO	ON GEOGR	34	ļ	=SUMPRC LEN(SUBS ""))) / LEN(DUCT((LEN(Z1 STITUTE(Z1:Z17("ECON GEOGR"	:Z170) -), "ECON GI "))	EOGR",			

	Abbreviated Journal Title		JCR Data ()							
Rank	(linked to journal information)	ISSN	Total Cites	Impact Factor	Immediacy Index	Articles	Cited Half-life			
1	T I BRIT GEOGR	0020-2754	1154	3.500	0.133	30	7.9			
2	PROG HUM GEOG	0309-1325	1410	3.440	0.333	42	5.6			
3	GLOBAL ENVIRON CHANG	0959-3780	779	2.600	1.200	30	5.3			
4	J ECON GEOGR	1468-2702	403	2.519	0.591	22	3.4			
5	ANN ASSOC AM GEOGR	0004-5608	1872	2.141	0.275	40	9.4			

Geography, top 5 impact factor 2006										
Journal name	Journal Abbrev.	# of	Excel count formula							
		records								
TRANSACTIONS OF THE	T I BRIT	38	=SUMPRODUCT((LEN(Z1:Z170) -							
INSTITUTE OF BRITISH	GEOGR		LEN(SUBSTITUTE(Z1:Z170, "TTBRIT GEOGR", ""))) / LEN("TTBRIT GEOGR"))							
GEOGRAPHERS										
PROGRESS IN HUMAN	PROG HUM	124	=SUMPRODUCT((LEN(Z1:Z170) -							
GEOGRAPHY	GEOG		GEOG ["] ""))) / LEN("PROG HUM GEOG"))							
GLOBAL ENVIRONMENTAL CHANGE-HUMAN AND POLICY DIMENSIONS	GLOBAL ENVIRON CHANG	38	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "GLOBAL ENVIRON CHANG", ""))) / LEN("GLOBAL ENVIRON CHANG"))							
JOURNAL OF ECONOMIC	J ECON	41	=SUMPRODUCT((LEN(Z1:Z170) -							
GEOGRAPHY	GEOGR		GEOGR", ""))) / LEN("J ECON GEOGR"))							
ANNALS OF THE ASSOCIATION	ANN ASSOC	93	=SUMPRODUCT((LEN(Z1:Z170) -							
OF AMERICAN GEOGRAPHERS	AM GEOGR		ASSOC AM GEOGR", ""))) / LEN("ANN							
			ASSOC AM GEOGR"))							



2	2007:											
				JCR Data 🕦						Eigenfactor TM Metrics ()		
R	tank	Abbreviated Journal Title (linked to journal information)	ISSN	Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	Articles	Cited Half-life	Eigenfactor TM Score	Article Influence [™] Score	
	1	T I BRIT GEOGR	0020-2754	1402	4.067	4.336	0.433	30	6.9	0.00561	1.763	
	2	GLOBAL ENVIRON CHANG	0959-3780	998	3.915	3.727	0.649	37	5.3	0.00547	1.645	
	3	PROG HUM GEOG	0309-1325	1638	3.762	4.052	0.372	43	5.6	0.00735	1.483	
1	4	ANN ASSOC AM GEOGR	0004-5608	2008	2.962	3.333	0.561	41	8.8	0.00677	1.386	
	5	J ECON GEOGR	1468-2702	571	2.679	4.050	0.933	30	4.0	0.00478	1.728	

Geography, top 5 impact factor 2007										
Journal name	Journal	# of	Excel count formula							
	Abbrev.	records								
TRANSACTIONS OF THE INSTITUTE OF BRITISH GEOGRAPHERS	T I BRIT GEOGR	42	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "T I BRIT GEOGR", ""))) / LEN("T I BRIT GEOGR"))							
GLOBAL ENVIRONMENTAL CHANGE-HUMAN AND POLICY DIMENSIONS	GLOBAL ENVIRON CHANG	42	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "GLOBAL ENVIRON CHANG", ""))) / LEN("GLOBAL ENVIRON CHANG"))							
PROGRESS IN HUMAN GEOGRAPHY	PROG HUM GEOG	114	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "PROG HUM GEOG", ""))) / LEN("PROG HUM GEOG"))							
ANNALS OF THE ASSOCIATION OF AMERICAN GEOGRAPHERS	ANN ASSOC AM GEOGR	85	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "ANN ASSOC AM GEOGR", ""))) / LEN("ANN ASSOC AM GEOGR"))							
JOURNAL OF ECONOMIC GEOGRAPHY	J ECON GEOGR	40	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "J ECON GEOGR", ""))) / LEN("J ECON GEOGR"))							

	Abbreviated Journal Title (linked to journal information)	155N			JCR	Eigenfactor TH Metrics ()				
Rank			Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	Articles	Cited Half-life	Elgenfactor TH Score	Article Influence TH Score
1	T I BRIT GEOGR	0020-2754	1581	3.967	4.600	0.455	33	7.3	0.00588	1.830
2	GLOBAL ENVIRON CHANG	0959-3780	1291	3.955	4.272	0.524	63	5.1	0.00564	1.611
3	PROG HUM GEOG	0309-1325	1889	3.482	4.305	0.575	40	6.0	0.00749	1.586
4	ECON GEOGR	0013-0095	1048	2.968	3.578	0.438	16	10.0	0.00224	1.217
5	J ECON GEOGR	1468-2702	763	2.932	4.557	0.576	33	4.8	0.00538	1.854

Geography, top 5 impact factor 2008											
Journal name	Journal Abbrev.	# of	Excel count formula								
		records									
TRANSACTIONS OF THE INSTITUTE OF BRITISH GEOGRAPHERS	T I BRIT GEOGR	39	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "T I BRIT GEOGR", ""))) / LEN("T I BRIT GEOGR"))								
GLOBAL ENVIRONMENTAL CHANGE-HUMAN AND POLICY DIMENSIONS	GLOBAL ENVIRON CHANG	73	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "GLOBAL ENVIRON CHANG", ""))) / LEN("GLOBAL ENVIRON CHANG"))								
PROGRESS IN HUMAN GEOGRAPHY	PROG HUM GEOG	109	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "PROG HUM GEOG", ""))) / LEN("PROG HUM GEOG"))								
ECONOMIC GEOGRAPHY	ECON GEOGR	44	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "ECON GEOGR", ""))) / LEN("ECON GEOGR"))								
JOURNAL OF ECONOMIC GEOGRAPHY	J ECON GEOGR	47	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "J ECON GEOGR", ""))) / LEN("J ECON GEOGR"))								



20	2009:										
					JCR	Eigenfactor TM Metrics ()					
Rai	Abbreviated Journal Title (linked to journal information)	ISSN	Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	Articles	Cited Half-life	Eigenfactor TM Score	Article Influence TM Score	
1	J ECON GEOGR	1468-2702	1146	3.937	4.705	0.543	35	5.2	0.00515	1.691	
2	PROG HUM GEOG	0309-1325	2402	3.590	5.158	0.468	47	6.6	0.00812	1.863	
3	ECON GEOGR	0013-0095	1311	3.452	3.075	1.200	20	>10.0	0.00166	0.993	
4	T I BRIT GEOGR	0020-2754	1876	3.413	4.768	0.647	34	7.9	0.00545	1.729	
5	GLOBAL ENVIRON CHANG	0959-3780	1832	3.340	5.487	0.787	47	5.1	0.00853	2.098	

Geography, top 5 impact factor 2009										
Journal name	Journal Abbrev	# of records	Excel count formula							
JOURNAL OF ECONOMIC GEOGRAPHY	J ECON GEOGR	47	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "J ECON GEOGR", ""))) / LEN("J ECON GEOGR"))							
PROGRESS IN HUMAN GEOGRAPHY	PROG HUM GEOG	117	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "PROG HUM GEOG", ""))) / LEN("PROG HUM GEOG"))							
ECONOMIC GEOGRAPHY	ECON GEOGR	47	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "ECON GEOGR", ""))) / LEN("ECON GEOGR"))							
TRANSACTIONS OF THE INSTITUTE OF BRITISH GEOGRAPHERS	T I BRIT GEOGR	35	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "T I BRIT GEOGR", ""))) / LEN("T I BRIT GEOGR"))							
GLOBAL ENVIRONMENTAL CHANGE- HUMAN AND POLICY DIMENSIONS	GLOBAL ENVIRON CHANG	52	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "GLOBAL ENVIRON CHANG", ""))) / LEN("GLOBAL ENVIRON CHANG"))							

5 Information Science & Library Science (Subj heading used by JCR) 2005:

	Abbreviated Journal Title		JCR Data (j)							
Rank	(linked to journal information)	ISSN	Total Cites	Impact Factor	Immediacy Index	Articles	Cited Half-life			
1	MIS QUART	0276-7783	2395	4.978	0.643	28	>10.0			
2	J AM MED INFORM ASSN	1067-5027	2040	4.339	0.710	69	4.7			
3	ANNU REV INFORM SCI	0066-4200	298	2.652	0.643	14	6.3			
4	INFORM SYST RES	1047-7047	949	2.054	0.048	21	6.2			
5	SCIENTOMETRICS	0138-9130	1406	1.738	0.241	112	6.1			

Informatio	Information Science & Library Science, top 5 impact factor 2005											
Journal name	Journal Abbrev.	# of	Excel count formula									
		records										
MIS QUARTERLY	MIS QUART	34	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "MIS QUART", ""))) / LEN("MIS QUART"))									
JOURNAL OF THE AMERICAN MEDICAL INFORMATICS ASSOCIATION	J AM MED INFORM ASSN	85	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "J AM MED INFORM ASSN", ""))) / LEN("J AM MED									
ANNUAL REVIEW OF INFORMATION SCIENCE AND TECHNOLOGY	ANNU REV INFORM	15	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "ANNU REV INFORM SCI", ""))) / LEN("ANNU REV INFORM SCI"))									
INFORMATION SYSTEMS RESEARCH	INFORM SYST RES	31	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "INFORM SYST RES", ""))) / LEN("INFORM SYST RES"))									
SCIENTOMETRICS	SCIENTOMETRICS	114	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "SCIENTOMETRICS", ""))) / LEN("SCIENTOMETRICS"))									



2006:										
	Abbreviated Journal Title		JCR Data (j							
Rank	(linked to journal information)	ISSN	Total Cites	Impact Factor	Immediacy Index	Articles	Cited Half-life			
1	MIS QUART	0276-7783	3186	4.731	0.610	41	9.5			
2	J AM MED INFORM ASSN	1067-5027	2143	3.979	0.587	80	4.7			
3	INFORM SYST RES	1047-7047	1508	2.537	0.304	23	6.6			
4	INFORM MANAGE-AMSTER	0378-7206	1466	2.119	0.215	79	5.4			
5	J MANAGE INFORM SYST	0742-1222	1523	1.818	0.195	41	6.9			

Information S	Information Science & Library Science, top 5 impact factor 2006										
Journal name	Journal Abbrev.	# of	Excel count formula								
		records									
MIS QUARTERLY	MIS QUART	46	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "MIS QUART", ""))) / LEN("MIS QUART"))								
JOURNAL OF THE AMERICAN MEDICAL INFORMATICS ASSOCIATION	J AM MED INFORM ASSN	91	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "J AM MED INFORM ASSN", ""))) / LEN("J AM MED								
INFORMATION SYSTEMS RESEARCH	INFORM SYST RES	24	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "INFORM SYST RES", ""))) / LEN("INFORM SYST RES"))								
INFORMATION & MANAGEMENT	INFORM MANAGE- AMSTER	81	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "INFORM MANAGE-AMSTER", ""))) / LEN("INFORM MANAGE-AMSTER"))								
JOURNAL OF MANAGEMENT INFORMATION SYSTEMS	J MANAGE INFORM SYST	48	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "J MANAGE INFORM SYST", ""))) / LEN("J MANAGE INFORM SYST"))								

	Abbreviated Journal Title (linked to journal information)	ISSN			JCR I	Eigenfactor ^{1M} Metrics ()				
tank			Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	Articles	Cited Half-life	Eigenfactor TM Score	Article Influence TM Score
1	MIS QUART	0276-7783	4329	5.826	9.257	0.533	30	9.4	0.01128	3.567
2	J AM MED INFORM ASSN	1067-5027	2394	3.094	3.489	0.699	93	5.2	0.00948	1.096
3	INFORM SYST RES	1047-7047	2146	2.682	6.579	0.130	23	8.3	0.00766	3.079
4	ANNU REV INFORM SCI	0066-4200	378	1.963	2.810	0.533	15	6.1	0.00137	0.934
5	J MANAGE INFORM SYST	0742-1222	1861	1.867	3.229	0.175	40	7.7	0.00571	1.307

Information Science & Library Science, top 5 impact factor 2007									
Journal name	Journal Abbrev.	# of records	Excel count formula						
MIS QUARTERLY	MIS QUART	35	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "MIS QUART", ""))) / LEN("MIS QUART"))						
JOURNAL OF THE AMERICAN MEDICAL INFORMATICS ASSOCIATION	J AM MED INFORM ASSN	112	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "J AM MED INFORM ASSN", ""))) / LEN("J AM MED INFORM ASSN"))						
INFORMATION SYSTEMS RESEARCH	INFORM SYST RES	25	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "INFORM SYST RES", ""))) / LEN("INFORM SYST RES"))						
ANNUAL REVIEW OF INFORMATION SCIENCE AND TECHNOLOGY	ANNU REV INFORM SCI	16	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "ANNU REV INFORM SCI", ""))) / LEN("ANNU REV INFORM SCI"))						
JOURNAL OF MANAGEMENT INFORMATION SYSTEMS	J MANAGE INFORM SYST	47	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "J MANAGE INFORM SYST", ""))) / LEN("J MANAGE INFORM SYST"))						



2	2008:										
						JCR I	Eigenfactor TM Metrics ()				
	tank	Abbreviated Journal Title (linked to journal information)	ISSN	Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	Articles	Cited Half-life	Eigenfactor TM Score	Article Influence TM Score
	1	MIS QUART	0276-7783	5684	5.183	11.586	0.778	36	9.7	0.01138	3.541
	2	J AM MED INFORM ASSN	1067-5027	2574	3.428	3.886	0.560	100	5.2	0.00890	1.068
	3	J INFORMETR	1751-1577	89	2.531	2.563	0.206	34		0.00040	0.563
	4	ANNU REV INFORM SCI	0066-4200	477	2.500	2.954	0.846	13	6.5	0.00138	0.956
	5	INFORM SYST J	1350-1917	528	2.375	2.940	0.600	25	6.0	0.00132	0.711

Information Science & Library Science, top 5 impact factor 2008									
Journal name	Journal Abbrev.	# of records	Excel count formula						
MIS QUARTERLY	MIS QUART	39	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "MIS QUART", ""))) / LEN("MIS QUART"))						
JOURNAL OF THE AMERICAN MEDICAL INFORMATICS ASSOCIATION	J AM MED INFORM ASSN	112	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "J AM MED INFORM ASSN", ""))) / LEN("J AM MED INFORM ASSN"))						
JOURNAL OF INFORMETRICS	J INFORMETR	34	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "J INFORMETR", ""))) / LEN("J INFORMETR"))						
ANNUAL REVIEW OF INFORMATION SCIENCE AND TECHNOLOGY	ANNU REV INFORM SCI	14	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "ANNU REV INFORM SCI", ""))) / LEN("ANNU REV INFORM SCI"))						
INFORMATION SYSTEMS RESEARCH	INFORM SYST J	28	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "INFORM SYST J", ""))) / LEN("INFORM SYST J"))						

2	2009:										
		k Abbreviated Journal Title (linked to journal information)				JCR	Eigenfactor ^{1M} Metrics ()				
Rai	Rank		ISSN	Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	Articles	Cited Half-life	Eigenfactor TM Score	Article Influence TM Score
	1	MIS QUART	0276-7783	6186	4.485	9.208	0.579	38	>10.0	0.00962	2.899
	2	J AM MED INFORM ASSN	1067-5027	4183	3.974	5.199	0.705	105	5.7	0.01366	1.585
	3	J COMPUT-MEDIAT COMM	1083-6101	1279	3.639		0.017	60	4.6	0.00457	
	4	J INFORMETR	1751-1577	253	3.379	3.379	0.909	33	2.1	0.00149	1.079
	5	ANNU REV INFORM SCI	0066-4200	563	2.929	3.030	1.200	10	6.9	0.00147	1.053

Information Science & Library Science, top 5 impact factor 2009									
Journal name	Journal Abbrev.	# of records	Excel count formula						
MIS QUARTERLY	MIS QUART	47	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "MIS QUART", ""))) / LEN("MIS QUART"))						
JOURNAL OF THE AMERICAN MEDICAL INFORMATICS ASSOCIATION	J AM MED INFORM ASSN	123	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "J AM MED INFORM ASSN", ""))) / LEN("J AM MED INFORM ASSN"))						
JOURNAL OF COMPUTER- MEDIATED COMMUNICATION	J COMPUT- MEDIAT COMM	60	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "J COMPUT-MEDIAT COMM", ""))) / LEN("J COMPUT-MEDIAT COMM"))						
JOURNAL OF INFORMETRICS	J INFORMETR	36	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "J INFORMETR", ""))) / LEN("J INFORMETR"))						
ANNUAL REVIEW OF INFORMATION SCIENCE AND TECHNOLOGY	ANNU REV INFORM SCI	11	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "ANNU REV INFORM SCI", ""))) / LEN("ANNU REV INFORM SCI"))						



6 Political Science

2005:

Rank	Abbreviated Journal Title (linked to journal information)		JCR Data ()						
		ISSN	Total Cites	Impact Factor	Immediacy Index	Articles	Cited Half-life		
1	AM POLIT SCI REV	0003-0554	4628	3.233	0.409	44	>10.0		
2	AM J POLIT SCI	0092-5853	3123	1.845	0.217	60	9.5		
3	EUR J POLIT RES	0304-4130	928	1.783	0.174	69	6.5		
4	J THEOR POLIT	0951-6298	291	1.686	0.250	20	6.4		
5	PUBLIC OPIN QUART	0033-362X	1700	1.509	0.324	34	>10.0		

Political Science, top 5 impact factor 2005									
Journal name	Journal Abbrev.	# of	Excel count formula						
		records							
AMERICAN POLITICAL	AM POLIT SCI	45	=SUMPRODUCT((LEN(Z1:Z170)-						
SCIENCE REVIEW	REV		""))) / LEN("AM POLIT SCI REV"))						
AMERICAN JOURNAL OF	AM J POLIT SCI	60	=SUMPRODUCT((LEN(Z1:Z170) -						
POLITICAL SCIENCE			LEN(SUBSTITUTE(Z1:Z170, "AM J POLIT SCI", ""))) / LEN("AM J POLIT SCI"))						
EUROPEAN JOURNAL OF	EUR J POLIT	72	=SUMPRODUCT((LEN(Z1:Z170) -						
POLITICAL RESEARCH	RES		LEN(SUBSTITUTE(Z1:Z170, "EUR J POLIT RES", ""))) / LEN("EUR J POLIT RES"))						
JOURNAL OF	J THEOR POLIT	21	=SUMPRODUCT((LEN(Z1:Z170) -						
THEORETICAL POLITICS			LEN(SUBSTITUTE(Z1:Z170, "J THEOR POLIT", ""))) / LEN("J THEOR POLIT"						
PUBLIC OPINION	PUBLIC OPIN	67	=SUMPRODUCT((LEN(Z1:Z170))-						
QUARTERLY	QUART		QUART", ""))) / LEN("PUBLIC OPIN QUART"))						

	Abbreviated Journal Title		JCR Data 🕦						
Rank	(linked to journal information)	ISSN	Total Cites	Impact Factor	Immediacy Index	Articles	Cited Half-life		
1	AM POLIT SCI REV	0003-0554	5327	3.023	0.368	57	>10.0		
2	AM J POLIT SCI	0092-5853	3535	2.167	0.438	64	>10.0		
3	EUR J POLIT RES	0304-4130	1108	1.916	0.326	43	7.1		
4	J CONFLICT RESOLUT	0022-0027	1518	1.810	0.488	41	>10.0		
5	J PEACE RES	0022-3433	730	1.658	0.351	37	7.0		

Political Science, top 5 impact factor 2006									
Journal name	Journal Abbrev.	# of records	Excel count formula						
AMERICAN POLITICAL SCIENCE REVIEW	AM POLIT SCI REV	80	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "AM POLIT SCI REV", ""))) / LEN("AM POLIT SCI REV"))						
AMERICAN JOURNAL OF POLITICAL SCIENCE	AM J POLIT SCI	64	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "AM J POLIT SCI", ""))) / LEN("AM J POLIT SCI"))						
EUROPEAN JOURNAL OF POLITICAL RESEARCH	EUR J POLIT RES	44	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "EUR J POLIT RES", ""))) / LEN("EUR J POLIT RES"))						
JOURNAL OF CONFLICT RESOLUTION	J CONFLICT RESOLUT	44	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "J CONFLICT RESOLUT", ""))) / LEN("J CONFLICT RESOLUT"))						
JOURNAL OF PEACE RESEARCH	J PEACE RES	185	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "J PEACE RES", ""))) / LEN("J PEACE RES"))						



2007	2007:										
				JCR Data 🕦					Eigenfactor TM Metrics		
Rank	Abbreviated Journal Title (linked to journal information)	ISSN	Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	Articles	Cited Half-life	Eigenfactor [™] Score	Article Influence [™] Score	
1	POLIT ANAL	1047-1987	453	2.535		0.545	22	5.2	0.00571		
2	AM POLIT SCI REV	0003-0554	5323	2.317	3.919	0.269	52	>10.0	0.01861	3.590	
3	AM J POLIT SCI	0092-5853	3628	2.032	2.901	0.306	62	>10.0	0.01792	2.714	
4	PUBLIC OPIN QUART	0033-362X	2189	2.030	2.349	0.658	38	>10.0	0.00498	1.467	
5	J CONFLICT RESOLUT	0022-0027	1509	1.975	2.157	0.081	37	>10.0	0.00873	1.965	

Political Science, top 5 impact factor 2007								
Journal name	Journal Abbrev.	# of	Excel count formula					
		records						
POLITICAL ANALYSIS	POLIT ANAL	26	=SUMPRODUCT((LEN(Z1:Z170))-					
			""))) / LEN("POLIT ANAL"))					
AMERICAN POLITICAL	AM POLIT SCI	56	=SUMPRODUCT((LEN(Z1:Z170) -					
SCIENCE REVIEW	REV		LEN(SUBSTITUTE(Z1:Z170, "AM POLIT SCI REV", ""))) / LEN("AM POLIT SCI REV"))					
AMERICAN JOURNAL OF	AM J POLIT SCI	62	=SUMPRODUCT((LEN(Z1:Z170) -					
POLITICAL SCIENCE			LEN(SUBSTITUTE(Z1:Z170, "AM J POLIT SCI" ""))) / LEN("AM J POLIT SCI"))					
PUBLIC OPINION	PUBLIC OPIN	53	=SUMPRODUCT((LEN(Z1:Z170) -					
QUARTERIY	QUART	00	LEN(SUBSTITUTE(Z1:Z170, "PUBLIC OPIN					
			QUART", ""))) / LEN("PUBLIC OPIN QUART"))					
JOURNAL OF CONFLICT	J CONFLICT	39	=SUMPRODUCT((LEN(Z1:Z170) -					
RESOLUTION	RESOLUT		LEN(SUBSTITUTE(Z1:Z170, "J CONFLICT					
			RESOLUT", ""))) / LEN("J CONFLICT					
			RESOLUT"))					

			JCR Data 👔					Eigenfactor TM Metrics ()		
Rank	Abbreviated Journal Title (linked to journal information)	ISSN	Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	Articles	Cited Half-life	Eigenfactor TM Score	Article Influence TM Score
1	POLIT ANAL	1047-1987	644	4.780	3.283	0.263	19	5.0	0.00709	2.831
2	EUR J POLIT RES	0304-4130	1760	2.514	2.734	0.239	71	6.6	0.01037	1.637
3	AM J POLIT SCI	0092-5853	4416	2.397	3.363	0.322	59	>10.0	0.01972	3.079
4	POLIT GEOGR	0962-6298	1032	2.295	2.375	0.250	40	6.7	0.00453	1.064
5	EUR UNION POLIT	1465-1165	419	2.064	2.378	0.435	23	4.5	0.00303	1.231

Political Science, top 5 impact factor 2008									
Journal name	Journal Abbrev.	# of	Excel count formula						
		records							
POLITICAL ANALYSIS	POLIT ANAL	29	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "POLIT ANAL", ""))) /						
			LEN("POLIT ANAL"))						
EUROPEAN JOURNAL OF	EUR J POLIT	72	=SUMPRODUCT((LEN(Z1:Z170) -						
POLITICAL RESEARCH	RES		""))) / LEN("EUR J POLIT RES"))						
AMERICAN JOURNAL OF	AM J POLIT	59	=SUMPRODUCT((LEN(Z1:Z170) -						
POLITICAL SCIENCE	SCI		""))) / LEN("AM J POLIT SCI"))						
POLITICAL GEOGRAPHY	POLIT GEOGR	75	=SUMPRODUCT((LEN(Z1:Z170) -						
			LEN(SUBSTITUTE(21:2170, "POLIT GEOGR", ""))) / LEN("POLIT GEOGR"))						
EUROPEAN UNION	EUR UNION	23	=SUMPRODUCT((LEN(Z1:Z170) -						
POLITICS	POLIT		POLIT", ""))) / LEN("EUR UNION POLIT"))						



2009	:			11						
					JCR	Data ()			Eigenfact	tor TM Metrics ()
Rank	Abbreviated Journal Title (linked to journal information)	ISSN	Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	Articles	Cited Half-life	Elgenfactor TH Score	Article Influence TH Score
1	POLIT ANAL	1047-1987	757	3.756	4.083	0.200	25	4.7	0.00817	3.625
2	AM POLIT SCI REV	0003-0554	7507	3.207	4.194	0.243	37	>10.0	0.01723	3.560
3	ANNU REV POLIT SCI	1094-2939	760	2.619	3.206	0.346	26	6.9	0.00506	2.380
4	AM J POLIT SCI	0092-5853	5239	2.554	3.793	0.233	60	>10.0	0.01944	3.117
5	J PEACE RES	0022-3433	1529	2.468	2.677	0.465	43	8.2	0.00575	1.458

Political Science, top 5 impact factor 2009									
Journal name	Journal Abbrev.	# of	Excel count formula						
		records							
POLITICAL ANALYSIS	POLIT ANAL	25	=SUMPRODUCT((LEN(Z1:Z170) -						
			LEN("POLIT ANAL"))						
AMERICAN POLITICAL	AM POLIT SCI	38	=SUMPRODUCT((LEN(Z1:Z170) -						
SCIENCE REVIEW	REV		LEN(SUBSTITUTE(Z1:Z170, "AM POLIT SCI REV", ""))) / LEN("AM POLIT SCI REV"))						
ANNUAL REVIEW OF	ANNU REV	27	=SUMPRODUCT((LEN(Z1:Z170) -						
POLITICAL SCIENCE	POLIT SCI		LEN(SUBSTITUTE(Z1:Z170, "ANNU REV POLIT SCI". ""))) / LEN("ANNU REV POLIT SCI"))						
AMERICAN JOURNAL OF	AM J POLIT SCI	60	=SUMPRODUCT((LEN(Z1:Z170) -						
POLITICAL SCIENCE			LEN(SUBSTITUTE(Z1:Z170, "AM J POLIT SCI",						
			""))) / LEN("AM J POLIT SCI"))						
JOURNAL OF PEACE	J PEACE RES	158	=SUMPRODUCT((LEN(Z1:Z170))-						
RESEARCH			/ LEN("J PEACE RES"))						

7 Psychology

	Abbreviated Journal Title (linked to journal information)	11011000					
Rank		ISSN	Total Cites	Impact Factor	Immediacy Index	Articles	Cited Half-life
1	BEHAV BRAIN SCI	0140-525X	4029	9.885	1,857	14	8.7
2	ANNU REV PSYCHOL	0066-4308	4014	9.784	2.261	23	7.1
3	PSYCHOL BULL	0033-2909	16506	9.746	1.892	37	>10.0
4	TRENDS COGN SCI	1364-6613	4597	9.155	1.250	92	4.8
5	PSYCHOL REV	0033-295X	13423	7.986	2.229	35	>10.0

Psychology, top 5 impact factor 2005								
Journal name	Journal Abbrev.	# of records	Excel count formula					
BEHAVIORAL AND BRAIN SCIENCES	BEHAV BRAIN SCI	365	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "BEHAV BRAIN SCI", ""))) / LEN("BEHAV BRAIN SCI"))					
ANNUAL REVIEW OF PSYCHOLOGY	ANNU REV PSYCHOL	24	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "ANNU REV PSYCHOL", ""))) / LEN("ANNU REV PSYCHOL"))					
PSYCHOLOGICAL BULLETIN	PSYCHOL BULL	52	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "PSYCHOL BULL", ""))) / LEN("PSYCHOL BULL"))					
TRENDS IN COGNITIVE SCIENCES	TRENDS COGN SCI	140	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "TRENDS COGN SCI", ""))) / LEN("TRENDS COGN SCI"))					
PSYCHOLOGICAL REVIEW	PSYCHOL REV	58	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "PSYCHOL REV", ""))) / LEN("PSYCHOL REV"))					



2006:									
Rank	Abbreviated Journal Title (linked to journal information)	ISSN	JCR Data ()						
			Total Cites	Impact Factor	Immediacy Index	Articles	Cited Half-life		
1	BEHAV BRAIN SCI	0140-525X	4425	14.964	1.100	10	8.2		
2	PSYCHOL BULL	0033-2909	18429	12.725	1.919	37	>10.0		
3	ANNU REV PSYCHOL	0066-4308	4804	11.706	4.091	22	6.8		
4	PSYCHOL INQ	1047-840X	1026	9.688	0.600	5	6.8		
5	TRENDS COGN SCI	1364-6613	5965	9.374	1.566	83	4.6		

Psychology, top 5 impact factor 2006						
Journal name Journal Ab		# of records	Excel count formula			
BEHAVIORAL AND BRAIN SCIENCES	BEHAV BRAIN SCI	284	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "BEHAV BRAIN SCI", ""))) / LEN("BEHAV BRAIN SCI"))			
PSYCHOLOGICAL BULLETIN	PSYCHOL BULL	44	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "PSYCHOL BULL", ""))) / LEN("PSYCHOL BULL"))			
ANNUAL REVIEW OF PSYCHOLOGY	ANNU REV PSYCHOL	23	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "ANNU REV PSYCHOL", ""))) / LEN("ANNU REV PSYCHOL"))			
PSYCHOLOGICAL INQUIRY	PSYCHOL INQ	42	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "PSYCHOL INQ", ""))) / LEN("PSYCHOL INQ"))			
TRENDS IN COGNITIVE SCIENCES	TRENDS COGN SCI	118	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "TRENDS COGN SCI", ""))) / LEN("TRENDS COGN SCI"))			

Rank	Abbreviated Journal Title (linked to journal Information)	ISSN	JCR Data 🕦					Eigenfactor TM Metrics ()		
			Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	Articles	Cited Half-life	Eigenfactor TM Score	Article Influence TM Score
1	BEHAV BRAIN SCI	0140-525X	4721	17.462	16.391	3.500	2	9.0	0.01089	7.317
2	ANNU REV PSYCHOL	0066-4308	5425	13.400	17.263	3.583	24	7.2	0.02499	9.107
3	PSYCHOL BULL	0033-2909	19678	10.905	15.230	1.841	44	>10.0	0.03357	7.890
4	TRENDS COGN SCI	1364-6613	7525	9.389	12.421	1.513	76	4.9	0.05120	6.067
5	PSYCHOL REV	0033-295X	15541	7.803	10.607	2.351	37	>10.0	0.02362	5.872

Psychology, top 5 impact factor 2007							
Journal name	Journal Abbrev.	# of	Excel count formula				
		records					
BEHAVIORAL AND BRAIN	BEHAV BRAIN	254	=SUMPRODUCT((LEN(Z1:Z170) -				
SCIENCES	SCI		LEN(SUBSTITUTE(21:2170, "BEHAV BRAIN SCI", ""))) / LEN("BEHAV BRAIN SCI"))				
ANNUAL REVIEW OF	ANNU REV	24	=SUMPRODUCT((LEN(Z1:Z170) -				
PSYCHOLOGY	PSYCHOL		LEN(SUBSTITUTE(Z1:Z170, "ANNU REV				
			PSYCHOL"))				
PSYCHOLOGICAL	PSYCHOL BULL	50	=SUMPRODUCT((LEN(Z1:Z170))-				
BULLETIN			LEN(SUBSTITUTE(Z1:Z170, "PSYCHOL BULL", ""))) / LEN("PSYCHOL BULL"))				
TRENDS IN COGNITIVE	TRENDS COGN	99	=SUMPRODUCT((LEN(Z1:Z170) -				
SCIENCES	SCI		LEN(SUBSTITUTE(Z1:Z170, "TRENDS COGN				
			SCI", ""))) / LEN("TRENDS COGN SCI"))				
PSYCHOLOGICAL REVIEW	PSYCHOL REV	58	=SUMPRODUCT((LEN(Z1:Z170) -				
			LEN(SUBSTITUTE(Z1:Z170, "PSYCHOL				
			REV", ""))) / LEN("PSYCHOL REV"))				


2008	2008:										
					JCR	Eigenfactor TM Metrics ()					
Rank	Abbreviated Journal Title (linked to journal information)	ISSN	Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	Articles	Cited Half-life	Eigenfactor [™] Score	Article Influence TM Score	
1	ANNU REV PSYCHOL	0066-4308	6715	16.217	17.608	4.958	24	7.7	0.02277	8.560	
2	BEHAV BRAIN SCI	0140-525X	5274	12.818	19.355	2.667	12	9.5	0.01173	8.533	
3	PSYCHOL BULL	0033-2909	22965	12.568	18.037	1.026	38	>10.0	0.03453	8.244	
4	PSYCHOL REV	0033-295X	17810	11.765	12.563	2.396	48	>10.0	0.02646	6.783	
5	TRENDS COGN SCI	1364-6613	9143	10.981	13.826	1.086	70	5.3	0.05323	6.320	

	Psychology, top 5	impact factor	2008
Journal name	Journal Abbrev.	# of	Excel count formula
		records	
ANNUAL REVIEW OF PSYCHOLOGY	ANNU REV PSYCHOL	24	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "ANNU REV PSYCHOL", ""))) / LEN("ANNU REV PSYCHOL"))
BEHAVIORAL AND BRAIN SCIENCES	BEHAV BRAIN SCI	296	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "BEHAV BRAIN SCI", ""))) / LEN("BEHAV BRAIN SCI"))
PSYCHOLOGICAL BULLETIN	PSYCHOL BULL	43	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "PSYCHOL BULL", ""))) / LEN("PSYCHOL BULL"))
PSYCHOLOGICAL REVIEW	PSYCHOL REV	71	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "PSYCHOL REV", ""))) / LEN("PSYCHOL REV"))
TRENDS IN COGNITIVE SCIENCES	TRENDS COGN SCI	96	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "TRENDS COGN SCI", ""))) / LEN("TRENDS COGN SCI"))

2009:

		Abbreviated Journal Title (linked to journal information)	ISSN			JCR	Eigenfactor TM Metrics ()				
Mark	Rank			Total Cites	Impact Factor	S-Year Impact Factor	Immediacy Index	Articles	Cited Haif-life	Elgenfactor TH Score	Article Influence TH Score
13	1	ANNU REV PSYCHOL	0066-4308	8192	22.750	21.025	4.321	28	9.2	0.02575	10.200
0	2	BEHAV BRAIN SCI	0140-525X	6290	19.045	23.548	3.000	9	>10.0	0.01207	9.334
0	3	PSYCHOL BULL	0033-2909	26149	12.854	19.160	2.024	42	>10.0	0.03312	8.445
	4	TRENDS COGN SCI	1364-6613	11626	11.664	15.591	2.134	67	5.6	0.05759	7.189
E)	5	ANNU REV CLIN PSYCHO	1548-5943	837	9.613	11.250	1.200	20	3.8	0.00717	4.773

	Psychology, top 5 impact factor 2009										
Journal name	Journal Abbrev.	# of	Excel count formula								
		records									
ANNUAL REVIEW OF PSYCHOLOGY	ANNU REV PSYCHOL	29	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "ANNU REV PSYCHOL", ""))) / LEN("ANNU REV PSYCHOL"))								
BEHAVIORAL AND BRAIN SCIENCES	BEHAV BRAIN SCI	254	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "BEHAV BRAIN SCI", ""))) / LEN("BEHAV BRAIN SCI"))								
PSYCHOLOGICAL BULLETIN	PSYCHOL BULL	54	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "PSYCHOL BULL", ""))) / LEN("PSYCHOL BULL"))								
TRENDS IN COGNITIVE SCIENCES	TRENDS COGN SCI	95	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "TRENDS COGN SCI", ""))) / LEN("TRENDS COGN SCI"))								
ANNUAL REVIEW OF CLINICAL PSYCHOLOGY	ANNU REV CLIN PSYCHO	21	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "ANNU REV CLIN PSYCHO", ""))) / LEN("ANNU REV CLIN PSYCHO"))								



8 Sociology

2005:

	Abbreviated Journal Title		JCR Data (j									
Rank	(linked to journal information)	ISSN	Total Cites	Impact Factor	Immediacy Index	Articles	Cited Half-life					
1	AM J SOCIOL	0002-9602	6189	3.262	0.683	41	>10.0					
2	AM SOCIOL REV	0003-1224	7210	2.933	0.439	41	>10.0					
3	ANNU REV SOCIOL	0360-0572	2232	2.521	0.062	16	8.3					
4	SOCIOL HEALTH ILL	0141-9889	1132	2.169	0.171	41	7.7					
5	SOC PROBL	0037-7791	1414	1.796	0.143	28	>10.0					

	Sociology, top 5 impact factor 2005										
Journal name	Journal Abbrev.	# of	Excel count formula								
		records									
AMERICAN JOURNAL OF	AM J SOCIOL	186	=SUMPRODUCT((LEN(Z1:Z170) -								
SOCIOLOGY			LEN(SUBSTITUTE(Z1:Z170, "AM J SOCIOL", "")))								
			/ LEN("AM J SOCIOL"))								
AMERICAN	AM SOCIOL REV	46	=SUMPRODUCT((LEN(Z1:Z170) -								
SOCIOLOGICAL REVIEW			LEN(SUBSTITUTE(Z1:Z170, "AM SOCIOL REV",								
			""))) / LEN("AM SOCIOL REV"))								
ANNUAL REVIEW OF	ANNU REV	17	=SUMPRODUCT((LEN(Z1:Z170) -								
SOCIOLOGY	SOCIOI		LEN(SUBSTITUTE(Z1:Z170, "ANNU REV								
000102001	OCOICE		SOCIOL", ""))) / LEN("ANNU REV SOCIOL"))								
SOCIOLOGY OF HEALTH &	SOCIOL HEALTH	85	=SUMPRODUCT((LEN(Z1:Z170) -								
ILL NESS			LEN(SUBSTITUTE(Z1:Z170, "SOCIOL HEALTH								
ILLINEOO			ILL", ""))) / LEN("SOCIOL HEALTH ILL"))								
SOCIAL PROBLEMS	SOC PROBL	33	=SUMPRODUCT((LEN(Z1:Z170) -								
			LEN(SUBSTITUTE(Z1:Z170, "SOC PROBL", ""))) /								
			LEN("SOC PROBL"))								

2006:

	Abbreviated Journal Title		JCR Data (j)							
Rank	(linked to journal information)	ISSN	Total Cites	Impact Factor	Immediacy Index	Articles	Cited Half-life			
1	ANNU REV SOCIOL	0360-0572	2687	3.275	0.368	19	9.1			
2	AM SOCIOL REV	0003-1224	7927	3.205	0.571	42	>10.0			
3	AM J SOCIOL	0002-9602	6730	2.581	0.361	36	>10.0			
4	SOCIOL METHOD RES	0049-1241	808	2.355	0.111	18	>10.0			
5	SOCIOL RURALIS	0038-0199	577	2.093	0.056	18	6.3			

	Socio	ology, top 5	impact factor 2006
Journal name	Journal	# of	Excel count formula
	Abbrev.	records	
ANNUAL REVIEW OF	ANNU REV	19	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170,
SOCIOLOGY	SOCIOL		"ANNU REV SOCIOL", ""))) / LEN("ANNU REV SOCIOL"))
AMERICAN	AM SOCIOL	49	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170,
SOCIOLOGICAL	REV		"AM SOCIOL REV", ""))) / LEN("AM SOCIOL REV"))
REVIEW			
AMERICAN	AM J	197	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170,
JOURNAL OF	SOCIOL		"AM J SOCIOL", ""))) / LEN("AM J SOCIOL"))
SOCIOLOGY			
SOCIOLOGICAL	SOCIOL	20	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170,
METHODS &	METHOD		"SOCIOL METHOD RES", ""))) / LEN("SOCIOL METHOD RES"))
RESEARCH	RES		
SOCIOLOGIA	SOCIOL	19	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170,
RURALIS	RURALIS		"SOCIOL RURALIS", ""))) / LEN("SOCIOL RURALIS"))



20	2007:											
				JCR Data 🕦						Eigenfactor TM Metrics ()		
Ra	nk	Abbreviated Journal Title (linked to journal information)	ISSN	Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	Articles	Cited Half-life	Eigenfactor TM Score	Article Influence TM Score	
1	1	AM J SOCIOL	0002-9602	7264	3.338	5.113	0.514	37	>10.0	0.01564	4.004	
2	2	AM SOCIOL REV	0003-1224	8092	3.277	4.541	0.619	42	>10.0	0.01598	3.508	
1	3	BRIT J SOCIOL	0007-1315	957	2.449	2.052	0.222	27	9.1	0.00386	1.238	
4	4	ANNU REV SOCIOL	0360-0572	2984	2.400	5.718	0.200	25	9.6	0.00976	4.077	
5	5	GLOBAL NETW	1470-2266	269	1.886		0.080	25	4.0	0.00213		

	Sociology, top 5 impact factor 2007											
Journal name	Journal Abbrev.	# of	Excel count formula									
		records										
AMERICAN JOURNAL OF SOCIOLOGY	AM J SOCIOL	180	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "AM J SOCIOL", ""))) / LEN("AM J SOCIOL"))									
AMERICAN SOCIOLOGICAL REVIEW	AM SOCIOL REV	49	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "AM SOCIOL REV", ""))) / LEN("AM SOCIOL REV"))									
BRITISH JOURNAL OF SOCIOLOGY	BRIT J SOCIOL	109	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "BRIT J SOCIOL", ""))) / LEN("BRIT J SOCIOL"))									
ANNUAL REVIEW OF SOCIOLOGY	ANNU REV SOCIOL	25	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "ANNU REV SOCIOL", ""))) / LEN("ANNU REV SOCIOL"))									
GLOBAL NETWORKS-A JOURNAL OF TRANSNATIONAL AFFAIRS	GLOBAL NETW	28	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "GLOBAL NETW", ""))) / LEN("GLOBAL NETW"))									

2008:

	Abbreviated Journal Title (linked to journal information)	ISSN	JCR Data 🕦						Eigenfactor TM Metrics ()	
Rank			Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	Articles	Cited Half-life	<i>Eigenfactor</i> ™ Score	Article Influence TM Score
1	AM SOCIOL REV	0003-1224	9349	3.762	5.285	0.364	44	>10.0	0.01732	3.906
2	AM J SOCIOL	0002-9602	8629	2.808	5.046	0.444	45	>10.0	0.01481	3.819
3	ANNU REV SOCIOL	0360-0572	3665	2.273	4.954	0.364	22	>10.0	0.00806	3.368
4	SOCIOL METHODOL	0081-1750	1226	2.087	2.691	0.000	15	>10.0	0.00257	2.107
5	SOC NETWORKS	0378-8733	1276	2.068	2.929	0.276	29	>10.0	0.00318	1.269

	Sociology, top 5 impact factor 2008										
Journal name	Journal Abbrev.	# of	Excel count formula								
		records									
AMERICAN SOCIOLOGICAL REVIEW	AM SOCIOL REV	47	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "AM SOCIOL REV", ""))) / LEN("AM SOCIOL REV"))								
AMERICAN JOURNAL OF SOCIOLOGY	AM J SOCIOL	192	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "AM J SOCIOL", ""))) / LEN("AM J SOCIOL"))								
ANNUAL REVIEW OF SOCIOLOGY	ANNU REV SOCIOL	22	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "ANNU REV SOCIOL", ""))) / LEN("ANNU REV SOCIOL"))								
SOCIOLOGICAL METHODOLOGY	SOCIOL METHODOL	15	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "SOCIOL METHODOL", ""))) / LEN("SOCIOL METHODOL"))								
SOCIAL NETWORKS	SOC NETWORKS	29	=SUMPRODUCT((LEN(Z1:Z170) - LEN(SUBSTITUTE(Z1:Z170, "SOC NETWORK", ""))) / LEN("SOC NETWORK"))								



2	2009:													
Ī				JCR Data 🕦						Eigenfactor TM Metrics ()				
R	tank	Abbreviated Journal Title (linked to journal information)	ISSN	Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	Articles	Cited Half-life	Eigenfactor TM Score	Article Influence [™] Score			
	1	ANNU REV SOCIOL	0360-0572	4803	3.702	5.953	0.333	27	>10.0	0.00837	3.787			
	2	AM J SOCIOL	0002-9602	11196	3.476	5.411	0.444	36	>10.0	0.01428	3.564			
	3	AM SOCIOL REV	0003-1224	11813	3.221	5.578	0.500	44	>10.0	0.01732	4.030			
	4	SOC NETWORKS	0378-8733	1485	2.349	3.328	0.370	27	>10.0	0.00357	1.369			
_	5	SOCIOL HEALTH ILL	0141-9889	1904	2.041	2.598	0.106	66	8.6	0.00439	0.855			

	Sociology, top 5 i	mpact factor 2	2009
Journal name	Journal Abbrev.	# of	Excel count formula
		records	
ANNUAL REVIEW OF	ANNU REV	27	=SUMPRODUCT((LEN(Z1:Z170) -
SOCIOLOGY	SOCIOL		SOCIOL", ""))) / LEN("ANNU REV SOCIOL"))
AMERICAN JOURNAL OF	AM J SOCIOL	243	=SUMPRODUCT((LEN(Z1:Z170) -
SOCIOLOGY			LEN(SUBSTITUTE(Z1:Z170, "AM J SOCIOL", ""))) / LEN("AM J SOCIOL"))
AMERICAN	AM SOCIOL REV	48	=SUMPRODUCT((LEN(Z1:Z170) -
SOCIOLOGICAL REVIEW			LEN(SUBSTITUTE(Z1:Z170, "ANNU REV SOCIOL", ""))) / LEN("ANNU REV SOCIOL"))
SOCIAL NETWORKS	SOC NETWORKS	27	=SUMPRODUCT((LEN(Z1:Z170) -
			NETWORKS , "))) / LEN(SOC NETWORKS"))
SOCIOLOGY OF HEALTH	SOCIOL HEALTH	107	=SUMPRODUCT((LEN(Z1:Z170) -
& ILLNESS	ILL		LEN(SUBSTITUTE(Z1:Z170, "SOCIOL
			ILL"))



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Appendix R-1 Top 5 impact factor journals for disciplines by year 1979-1983

Note: The same high impact factor journals from 1981 Journal Citation Report Index were used for 1979, 1980, 1981, 1982, and 1983 searches on Web of Science database.

Journal is also in top 5 ranking 2005-2009

1 Anthropology

Anthropology, 1981 h	# of records in Web of Science						
				C	latabase		
Journal name	Journal Abbrev.	1981 ImpFac	1979	1980	1981	1982	1983
AMERICAN JOURNAL OF	AM J PHYS	1.384	432	466	452	428	510
PHYSICAL ANTHROPOLOGY							
ANNUAL REVIEW OF	ANNU REV	1.136	23	22	15	13	18
ANTHROPOLOGY	ANTHROPOL						
AMERICAN ANTHROPOLOGIST	AM ANTHROPOL	.919	428	458	330	388	304
*SOCIAL NETWORKS	17	19	16	25	24		
CURRENT ANTHROPOLOGY	162	186	141	150	145		

*Social Networks was in top 5 of JCR impact factor score sort 2006, 2008, & 2009 for anthropology and 2008 for sociology

2 Communication

Communication, 1981	# of records in Web of Science						
	database						
Journal name	Journal Abbrev.	1981 ImpFac	1979	1980	1981	1982	1983
COMMUNICATION RESEARCH	COMMUN RES	1.128	26	24	25	33	33
*PUBLIC OPINION QUARTERLY	.876	76	66	60	71	55	
JOURNAL OF COMMUNICATION	J COMMUN	.464	185	176	170	151	182
QUARTERLY JOURNAL OF	Q J SPEECH	.455	88	113	114	100	103
SPEECH							
COMMUNICATION MONOGRAPHS	26	22	19	20	25		
				1000	~~~ /	11.41	

*Public Opinion Quarterly was in top 5 of JCR impact factor score sort 2005-2008 for communication and 2005, 2007 for political science



3 Economics

Economics, 1981 high	# of records in Web of Science database						
Journal name	Journal Abbrev.	1981 ImpFac	1979	1980	1981	1982	1983
JOURNAL OF ECONOMIC LITERATURE	3.103	197	213	198	176	171	
JOURNAL OF FINANCIAL ECONOMICS	J FINANC ECON	2.821	14	14	21	21	43
*JOURNAL OF POLITICAL ECONOMY	J POLIT ECON	1.903	107	105	90	90	78
AMERICAN ECONOMIC REVIEW	186	210	195	194	197		
**ECONOMETRICA	111	128	96	93	102		

*Journal of Political Economy was in top 5 of JCR impact factor score sort 2006-2008

**Econometrica was in top 5 of JCR impact factor score sort 2008 & 2009.

4 Geography

Geography, 1981 high	# of records in Web of Science									
	database									
Journal name	Journal Abbrev.	1981 ImpFac	1979	1980	1981	1982	1983			
*ECONOMIC GEOGRAPHY	ECON GEOGR	.907	35	38	44	64	57			
GEOGRAPHICAL ANALYSIS	.843	50	50	36	38	40				
PROFESSIONAL GEOGRAPHER	PROF GEOGR	.817	157	162	162	177	248			
TRANSACTIONS OF THE INSTITUTE	T I BRIT GEOGR	.622	39	47	35	41	39			
OF BRITISH GEOGRAPHERS										
**ANNALS OF THE ASSOCIATION OF	106	88	98	92	82					
AMERICAN GEOGRAPHERS	GEOGR									

*Note: Journal of Economic Geography is a different journal that began publication in 2001 that is now often cited by both economics and geography. Economic Geography was in the top 5 of JCR impact factor score sort 2005, 2008, & 2009 for geography; Journal of Economic Geography was in the top 5 of JCR impact factor sort 2005, 2007, 2009 for geography and 2005 & 2009 for economics. **Annals of the Association of American Geographers was in top 5 of JCR impact factor score sort 2006-2007



5 Information Science & Library Science (Subj heading used by JCR)

Information Science & Library Science	# O	f records	in Web	of Scien	се		
			database				
Journal name	Journal Abbrev.	1981 ImpFac	1979	1980	1981	1982	1983
*ANNUAL REVIEW OF INFORMATION	ANNU REV INFORM	1.611	9	9	15	10	10
SCIENCE AND TECHNOLOGY	SCI						
**LIBRARY JOURNAL	LIBR J	.918	301	309	296	324	697
LIBRARY RESOURCES & TECHNICAL	LIBR RESOURCE	.793	42	34	30	32	35
SERVICES	TECH SER						
LIBRARY QUARTERLY	.710	127	99	114	109	95	
JOURNAL OF ACADEMIC	79	87	104	104	122		
LIBRARIANSHIP							

*was in top 5 of JCR impact factor score sort 2005 and 2007-2009

**note: J LIBR is a different journal; JCR impact factor score for J LIBR in 1981 was .333

6 Political Science

Political Science, 1981 hig	# of records in Web of Science							
			database					
Journal name	Journal Abbrev.	1981 ImpFac	1979	1980	1981	1982	1983	
WORLD POLITICS	WORLD POLIT	1.936	35	63	54	65	78	
*JOURNAL OF POLITICAL ECONOMY	107	105	90	90	78			
AMERICAN POLITICAL SCIENCE	AM POLIT SCI REV	1.773	550	511	504	457	536	
REVIEW								
AMERICAN JOURNAL OF POLITICAL	AM J POLIT SCI	.976	42	43	42	43	41	
SCIENCE								
JOURNAL OF CONFLICT	38	42	30	33	49			
RESOLUTION	RESOLUTION RESOLUT							

*note: in 1981 also in top 5 JCR impact factor score for economics; not 05-09 in top 5 JCR impact factor score sort for Political Science but was in top 5 for economics 2006, 2007, & 2008.



7 Psychology

Psychology, 1981 high	# of records in Web of Science database						
Journal name	Journal Abbrev.	1981 ImpFac	1979	1980	1981	1982	1983
ANNUAL REVIEW OF PSYCHOLOGY	19	19	18	20	19		
*PSYCHOLOGICAL REVIEW	PSYCHOL REV	4.895	32	30	29	29	25
COGNITIVE PSYCHOLOGY	COGNITIVE PSYCHOL	4.775	21	19	20	19	17
**ADVANCES IN EXPERIMENTAL SOCIAL PSYCHOLOGY	8	6	7	6	5		
COGNITION	3.769	24	15	61	34	38	

*Note: was in top 5 impact factor sort 2005 & 2007-2008.

**Complete results for this journal could not be located using web of science June 11 or June 12, 2011; 1982 & 1983 results were found but not 1979-1981. Therefore totals for this journal are from

http://www.sciencedirect.com/science?_ob=PublicationURL&_tockey=%23TOC%2321321%231979%23999879999%23685388%23FLP%23&_cd i=21321& pubType=BS& auth=y& acct=C000037419& version=1& urlVersion=0& userid=681891&md5=9f38e1deed1ea47c9b91b22ee4f3f012 The 1982 and 1983 totals were the same there so the 1979-1981 discovered were counted and added to table above.

8 Sociology

Sociology, 1981 high i	# of records in from Web of Science database						
Journal name	Journal Abbrev.	1981 ImpFac	1979	1980	1981	1982	1983
AMERICAN SOCIOLOGICAL REVIEW	AM SOCIOL REV	3.188	84	88	96	86	80
AMERICAN JOURNAL OF SOCIOLOGY	237	240	222	213	224		
ANNUAL REVIEW OF SOCIOLOGY	ANNU REV SOCIOL	1.563	16	16	15	13	26
SOCIOLOGY – THE JOURNAL OF THE BRITISH SOCIOLOGICAL ASSOCIATION	1.077	93	101	78	103	61	
SOCIAL PROBLEMS	SOC PROBL	.891	49	47	47	46	46

Note that top impact factor journals in sociology 1981 are still top impact factor journals 2005-2009.



Appendix S – 1

1979	ANTH	СОМ	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
anthropology	0	0	7	1	0	0	3	3	14
communication	0	0	0	0	2	0	3	7	12
economics	0	0	0	4	0	2	0	30	36
geography	1	0	0	0	0	0	0	2	3
info&libSci	0	0	0	0	0	0	0	0	0
politicalSci	0	2	24	0	0	0	1	17	44
psychology	1	7	0	0	3	0	0	8	19
sociology	0	13	0	4	0	5	4	0	26
totals	2	22	31	9	5	7	11	67	154

Asymmetric citation matrices without self-citations 1979-1983

1980	ANTH	COM	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
anthropology	0	0	0	2	0	0	0	4	6
communication	0	0	0	0	9	0	1	9	19
economics	0	0	0	15	0	1	17	24	57
geography	0	0	0	0	0	0	0	3	3
info&libSci	0	0	0	0	0	0	0	0	0
politicalSci	0	4	18	2	0	0	8	18	50
psychology	0	4	1	0	3	0	0	6	14
sociology	0	7	3	8	0	0	27	0	45
totals	0	15	22	27	12	1	53	64	194

1981	ANTH	COM	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
anthropology	0	0	0	0	0	0	3	11	14
communication	0	0	0	0	0	0	90	11	101
economics	0	1	0	3	0	2	5	15	26
geography	0	0	0	0	0	0	0	0	0
info&libSci	0	0	0	0	0	0	0	0	0
politicalSci	0	5	17	1	0	0	2	8	33
psychology	0	6	1	16	2	0	0	2	27
sociology	1	10	1	1	1	3	4	0	21
totals	1	22	19	21	3	5	104	47	222



Appendix S - 2

1982	ANTH	СОМ	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
anthropology	0	0	0	0	0	0	0	4	4
communication	0	0	0	0	12	0	2	17	31
economics	0	0	0	2	2	4	0	19	27
geography	0	0	0	0	0	0	1	1	2
info&libSci	0	0	0	1	0	0	0	0	1
politicalSci	0	10	20	0	0	0	13	8	51
psychology	0	11	13	0	0	5	0	7	36
sociology	0	14	2	10	0	8	9	0	43
totals	0	35	35	13	14	17	25	56	195

Asymmetric citation matrices without self-citations 1979-1983

1983	ANTH	COM	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
anthropology	0	0	0	0	0	1	2	14	17
communication	0	0	0	1	3	1	2	10	17
economics	0	0	0	12	0	2	0	28	42
geography	0	0	0	0	0	0	0	0	0
info&libSci	0	0	0	0	0	0	0	0	0
politicalSci	0	8	9	5	0	0	0	14	36
psychology	0	1	0	0	1	0	0	3	5
sociology	0	21	1	6	0	1	2	0	31
totals	0	30	10	24	4	5	6	69	148

Remember:

"cites" = column labeled disciplines cite row labeled disciplines (for example communication cites psychology 1 times in 1983)

"cited" = row labeled disciplines are cited by column labeled disciplines (for example communication is cited by psychology 2 times in 1983)



Appendix T – 1

1979	ANTH	СОМ	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
anthropology	436	0	7	1	0	0	3	3	450
communication	0	34	0	0	2	0	3	7	46
economics	0	0	150	4	0	2	0	30	186
geography	1	0	0	16	0	0	0	2	19
info&libSci	0	0	0	0	21	0	0	0	21
politicalSci	0	2	24	0	0	25	1	17	69
psychology	1	7	0	0	3	0	162	8	181
sociology	0	13	0	4	0	5	4	440	466
totals	438	56	181	25	26	32	173	507	1438

Asymmetric citation matrices with self-citation 1979-1983

1980	ANTH	СОМ	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
anthropology	57	0	0	2	0	0	0	4	63
communication	0	58	0	0	9	0	1	9	77
economics	0	0	155	15	0	1	17	24	212
geography	0	0	0	44	0	0	0	3	47
info&libSci	0	0	0	0	6	0	0	0	6
politicalSci	0	4	18	2	0	4	8	18	54
psychology	0	4	1	0	3	0	134	6	148
sociology	0	7	3	8	0	0	27	483	528
totals	57	73	177	71	18	5	187	547	1135

1981	ANTH	COM	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
anthropology	584	0	0	0	0	0	3	11	598
communication	0	70	0	0	0	0	90	11	171
economics	0	1	144	3	0	2	5	15	170
geography	0	0	0	50	0	0	0	0	50
info&libSci	0	0	0	0	35	0	0	0	35
politicalSci	0	5	17	1	0	16	2	8	49
psychology	0	6	1	16	2	0	192	2	219
sociology	1	10	1	1	1	3	4	499	520
totals	585	92	163	71	38	21	296	546	1812



Appendix T – 2

1982	ANTH	СОМ	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
anthropology	473	0	0	0	0	0	0	4	477
communication	0	83	0	0	12	0	2	17	114
economics	0	0	112	2	2	4	0	19	139
geography	0	0	0	20	0	0	1	1	22
info&libSci	0	0	0	1	10	0	0	0	11
politicalSci	0	10	20	0	0	8	13	8	59
psychology	0	11	13	0	0	5	142	7	178
sociology	0	14	2	10	0	8	9	389	432
totals	473	118	147	33	24	25	167	445	1432

Asymmetric citation matrices with self-citation 1979-1983

1983	ANTH	СОМ	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
anthropology	532	0	0	0	0	1	2	14	549
communication	0	99	0	1	3	1	2	10	116
economics	0	0	86	12	0	2	0	28	128
geography	0	0	0	37	0	0	0	0	37
info&libSci	0	0	0	0	4	0	0	0	4
politicalSci	0	8	9	5	0	11	0	14	47
psychology	0	1	0	0	1	0	130	3	135
sociology	0	21	1	6	0	1	2	416	447
totals	532	129	96	61	8	16	136	485	1463

Remember:

"cites" = column labeled disciplines cite row labeled disciplines (for example communication cites psychology 1 times in 1983)

"cited" = row labeled disciplines are cited by column labeled disciplines (for example communication is cited by psychology 2 times in 1983)



Appendix U - 1

2005	ANTH	СОМ	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
anthropology	0	0	0	0	0	0	43	1	44
communication	0	0	1	0	8	11	0	7	27
economics	0	4	0	71	6	20	15	19	135
geography	0	0	0	0	0	0	0	0	0
info&libSci	0	0	0	0	0	0	0	0	0
politicalSci	0	219	14	0	2	0	1	48	284
psychology	11	4	1	0	19	5	0	11	51
sociology	0	17	11	3	14	10	8	0	63
Totals	11	244	27	74	49	46	67	86	604

Asymmetric citation matrices without self-citation 2005-2009

2006	ANTH	СОМ	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
anthropology	0	0	0	0	1	0	39	2	42
communication	0	0	0	0	4	6	1	11	22
economics	0	0	0	1	16	34	8	7	66
geography	0	0	1	0	0	0	1	0	2
info&libSci	0	0	0	0	0	0	1	0	1
politicalSci	0	0	2	2	2	0	1	28	35
psychology	18	1	16	0	18	0	0	7	60
sociology	1	0	4	8	15	17	5	0	50
Totals	19	1	23	11	56	57	56	55	278

2007	ANTH	COM	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
anthropology	0	0	0	0	0	0	30	1	31
communication	0	0	0	0	10	15	1	3	29
economics	0	0	0	0	11	1	14	20	46
geography	0	0	0	0	2	0	0	1	3
info&libSci	0	0	0	0	0	0	0	0	0
politicalSci	0	229	1	0	0	0	4	34	268
psychology	1	14	0	0	40	1	0	16	72
sociology	1	11	0	2	17	3	4	0	38
Totals	2	254	1	2	80	20	53	75	487



Appendix U – 2

0000									
2008	ANTH	COM	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
anthropology	0	1	0	1	0	0	2	9	13
communication	0	0	4	0	11	3	1	2	21
economics	0	11	0	1	20	15	17	41	105
geography	0	0	0	0	0	0	0	2	2
info&libSci	0	1	0	0	0	0	3	0	4
politicalSci	0	11	0	22	0	0	0	4	37
psychology	4	24	5	1	18	0	0	6	58
sociology	0	27	7	5	13	6	0	0	58
Totals	4	75	16	30	62	24	23	64	298
									298

Asymmetric citation matrices without self-citation 2005-2009

2009	ANTH	COM	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
anthropology	0	6	0	0	2	0	4	2	14
communication	0	0	0	0	3	0	17	8	28
economics	0	2	0	165	18	31	9	17	242
geography	0	0	0	0	0	0	0	4	4
info&libSci	0	42	0	0	0	0	0	2	44
politicalSci	0	13	4	4	2	0	30	14	67
psychology	19	10	10	1	59	5	0	2	106
sociology	0	40	9	17	28	4	4	0	102
Totals	19	113	23	187	112	40	64	49	607

Remember:

"cites" = column labeled disciplines cite row labeled disciplines (for example anthropology cites psychology 19 times in 2009)

"cited" = row labeled disciplines are cited by column labeled disciplines (for example anthropology is cited by psychology 4 times in 2009)



2005	ANTH	СОМ	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
anthropology	1124	0	0	0	0	0	43	1	1168
communication	0	140	1	0	8	11	0	7	167
economics	0	4	129	71	6	20	15	19	264
geography	0	0	0	61	0	0	0	0	61
info&libSci	0	0	0	0	229	0	0	0	229
politicalSci	0	219	14	0	2	280	1	48	564
psychology	11	4	1	0	19	5	395	11	446
sociology	0	17	11	3	14	10	8	455	518
totals	1135	384	156	135	278	326	462	541	3417

Asymmetric Matrices with self-citations 2005-2009

2006	ANTH	СОМ	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
anthropology	1338	0	0	0	1	0	39	2	1380
communication	0	6	0	0	4	6	1	11	28
economics	0	0	100	1	16	34	8	7	166
geography	0	0	1	168	0	0	1	0	170
info&libSci	0	0	0	0	351	0	1	0	352
politicalSci	0	0	2	2	2	466	1	28	501
psychology	18	1	16	0	18	0	255	7	315
sociology	1	0	4	8	15	17	5	242	292
totals	1357	7	123	179	407	523	311	297	3204

2007	ANTH	СОМ	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
anthropology	80	0	0	0	0	0	30	1	111
communication	0	152	0	0	10	15	1	3	181
economics	0	0	31	0	11	1	14	20	77
geography	0	0	0	14	2	0	0	1	17
info&libSci	0	0	0	0	432	0	0	0	432
politicalSci	0	229	1	0	0	167	4	34	435
psychology	1	14	0	0	40	1	334	16	406
sociology	1	11	0	2	17	3	4	478	516
totals	82	406	32	16	512	187	387	553	2175



2008	ANTH	СОМ	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
anthropology	2229	1	0	1	0	0	2	9	2242
communication	0	165	4	0	11	3	1	2	186
economics	0	11	307	1	20	15	17	41	412
geography	0	0	0	158	0	0	0	2	160
info&libSci	0	1	0	0	236	0	3	0	240
politicalSci	0	11	0	22	0	113	0	4	150
psychology	4	24	5	1	18	0	240	6	298
sociology	0	27	7	5	13	6	0	402	460
totals	2233	240	323	188	298	137	263	466	4148

Asymmetric Matrices with self-citations 2005-2009

2009	ANTH	СОМ	ECON	GEOG	InfoLib	PoliSci	PSYCH	SOC	totals
anthropology	219	6	0	0	2	0	4	2	233
communication	0	168	0	0	3	0	17	8	196
economics	0	2	222	165	18	31	9	17	464
geography	0	0	0	189	0	0	0	4	193
info&libSci	0	42	0	0	283	0	0	2	327
politicalSci	0	13	4	4	2	169	30	14	236
psychology	19	10	10	1	59	5	188	2	294
sociology	0	40	9	17	28	4	4	307	409
totals	238	281	245	376	395	209	252	356	2352

Remember:

"cites" = column labeled disciplines cite row labeled disciplines (for example anthropology cites psychology 19 times in 2009)

"cited" = row labeled disciplines are cited by column labeled disciplines (for example anthropology is cited by psychology 4 times in 2009)



Appendix	W-1a
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WITHOUT S	ELF CITATIONS									
Note: colum	n labels are disc	iplines wh	ose 2005 to	op impa	t journals	were ex	amined; ro	w labels (at lo	eft) represer	ıt
citations/dis	cipline of top 5	mpact fac	tor journals	in top j	ournal by	discipline				-
acummatric	matrix citation /	data								
asymmetric	anthronology	commur	economic	aeoar	informa	political	nsycholo	sociology	row total	6ofTotalCited
anthropolo	andnopology	0	0	geogra	0	policica	43	sociology	44	7 284768
communic	0	0	1		9	11		7	27	4 470199
economics	0	4		71	6	20	15	10	125	22 35000
economics	0			/1	0	20	15	19	1.33	22.33033
geography	0	0	0	0	0	0	0	0	0	0
info&libSci	0	0	0	0	0	0	0	0	0	0
politicalSci	0	219	14	0	2	0	1	48	284	47.01987
psychology	11	4	1	0	19	5	0	11	51	8.443709
sociology	0	17	11	3	14	10	8	0	63	10.43046
column tota	11	244	27	74	49	46	67	86	604	100
col:%ofTota	1.8211921	40.4	4.4702	12.3	8.113	7.616	11.093	14.23841	604	100
remember:	A matrix column	s=cites, n	ows=cited							
"cites" = colur	mn labeled discipli	nes cite rov	v labeled disc	iplines (I	for example	anthropol	logy cites ps	ychology four ti	mes)	
"cited" = row	labeled disciplines	are cited b	y column lab	eled disci	plines (for	example a	nthropology	is cited by psyc	hology twice)	
		tellar alt at 1	n data							
transpose of	asymmetric ma	citatic	on data	000000	info 9.11	nolitical	neuchalo	cacialese	mu tatala	6 off oto City of
anthropolog	anthropology	communi	economics	geogra	into, a fit	politicals	psycholog	sociology	Tow totals	1 921102
communicat	0	0	4	0	0	219	11	17	244	40.39735
economics	0	1	0	0	0	14	1	11	27	4,470199
geography	0	Ô	71	Ő	0	0	Ô	3	74	12.25166
info. & librar	Ő	8	6	Ő	Ő	2	19	14	49	8.112583
politicalScie	0	11	20	0	0	0	5	10	46	7.615894
psychology	43	0	15	0	0	1	0	8	67	11.09272
sociology	1	7	19	0	0	48	11	0	86	14.23841
column tota	44	27	135	0	0	284	51	63	604	100
col:%ofTota	7.2847682	4.47	22.351	0	0	47.02	8.4437	10.43046	604	100
remember:	At matrix (trans	, pose matr	ix) is colum	ns=cite	d, rows=c	tes				
Commeteis I	Intrivit (Investo	incole of a		and the law h						
Symmetric	anthropology	langle of a	symmetric	macrix)	informati	political	psycholog	cociology	row totals	
anthropolog	anthropology	0	economics 0	geogra	a	pontical	11 psycholog	o	11	
communicat	0	0	4	0	0	219	4	17	244	
economics	Ő	4	0	Ő	Ő	14	1	11	30	
geography	0	0	0	0	0	0	0	3	3	
info&libSci	0	0	0	0	0	2	10	14	30	
politicalSci	0	219	14	0	2	2	19	10	250	
psychology	11	4	1	0	19	5	0	8	48	
cociolami		17	11	2	14	10	0	0	60	
sociology	0	17	11	3	14	10	8	0	63	
column tota	11	244	30	3	35	250	48	63	684	
									684	
0										
Symmetric M	natrix 2 (upper t	triangle of	asymmetric	c matrix]	and it is a 1	and the last	an eleksory	many hotels	
anthropolog	anthropology	communi	economics	geogra	informati	political	psycholog	sociology	row totals	
communication	0	0	0	0	0	11	43	1	44	
communicat	0	0	1		0	11	0		2/	
economics	0	1	0	71	6	20	15	19	132	
geography	0	0	71	0	0	0	0	0	71	
into&libSci	0	8	6	0	0	0	0	0	14	
politicalSci	0	11	20	0	0	0	1	48	80	
psychology	43	0	15	0	0	1	0	11	/0	
sociology	1	7	19	0	0	48	11	0	86	
column tota	44	27	132	71	14	80	70	86	524	
									524	



Appendix W-1b

2005 without self ditations

means of upper/lower triangles from assymetric matrix values (this matrix is symmetric)

				-		-			
	anthropology	communi	economics	geogra	info. & lit	politicals	psycholog	sociology	row totals
anthropolog	0	0	0	0	0	0	27	0.5	27.5
communicat	0	0	2.5	0	4	115	2	12	135.5
economics	0	2.5	0	35.5	3	17	8	15	81
geography	0	0	35.5	0	0	0	0	1.5	37
info, & librar	0	4	3	0	0	1	9.5	7	24.5
politicalScier	0	115	17	0	1	0	3	29	165
psychology	27	2	8	0	9.5	3	0	9.5	59
sociology	0.5	12	15	1.5	7	29	9.5	0	74.5
column total	27.5	135.5	81	37	24.5	165	59	74.5	841

absolute value differences of upper/lower triangles from assymetric matrix values (this matrix is symmetric)

	anthropology	communi	economics	geogra	info. & lit	politicals	psycholog	sociology	row totals
anthropolog	0	0	0	0	0	0	32	1	33
communicat	0	0	3	0	8	208	4	10	233
economics	0	3	0	71	6	6	14	8	108
geography	0	0	71	0	0	0	0	3	74
info. & librar	0	8	6	0	0	2	19	14	49
politicalScie	0	208	6	0	2	0	4	38	258
psychology	32	4	14	0	19	4	0	3	76
sociology	1	10	8	3	14	38	3	0	77
column total	33	233	108	74	49	258	76	77	908

Matrix product A*At (post mulitiplied)

	anthropology	communi	economics	geogra	info. & lit	politicals	psycholog	sociology	row totals
anthropolog	1850	7	664	0	0	91	11	344	2967
communicat	7	235	401	0	0	366	285	233	1527
economics	664	401	6079	0	0	1815	439	685	10083
geography	0	0	0	0	0	0	0	0	0
info. & librar	0	0	0	0	0	0	0	0	0
politicalScier	91	366	1815	0	0	50466	1456	3913	58107
psychology	11	285	439	0	0	1456	645	395	3231
sociology	344	233	685	0	0	3913	395	779	6349
column total	2967	1527	10083	0	0	58107	3231	6349	82264

Matrix product At*A (pre multiplied)

	anthropology	communi	economics	geogra	info. & lit	politicalS	psycholog	sociology	row totals
anthropolog	0	0	0	0	0	0	43	1	44
communicat	0	0	1	0	8	11	0	7	27
economics	0	4	0	71	6	20	15	19	135
geography	0	0	0	0	0	0	0	0	0
info. & librar	0	0	0	0	0	0	0	0	0
politicalScier	0	219	14	0	2	0	1	48	284
psychology	11	4	1	0	19	5	0	11	51
sociology	0	17	11	3	14	10	8	0	63
column total	11	244	27	74	49	46	67	86	604



Appendix W-1c

WITH SELF	CITATIONS									
Note: colum	n labels are disc	iplines wh	ose 2005 to	p impa	t journals	were ex	amined; ro	w labels (at l	eft) represer	ıt
citations/dis	cipline of top 5 i	mpact fac	tor journals	in top j	ournal by	discipline				
asymmetric	matrix citation of	data								
	anthropology	commun	economic	geogra	informa	politica	psycholo	sociology	row total	6ofTotalCited
anthropolo	1124	0	0	0	0	0	43	1	1168	34.18203
communic	0	140	1	0	8	11	0	7	167	4.887328
economics	0	4	129	71	6	20	15	19	264	7.726076
geography	0	0	0	61	0	0	0	0	61	1,785192
info&libSci	0	0	0	0	220	0	0	0	220	6 701785
noliticalSci	0	210	14	0	223	280	1	49	564	16 50571
poincicalisci	11	219	14	0	10	200	305	11	446	13.05239
sociology		17	11	3	14	10	333	455	518	15 1595
column tota	1135	384	156	135	278	326	462	541	3417	100
col:%ofTota	33,216272	11.24	4 5654	3.95	8 136	9.541	13 521	15,8326	3417	100
001.70011000	33.210272	44.67	4,0004	3.33	0.1.50	0.044	10.061	13.0320	5417	100
romombar	A matrix column	r-citor o	owe-elted							
"cites" = colur	mn labeled discipli	nes cite rov	v labeled disc	iolines (1	for example	anthropol	oov cites os	vchology four ti	imes)	
"cited" = row	labeled disciplines	are cited b	v column lab	eled disci	plines (for	example a	nthropology	is cited by psyc	thology twice)	
					hunda fran	contraction of the second		is close of poly	, , , , , , , , , , , , , , , , , , , ,	
transpose of	f asymmetric ma	trix citatio	on data							
	anthropology	communi	economics	geogra	info, & lit	politicalS	psycholog	sociology	row totals	6ofTotalCited
anthropolog	1124	0	0	0	0	0	11	0	1135	33.21627
communicat	0	140	4	0	0	219	4	17	384	11.23793
economics	0	1	129	0	0	14	1	11	156	4.565408
geography	0	0	71	61	0	0	0	3	135	3.950834
noliticalScie	0	11	20	0	229	280	19	14	2/0	0.133792
pointicalisciel	43		15	0	0	200	395	8	462	13 52063
sociology	1	7	19	ő	0	48	11	455	541	15,8326
column tota	1168	167	264	61	229	564	446	518	3417	100
col:%ofTota	34.182031	4.887	7.7261	1.79	6.702	16.51	13.052	15.1595	3417	100
remember:	At matrix (trans	pose matr	ix) is colum	ns=citer	d, rows=c	tes				
Symmetric I	Matrix1 (lower tr	iangle of a	asymmetric	matrix)	Information 1	Utile - I				
anthropolog	anthropology	communi	economics	geogra	Informati	political	psycholog	sociology	row totals	
anthropolog	1124	140	0	0	0	210	11	17	204	
economics	0	40	129	0	0	14	-4	11	304	
contonnics		-		61					64	
geography info®libCol	0	0	0	61	220	0	0	3	04	
politicalSci	0	210	14	0	229	280	19	14	204	
politicalSci	11	219	14	0	19	200	305	10	443	
psychology				~			333	455		
sociology	0	17	11	3	14	10	8	455	518	
column tota	1135	384	159	64	264	530	443	518	3497	
									3497	
Symmetric M	Matrix 2 (upper 1	triangle of	asymmetric	c matrix)					-
anthropolog	anthropology	communi	economics	geogra	informati	political	psycholog	sociology	row totals	
anthropolog	1124	140	0	0	0	11	43	1	1168	
communicat	0	140	1	0	8	11	0	/	16/	
economics	0	1	129	71	6	20	15	19	261	
geography	0	0	71	61	0	0	0	0	132	
info&libSci	0	8	6	0	229	0	0	0	243	
politicalSci	0	11	20	0	0	280	205	48	360	
psychology	43	0	15	0	0	1	395	11	465	
sociology	1	7	19	0	0	48	11	455	541	
column tota	1168	167	261	132	243	360	465	541	3337	
									3337	

AppendixW-1d

2005 WITH self citation

means of upper/lower triangles from assymetric matrix values (this matrix is symmetric)

anth	anthropology		economics	geogra	info. & lit	politicalSo	psycholog	sociology	row totals
anthropolog	1124	0	0	0	0	0	27	0.5	1151.5
communicat	0	140	2.5	0	4	115	2	12	275.5
economics	0	2.5	129	35.5	3	17	8	15	210
geography	0	0	35.5	61	0	0	0	1.5	98
info, & librar	0	4	3	0	229	1	9.5	7	253.5
politicalScier	0	115	17	0	1	280	3	29	445
psychology	27	2	8	0	9.5	3	395	9.5	454
sociology	0.5	12	15	1.5	7	29	9.5	455	529.5
column total	1151.5	275.5	210	98	253.5	445	454	529.5	1

absolute value differences o	f upper/lower triangles	from assymetric matrix values	(this matrix is symmetric)

ant	anthropology		economics	geogra	info, & lit	politicalSo	psycholog	sociology	row totals
anthropolog	1124	0	0	0	0	0	32	1	1157
communicat	0	140	3	0	8	208	4	10	373
economics	0	3	129	71	6	6	14	8	237
geography	0	0	71	61	0	0	0	3	135
info. & librar	0	8	6	0	229	2	19	14	278
politicalScier	0	208	6	0	2	280	4	38	538
psychology	32	4	14	0	19	4	395	3	471
sociology	1	10	8	3	14	38	3	455	532
column total	1157	373	237	135	278	538	471	532	3721

Matrix product A*At (post mulitiplied)

ant	thropology	communi	economics	geogra	info, & lit	politicalSo	psycholog	sociology	row totals
anthropolog	1265226	7	664	0	0	91	29360	799	1296147
communicat	7	19835	1090	0	1832	34106	845	5798	63513
economics	664	1090	22720	4331	1374	9221	6493	10749	56642
geography	0	0	4331	3721	0	0	0	183	8235
info, & librar	0	1832	1374	0	52441	458	4351	3206	63662
politicalScien	91	34106	9221	0	458	128866	3251	28553	204546
psychology	29360	845	6493	0	4351	3251	156670	8560	209530
sociology	799	5798	10749	183	3206	28553	8560	207804	265652
column total	1296147	63513	56642	8235	63662	204546	209530	265652	2167927

Matrix product At*A (pre multiplied)

ant	thropology	communi	economics	geogra	info. & lit	politicalSo	psycholog	sociology	row totals
anthropolog	1263497	44	11	0	209	55	52677	1245	1317738
communicat	44	67882	3913	335	1896	63130	1995	19347	158542
economics	11	3913	16960	9192	983	6626	2432	8146	48263
geography	0	335	9192	8771	468	1450	1089	2714	24019
info. & librar	209	1896	983	468	53102	1003	7709	6845	72215
politicalScien	55	63130	6626	1450	1003	79046	2635	18502	172447
psychology	52677	1995	2432	1089	7709	2635	158164	8361	235062
sociology	1245	19347	8146	2714	6845	18502	8361	209861	275021
column total	1317738	158542	48263	24019	72215	172447	235062	275021	2303307



WITHOUT SI	ELE CITATIONS									
WITHOUT S	ELF CHAITONS									
Note: colum	n labels are disc	iplines wh	ose 2006 to	op impa	ct journals	s were exa	amined; ro	w labels (at l	eft) represer	t
citations/dis	cipline of top 5 i	mpact fac	tor journals	in top j	ournal by	discipline	-			
asymmetric	matrix citation (lata								
osymmetric	anthropology		oconomio		informa	political	neucholo	cociology	row total	Coffee Cited
	anthropology	commu	economic	geogra	iniorma	politica	psycholo	sociology	row total	sorrotaicited
anthropolo	0	0	0	0	1	0	39	2	42	15.10791
communic	0	0	0	0	4	6	1	11	22	7.913669
economics	0	0	0	1	16	34	8	7	66	23.74101
geography	0	0	1	0	0	0	1	0	2	0.719424
info & lib Coi			-				-			0.250712
Info&libSci	0	0	0	0	0	0	1	0	1	0.359712
politicalSci	0	0	2	2	2	0	1	28	35	12.58993
psychology	18	1	16	0	18	0	0	7	60	21.58273
sociology	1	0	4	8	15	17	5	0	50	17.98561
column tota	19	1	23	11	56	57	56	55	278	100
col:%ofTota	6.8345324	0.36	8.2734	3.96	20.14	20.5	20.144	19,78417	278	100
	010010021	0.00	0.2701	0100		2010				
remember:	A matrix column	s=cites, n	ows=cited							
"cites" = colur	mn labeled discipli	nes cite rov	v labeled disc	iplines (1	for example	e anthropol	ogy cites ps	ychology four t	imes)	
"cited" = row	labeled disciplines	are cited b	y column lab	eled disci	plines (for	example ar	nthropology	is cited by psyc	hology twice)	
		to be a strength								
transpose of	asymmetric ma	trix citatio	on data							
	anthropology	communi	economics	geogra	info. & lit	politicalS	psycholog	sociology	row totals	6ofTotalCited
anthropolog	0	0	0	0	0	0	18	1	19	6.834532
communicat	0	0	0	0	0	0	1	0	1	0.359712
economics	0	0	0	1	0	2	16	4	23	8.273381
geography	0	0	1	0	0	2	0	8	11	3.956835
info. & librar	1	4	16	0	0	2	18	15	56	20.14388
politicalScier	0	6	34	0	0	0	0	17	57	20.5036
psychology	39	1	8	1	1	1	0	5	56	20.14388
sociology	2	11	7	0	0	28	7	0	55	19,78417
column tota	42	22	66	2	1	35	60	50	278	100
col:%ofTota	15 107014	7 014	22 741	0.72	0.26	12 50	21 592	17 09561	270	100
con veoriota	15.107914	7.514	23.741	0.72	0.30	12.33	21.303	17.90301	2/0	100
remember:	At matrix (trans	pose matr	ix) is colum	ns=cite	a, rows=c	tes				
Symmetric M	Astrix1 (lower tr	iangle of a	exmmetric	matrix)						
Symmetric P	acthropology	langle of a	assessmine	macrix)	informati	nolitical	neucholog	cacialaau	row totals	
anthropolog	antirropology	communi	economics	geogra	iniorinau	policical	psycholog	sociology	Tow totals	
anthropolog	0	0	0		0	v	10	1	19	
communicat	0	0	0	0	0	0	1	0	1	
economics	0	0	0	1	0	2	16	4	23	
geography	0	0	1	0	0	2	0	8	11	
info&libSci	0	0	0	0	0	2	18	15	35	
politicalSci	0	0	2	2	2	0	0	17	23	
psychology	18	1	16	0	18	0	0	5	58	
anglelow.	10				10	17	-		50	
sociology	1	0	4	8	15	17	5	0	50	
column tota	19	1	23	11	35	23	58	50	220	
									220	
Symmetric M	Aatrix 2 (upper l	riangle of	asymmetric	matrix	\					
Symmetric P	active 2 (upper)	communi	assonamics	000012	/ informati	nolitical	neveholog	cacialaau	row totals	
anthropolog	anonopology	Communi	conomics	geogra	anormati	pontical	paycholog	sociology	tow totals	
anthropolog	0	0	0	0	1	0	39	2	42	
communicat	0	0	0	0	4	6	1	11	22	
economics	0	0	0	1	16	34	8	7	66	
geography	0	0	1	0	0	0	1	0	2	
info&libSci	1	4	16	0	0	0	1	0	22	
politicalSci	0	6	34	0	0	0	1	28	69	
psychology	39	1	8	1	1	1	0	7	58	
population of p				-			-	,	50	
sociology	2	11	7	0	0	28	7	0	55	
column tota	42	- 22	66	2	- 22	69	58	55	335	
									336	

Appendix W-2a



Appendix W-2b

2006 WITHOUT self citations

means of upper/lower triangles from assymetric matrix values (this matrix is symmetric)

1	anthropology	communi	economics	geogra	Info. & lit	politicals	psycholog	sociology	row totals
anthropolog	0	0	0	0	0.5	0	28.5	1.5	30.5
communicat	0	0	0	0	2	3	1	5.5	11.5
economics	0	0	0	1	8	18	12	5.5	44.5
geography	0	0	1	0	0	1	0.5	4	6.5
info. & librar	0.5	2	8	0	0	1	9.5	7.5	28.5
politicalScier	0	3	18	1	1	0	0.5	22.5	46
psychology	28.5	1	12	0.5	9.5	0.5	0	6	58
sociology	1.5	5.5	5.5	- 4	7.5	22.5	6	0	52.5
column total	30.5	11.5	44.5	6.5	28.5	46	58	52.5	

absolute value differences of upper/lower triangles from assymetric matrix values (this matrix is symmetric)

	anthropology	communi	economics	geogra	info. & lit	politicalS	psycholog	sociology	row totals
anthropolog	0	0	0	0	1	0	21	1	23
communicat	0	0	0	0	4	6	0	11	21
economics	0	0	0	0	16	32	8	3	59
geography	0	0	0	0	0	2	1	8	11
info. & librar	1	4	16	0	0	2	17	15	55
politicalScie	0	6	32	2	2	0	1	11	54
psychology	21	0	8	1	17	1	0	2	50
sociology	1	11	3	8	15	11	2	0	51
column total	23	21	59	11	55	54	50	51	324

	anthropology	communi	economics	geogra	info. & lit	politicals	psycholog	sociology	row totals
anthropolog	1526	65	342	39	39	97	32	210	2350
communicat	65	174	353	1	S 1	317	149	167	1227
economics	342	353	1526	8	8	238	337	866	3678
geography	39	1	8	2	1	3	16	9	79
info, & librar	39	1	8	1	1	1	0	5	56
politicalScier	97	317	238	3	1	797	264	59	1776
psychology	32	149	337	16	0	264	954	352	2104
sociology	210	167	866	9	5	59	352	620	2288
column tota	2350	1227	3678	79	56	1776	2104	2288	13558

Matrix product At*A (pre multiplied)

	anthropology	communi	economics	geogra	info. & lib	politicalS	psycholog	sociology	row totals
anthropolog	325	18	292	8	339	17	5	126	1130
communicat	18	1	16	0	18	0	0	7	60
economics	292	16	277	36	352	68	23	168	1232
geography	8	0	36	69	140	170	50	63	536
info. & librar	339	18	352	140	826	823	248	340	3086
politicalScier	17	0	68	170	823	1481	363	304	3226
psychology	5	0	23	50	248	363	1614	173	2476
sociology	126	7	168	63	340	304	173	1007	2188
column total	1130	60	1232	536	3086	3226	2476	2188	13934



Appendix W-2c

WITH SELF (CITATIONS									
Note: colum	n labels are disc	iplines wh	ose 2006 to	p impa	ct journals	were exa	amined; ro	w labels (at lo	eft) represen	t
citations/dis	cipline of top 5 i	mpact fac	tor journals	in top j	ournal by	discipline				
asymmetric	matrix citation of	lata	-		-					
	anthropology	commun	economic	geogra	informa	politica	psycholo	sociology	row total	6ofTotalCited
anthropolo	1338	0	0	0	1	0	39	2	1380	43.07116
communic	0	6	0	0	4	6	1	11	28	0.873908
economics	0	0	100	1	16	34	8	7	166	5.181024
geography	0	0	1	168	0	0	1	0	170	5 305868
infollibCci	0	0	-	100	251	0	1	0	252	10.09627
noliticalSci	0	0	2	2	201	466	1	28	501	15 6367
poincicaloci	18	1	16	- 2	18	400	255	20	315	9.831461
sociology	10	0	4	8	15	17	5	242	292	9,113608
column tota	1357	7	123	179	407	523	311	297	3204	100
col:%ofTota	42,353308	0.218	3,839	5.59	12.7	16.32	9,7066	9,269663	3204	100
0011100011000	12:000000	0.210	0.000	0.00	16.17	10.06	5.7000	51205005	0001	
remember:	A matrix column	secites n	ows=cited							
"cites" = colur	mn labeled discipli	nes cite rov	v labeled disci	iplines (I	for example	anthropol	ogy cites ps	ychology four ti	imes)	
"cited" = row	labeled disciplines	are cited b	y column labe	eled disci	plines (for	example ar	nthropology	is cited by psyc	hology twice)	
transpose of	f asymmetric ma	trix citatio	on data							
	anthropology	communi	economics	geogra	info. & lit	politicals	psycholog	sociology	row totals	6ofTotalCited
anthropolog	1338	0	0	0	0	0	18	1	1357	42.35331
economics	0	0	100	1	0	2	16	4	123	3.939951
geography	0	0	1	168	0	2	0		179	5.586767
info, & librar	1	4	16	0	351	2	18	15	407	12,70287
politicalScie	0	6	34	0	0	466	0	17	523	16.32335
psychology	39	1	8	1	1	1	255	5	311	9.706617
sociology	2	11	7	0	0	28	7	242	297	9.269663
column tota	1380	28	166	170	352	501	315	292	3204	100
col:%ofTota	43.071161	0.874	5.181	5.31	10.99	15.64	9.8315	9.113608	3204	100
remember:	At matrix (trans	pose matr	ix) is colum	ns=cite	d, rows=c	ites				
Symmetric M	Aatrix1 (lower tr	iangle of a	symmetric	matrix)						
	anthropology	communi	economics	geogra	informati	political	psycholog	sociology	row totals	
anthropolog	1338	0	0	0	0	0	18	1	1357	
communicat	0	6	0	0	0	0	1	0	7	
economics	0	0	100	1	0	2	16	4	123	
geography	0	0	1	168	0	2	0	8	179	
info&libSci	0	0	0	0	351	2	18	15	386	
politicalSci	0	0	2	2	2	466	0	17	489	
psychology	18	1	16	0	18	0	255	5	313	
sociology	1	0	4	8	15	17	5	242	292	
column tota	1357	7	123	179	386	489	313	292	3146	
									3146	
Symmetric N	Matrix 2 (upper t	triangle of	asymmetric	: matrix)					
	anthropology	communi	economics	geogra	informati	political :	psycholog	sociology	row totals	
anthropolog	1338	0	0	0	1	0	39	2	1380	
communicat	0	6	0	0	4	6	1	11	28	
economics	0	0	100	1	16	34	8	7	166	
geography	0	0	1	168	0	0	1	0	170	
info&libSci	1	4	16	0	351	0	1	0	373	
politicalSci	0	6	34	0	0	466	1	28	535	
psychology	39	1	8	1	1	1	255	1	313	
sociology	2	11	7	0	0	28	7	242	297	
column tota	1380	28	100	170	3/3	535	313	237	3262	
									3262	



Appendix W-2d

2006 WITH self citations

means of upper/lower triangles from assymetric matrix values (this matrix is symmetric)

[anthropology	communi	economics	geogra	info. & lit	politicals	psycholog	sociology	row totals
anthropolog	1338	0	0	0	0.5	0	28.5	1.5	1368.5
communicat	0	6	0	0	2	3	1	5.5	17.5
economics	0	0	100	1	8	18	12	5.5	144.5
geography	0	0	1	168	0	1	0.5	4	174.5
info. & librar	0.5	2	8	0	351	1	9.5	7.5	379.5
politicalScier	0	3	18	1	1	466	0.5	22.5	512
psychology	28.5	1	12	0.5	9.5	0.5	255	6	313
sociology	1.5	5.5	5.5	4	7.5	22.5	6	242	294.5
column total	1368.5	17.5	144.5	174.5	379.5	512	313	294.5	

absolute value differences of upper/lower triangles from assymetric matrix values (this matrix is symmetric)

	anthropology	communi	economics	geogra	info. & lit	politicalS	psycholog	sociology	row totals
anthropolog	1338	0	0	0	1	0	21	1	1361
communicat	0	6	0	0	4	6	0	11	27
economics	0	0	100	0	16	32	8	3	159
geography	0	0	0	168	0	2	1	8	179
info. & librar	1	4	16	0	351	2	17	15	406
politicalScie	0	6	32	2	2	466	1	11	520
psychology	21	0	8	1	17	1	255	2	305
sociology	1	11	3	8	15	11	2	242	293
column total	1361	27	159	179	406	520	305	293	3250

Matrix product A*At (post mulitiplied)

statute birds and the birds are been allowed by the	and the second se								
	anthropology	communi	economics	geogra	info. & lit	politicalS	psycholog	sociology	row totals
anthropolog	108212	55	597	4	432	224	14436	2467	126427
communicat	41	1076	284	19	1728	2754	760	5414	12076
economics	247	699	3562	53	6912	6048	3458	3754	24733
geography	30	1	45	2352	0	5	334	340	3107
info. & librar	30	3511	3875	702	151632	- 4	14374	5971	180099
politicalScier	58	7095	1124	60	864	78780	1328	14824	104133
psychology	9097	608	4404	43	7776	1503	86034	4701	114166
sociology	472	1136	5216	384	6480	11091	6160	116019	146958
column total	118187	14181	19107	3617	175824	100409	126884	153490	711699

Matrix product At*A (pre multiplied)

	anthropology	communi	economics	geogra	info, & lit	politicalS	psycholog	sociology	row totals
anthropolog	107059	1	20	8	113	17	3380	409	111007
communicat	263	926	726	546	1483	107813	4006	10844	126607
economics	0	0	3102	33	498	1520	249	245	5647
geography	2	0	22	2368	30	34	24	484	2964
info. & librar	737	100	1810	483	152823	723	10817	4581	172074
politicalScier	21	91	462	359	473	77997	460	5581	85444
psychology	46156	340	6768	54	6338	2414	86477	3587	152134
sociology	2104	34	4237	4080	7859	24668	6707	116915	166604
column total	156342	1492	17147	7931	169617	215186	112120	142646	822481
		1	7.7 F 104 24 4 6					A () 0.17 9771210	822481



WITHOUT S	ELF CITATIONS									
Note: colum	in labels are disc	ciplines wh	ose 2007 to	op impa	ct journals	s were exa	amined; ro	w labels (at l	eft) represen	t
citations/dis	cipline of top 5 i	impact fac	tor journals	in top j	ournal by	discipline				
symmetric	matrix citation of	data								
	anthropology	commu	economic	geogra	informa	political	psycholo	sociology	row total	6ofTotalCite
anthropolo	0	0	0	0	0	0	30	1	31	6.36550
communic	0	0	0	0	10	15	1	3	29	5.95482
economics	0	Ō	0	0	11	1	14	20	46	9.44558
reograph	0	0	0	0	2	0	0	1	3	0.61601
info@libCci	0		0			0	0			0.01001
niluxiluSu	0	220	1		0	0	0	24	269	55.020
politicalSci	0	229	1		40	1		34	200	14 7943
psychology	1	14	0		40	1	0	10	72	7 00303
sociology	1	254	0	2	17	20	- 4	26	30	7.80287
column tota	0.4106776	234	0.0050	2	16.43	4 107	10 000	15 40041	487	10
col: %of lota	0.4106776	52.16	0.2053	0.41	16.43	4.107	10.883	15.40041	487	10
remember:	A matrix column	ns=cites, r	ows=cited							
"cites" = colu	mn labeled discipli	nes cite rov	/ labeled disc	iplines (1	for example	anthropol	logy cites ps	ychology four ti	imes)	
cited. = tow	abeled disciplines	are cited b	y column lab	ered disci	prines (10P)	example ar	chropology	is cried by psyc	nology (wice)	
transpose of	f asymmetric ma	atrix citativ	on data							
a an apose of	anthropology	communi	economics	geogra	info, & lit	political	psycholog	sociology	row totals	6ofTotalCite
anthropolog	0	0	0	0	0	0	1	1	2	0.41067
communicat	0	0	0	0	0	229	14	11	254	52.1560
economics	0	0	0	0	0	1	0	0	1	0.20533
geography	0	0	0	0	0	0	0	2	2	0.41067
info. & librar	0	10	11	2	0	0	40	17	80	16.427
politicalScie	0	15	1	0	0	0	1	3	20	4.10677
psychology	30	1	14	0	0	4	0	4	53	10.8829
sociology	1	3	20	1	0	34	16	0	75	15.4004
column tota	31	29	46	3	0	268	72	38	487	10
col:%ofTota	6.3655031	5.955	9.4456	0.62	0	55.03	14.784	7.802875	487	10
remember:	At matrix (trans	pose matr	ix) is colum	ns=cite	d, rows=c	ites				
Symmetric I	Matrix1 (lower tr	iangle of a	asymmetric	matrix)						
Symmetric	anthropology	communi	economics	deoora	informati	political	psycholog	sociology	row totals	
anthropolog	andropology	0	economics 0	geogra	0	ponecon	psycholog	sociology	TOW LOLDIS	1
communicat	0	ŏ	0	ő	v			1	2	
economics	ő	ő	~		• 0	229	14	11	2	
aeooranhy			0	0	0	229	14	11	2 254 1	
geography		Ň	0	0	0	229	14	11 0	2 254 1	
and the second se	0	0	0	0	000000000000000000000000000000000000000	229	14 0 0	1 11 0 2	2 254 1 2	
nfo&libSci	0	0	0	0	0	229 1 0	14 0 0 40	1 11 0 2 17	2 254 1 2 57 224	
politicalSci	0	0 0 229	0 0 0 1	000000000000000000000000000000000000000	000000000000000000000000000000000000000	229 1 0 0	14 0 0 40	1 11 0 2 17 3	2 254 1 2 57 234	
politicalSci psychology	0 0 0	0 0 229 14	0 0 1 0	000000000000000000000000000000000000000	0 0 0 0 40	229 1 0 0 1	14 0 0 40 1	1 111 0 2 17 3 4	2 254 1 2 57 234 60	
politicalSci psychology sociology	0 0 0 1 1	0 0 229 14 11	0 0 1 0 0	000000000000000000000000000000000000000	0 0 0 0 40 17	229 1 0 0 1 1 3	14 0 0 40 1 0 4	1 11 0 2 17 3 4 0	2 254 1 2 57 234 60 38	
politicalSci psychology sociology column tota	0 0 0 1 1 2	0 0 229 14 11 254	0 0 1 0 0 0	0 0 0 0 0 2 2 2	0 0 0 40 17 57	229 1 0 0 1 3 234	14 0 0 40 1 1 0 4 60	1 111 0 2 177 3 4 4 0 38	2 254 1 2 57 234 60 38 648	
politicalSci psychology sociology column tota	0 0 0 1 1 2	0 0 229 14 11 254	0 0 1 0 0 1	0 0 0 0 0 2 2	0 0 0 40 17 57	229 1 0 0 1 3 234	14 0 0 40 1 0 4 60	1 111 0 2 177 3 4 4 0 38	2 254 1 2 57 234 60 38 648 648	
politicalSci psychology sociology column tota	0 0 0 1 1 2	0 0 229 14 11 254	0 0 1 0 0 1	0 0 0 0 0 2 2	0 0 0 40 17 57	229 1 0 0 1 3 234	14 0 0 40 1 0 4 60	1 11 0 2 17 3 4 0 38	2 254 1 2 57 234 60 38 648 648	
politicalSci psychology sociology column tota	0 0 0 1 1 2	0 0 229 14 11 254	0 0 1 0 0	0 0 0 0 0 0 2 2	0 0 0 0 40 17 57	229 1 0 0 1 3 234	14 0 0 40 1 0 4 60	1 111 0 2 177 3 4 4 0 38	2 254 1 2 57 234 60 38 648 648	
politicalSci psychology sociology column tota Symmetric I	0 0 1 1 2 Matrix 2 (upper 1	0 0 229 14 11 254 triangle of	0 0 1 0 0 1 3 symmetric	0 0 0 0 2 2 2	000000000000000000000000000000000000000	229 1 0 0 1 3 234	14 0 0 40 1 0 4 60	1 111 0 2 177 3 4 4 0 38	2 254 1 2 57 234 60 38 648 648	
inroaciosci politicalSci psychology sociology column tota Symmetric !	0 0 1 1 2 Matrix 2 (upper 1 anthropology	0 0 229 14 11 254 triangle of communi	0 0 1 0 0 1 asymmetric	0 0 0 0 2 2 2 2 2 2 2 2 2 2	0 0 0 0 40 17 57	229 1 0 0 1 3 234 political	14 0 0 40 1 0 4 60 5 9 5 ycholog	1 11 0 2 17 3 4 0 38 38 sociology	2 254 1 2 57 234 60 38 648 648 648	
nroaliosci politicalSci psychology sociology column tota Symmetric ! anthropolog	0 0 1 1 2 Matrix 2 (upper tanthropology 0	0 0 229 14 11 254 triangle of communi 0	0 0 1 0 0 1 asymmetric economics 0	0 0 0 0 2 2 2 2 2 2 2 2 2 0	0 0 0 40 17 57 57 informati	229 1 0 0 1 3 234 234	14 0 40 1 0 40 4 60 5 9 5 9 5 9 5 9 5 9 5 9 5 9 5 9 5 9 5	1 11 0 2 17 3 4 0 38 38 sociology 1	2 254 1 2 57 234 60 38 648 648 648 648 70w totals 31	
nroaliosci politicalSci psychology sociology column tota Symmetric ! anthropolog communicat	0 0 1 1 2 Matrix 2 (upper 1 anthropology 0 0	0 0 229 14 11 254 triangle of communi 0	0 0 1 0 0 1 asymmetric economics 0	0 0 0 0 2 2 2 2 2 2 2 2 2 2 0 0 0 0 0 0	0 0 0 40 17 57 57 informati 0 10	229 1 0 0 1 3 234 234 political 0 15	14 0 0 40 1 0 4 60 4 60 9 sycholog 30 1	1 11 0 2 17 3 4 0 38 38 5000000000000000000000000000000	2 254 1 2 57 234 60 38 648 648 648 648 70w totals 31 29	
nroaliosci politicalSci psychology sociology column tota Symmetric ! anthropolog communicat economics	0 0 1 1 2 Matrix 2 (upper 1 anthropology 0 0 0	0 0 229 14 11 254 triangle of communi 0 0	0 0 1 0 0 1 3 symmetric economics 0 0 0	0 0 0 0 2 2 2 2 2 2 2 2 2 2 2 2 0 0 0 0	0 0 0 40 17 57 17 57 10 10	229 1 0 0 1 3 234 234 234 234	14 0 0 40 1 0 4 60 4 60 9 sycholog 30 1 1	1 11 0 2 17 3 4 4 0 38 38 50000gy 1 3 30 20	2 254 1 2 57 234 60 38 648 648 648 648 7 00 totals 31 29 46	
introacitosci politicalSci psychology sociology column tota Symmetric ! anthropolog communicat economics geography	0 0 1 1 2 Matrix 2 (upper 1 anthropology 0 0 0 0	0 0 229 14 11 254 triangle of communi 0 0 0	0 0 1 0 0 1 1 asymmetric economics 0 0 0	0 0 0 0 2 2 2 2 2 2 2 2 2 2 2 2 2 0	0 0 0 0 0 0 40 17 57 57 17 57 10 10 10 11	229 1 0 0 1 3 234 234 234 0 15 1 0	14 0 0 40 1 0 4 60 4 60 9 sycholog 30 1 1 4 0	1 11 0 2 17 3 4 4 0 38 38 50 50 50 50 50 50 50 50 50 50 50 50 50	2 254 1 2 57 234 60 38 648 648 648 648 648 7 00 totals 31 29 46 3	
Introactiosci politicalSci psychology sociology column tota Symmetric ! anthropolog communicat economics geography info&libSci	0 0 1 1 2 Matrix 2 (upper 1 anthropology 0 0 0 0 0 0	0 0 229 14 11 254 triangle of communi 0 0 0 0	0 0 1 0 0 1 1 asymmetrik economics 0 0 0 0 0	0 0 0 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0 0 0 0 0 0 40 17 57 57 17 57 10 10 10 11 2 0	229 1 0 0 1 3 234 234 234 0 15 15 1 0 0 0 0	14 0 0 40 1 0 4 60 4 60 9 5ycholog 30 1 1 4 0 0	1 11 0 2 17 3 4 4 0 38 38 50 50 50 50 50 50 50 50 50 50 50 50 50	2 254 1 2 57 234 60 38 648 648 648 648 648 70w totals 29 46 3 23	
Introactiosci politicalSci psychology sociology column tota Symmetric ! anthropolog communicat economics geography info&libSci politicalSci	0 0 0 1 1 2 4 4 4 7 2 4 4 7 7 7 7 7 7 7 7 7 7 7 7	0 0 229 14 11 254 triangle of communi 0 0 0 0 0 0 0 10	0 0 1 0 0 1 1 asymmetrik economics 0 0 0 0 0 0 0 0 11 1	0 0 0 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0 0 0 0 0 0 40 17 57 57 57 10 10 10 10 11 2 0 0	229 1 0 0 1 3 234 234 234 234 0 15 15 1 0 0 0 0 0 0	14 0 0 40 1 0 4 60 4 60 5 9 5 9 5 9 5 9 5 9 5 9 5 9 5 1 1 4 0 0 1 4 4 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 1 1 1 0 0 0 1 1 1 1 0 0 1	1 11 0 2 17 3 4 0 38 38 50 50 50 50 50 50 50 50 50 50 50 50 50	2 254 1 2 57 234 60 38 648 648 648 648 648 70w totals 31 29 46 3 3 23 54	
Introactiosci politicalSci psychology sociology column tota Symmetric 1 anthropolog communicat economics geography info&libSci politicalSci psychology	0 0 0 1 1 2 4 4 4 7 2 4 4 7 7 7 7 7 7 7 7 7 7 7 7	0 0 229 14 11 254 triangle of communi 0 0 0 0 0 0 0 10 15 1	0 0 0 1 0 0 1 asymmetric economics 0 0 0 0 0 0 11 1 1 1	0 0 0 0 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0 0 0 0 0 0 0 40 17 57 57 57 57 10 10 10 11 2 0 0 0 0	229 1 0 0 1 3 234 234 234 234 0 15 15 1 0 0 15 1 0 0 0 0 0 4	14 0 0 40 1 0 4 60 4 60 9 5ycholog 30 1 1 14 0 0 4 0	1 11 0 2 17 3 4 0 38 sociology 1 3 20 1 0 34 16	2 254 1 2 57 234 60 38 648 648 648 648 648 70w totals 31 29 46 3 23 54 65	
Introduitosci politicalSci psychology sociology column tota Symmetric I anthropolog communicat economics geography info&ilbSci politicalSci psychology sociology	0 0 0 1 1 2 4 4 4 7 2 4 4 7 7 7 7 7 7 7 7 7 7 7 7	0 0 229 14 11 254 triangle of communi 0 0 0 0 0 0 10 15 1	0 0 0 1 0 0 1 1 economics 0 0 0 0 0 0 0 0 1 1 1 1 1 4 20	0 0 0 0 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0 0 0 0 0 0 0 0 17 57 57 57 57 57 10 10 10 11 2 0 0 0 0 0	229 1 0 0 1 3 234 234 234 234 0 15 15 1 0 0 15 1 0 0 0 0 0 0 0 0 4 34	14 0 0 40 1 0 4 60 4 60 5 9 5 9 5 9 5 9 5 9 60 1 1 4 0 0 4 1 6 0 1 1 4 1 6 0 1 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 1 0 0 1 1 1 0 0 1	1 11 0 2 17 3 4 0 38 sociology 1 3 20 1 0 34 16 0	2 254 1 2 57 234 60 38 648 648 648 648 648 70 8 46 3 29 46 3 23 54 65 75	
Introbutosci politicalSci psychology sociology column tota Symmetric I anthropolog communicat economics geography info&ilbSci politicalSci psychology sociology column tota	0 0 0 1 1 2 4 4 4 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	0 0 229 14 11 254 triangle of communi 0 0 0 0 0 0 0 10 15 1 1 3 29	0 0 0 1 0 0 1 1 economics 0 0 0 0 0 0 0 0 0 0 0 0 11 1 1 4 4 5	0 0 0 0 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0 0 0 0 0 0 40 17 57 57 57 57 10 10 10 11 2 0 0 0 0 0 0 23	229 1 0 0 1 3 234 234 political 0 15 1 0 0 15 1 0 0 4 34 54	14 0 0 40 1 0 4 60 4 60 55	1 11 0 2 17 3 4 0 38 50 50 10 1 0 1 0 34 16 0 75	2 254 1 254 60 38 648 648 648 648 70w totals 31 29 46 3 23 54 65 75 326	
antoalitosci politicalSci psychology politicalSci psychology politicalSci peography nfo&litoSci politicalSci psychology pociology politicalSci	0 0 0 1 1 2 4 4 4 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	0 0 229 14 11 254 triangle of communi 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 1 0 0 1 1 economics 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1 4 4 5	0 0 0 0 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0 0 0 0 0 0 0 0 17 57 57 57 57 57 17 57 10 10 10 10 11 2 0 0 0 0 0 0 23	229 1 0 0 1 3 234 234 234 234 0 15 15 1 0 0 0 4 34 54	14 0 0 40 1 0 4 60 4 60 9 5 5 5	1 11 0 2 17 3 4 0 38 sociology 1 3 20 1 0 34 16 0 75	2 254 1 254 60 38 648 648 648 648 70w totals 70w totals 31 29 46 33 54 65 75 326 236	

Appendix W-3a



Appendix W-3b

2007 WITHOUT self citations

means of upper/lower triangles from assymetric matrix values (this matrix is symmetric)

	anthropology	communi	economics	geogra	info. & lit	politicals	psycholog	sociology	row totals
anthropolog	0	0	0	0	0	0	15.5	1	16.5
communicat	0	0	0	0	5	122	7.5	7	141.5
economics	0	0	0	0	5.5	1	7	10	23.5
geography	0	0	0	0	1	0	0	1.5	2.5
info. & librar	0	5	5.5	1	0	0	20	8.5	40
politicalScier	0	122	1	0	0	0	2.5	18.5	144
psychology	15.5	7.5	7	0	20	2.5	0	10	62.5
sociology	1	7	10	1.5	8.5	18.5	10	0	56.5
column total	16.5	141.5	23.5	2.5	40	144	62.5	56.5	1

absolute value differences of upper/lower triangles from assymetric matrix values (this matrix is symmetric)

	anthropology	communi	economics	geogra	info. & lit	politicals	psycholog	sociology	row totals
anthropolog	0	0	0	0	0	0	29	0	29
communicat	0	0	0	0	10	214	13	8	245
economics	0	0	0	0	11	0	14	20	45
geography	0	0	0	0	2	0	0	1	3
info. & librar	0	10	11	2	0	0	40	17	80
politicalScier	0	214	0	0	0	0	3	31	248
psychology	29	13	14	0	40	3	0	12	111
sociology	0	8	20	1	17	31	12	0	89
column total	29	245	45	3	80	248	111	89	850

Matrix produc	t A*At (post m	ulitiplied)							
	anthropology	communi	economics	geogra	info, & lit	politicals	psycholog	sociology	row totals
anthropolog	901	33	440	1	0	154	16	120	1665
communicat	33	335	199	23	0	106	463	219	1378
economics	440	199	718	42	0	736	761	246	3142
geography	1	23	42	5	0	34	96	34	235
info. & librar	0	0	0	0	0	0	0	0	0
politicalScier	184	106	736	34	0	53614	3750	2535	60929
psychology	16	463	761	96	0	3750	2054	838	7978
sociology	120	219	246	34	0	2535	838	440	4432
column total	1665	1378	3142	235	0	60929	7978	4432	79759

Matrix product At*A (pre-multiplied)

	anthropology	communi	economics	geogra	info. & lit	politicals	psycholog	sociology	row totals
anthropolog	2	25	0	2	57	4	4	16	110
communicat	25	52758	229	22	747	47	960	8010	62798
economics	0	229	1	0	0	0	4	34	268
geography	2	22	0	4	34	6	8	0	76
info. & librar	57	747	0	34	2114	252	232	892	4328
politicalScier	4	47	0	6	252	236	41	81	667
psychology	4	960	4	8	232	41	1129	449	2827
sociology	16	8010	34	0	892	81	449	1823	11305
column total	110	62798	268	76	4328	667	2827	11305	82379



Appendix	W-3c
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WITH SELF	CITATIONS	I		1						
Note: colum	n labels are disc	iplines wh	ose 2007 to	p impa	ct journals	s were ex	amined; ro	w labels (at lo	eft) repres	ent
citations/dis	cipline of top 5	impact fac	tor journals	in top j	ournal by	discipline				
asymmetric	matrix citation	data								
	anthropology	commun	economic	aeoara	informa	politica	psycholo	sociology	row total	6ofTotalCited
anthropolo	80	0	0	0	0	0	30	1	111	5.103448
communic	0	152	0	0	10	15	1	3	181	8.321839
economics	0	0	31	0	11	1	14	20	77	3.54023
geography	0	0	0	14	2	0	0	1	17	0.781609
info&libSci	0	0	0	0	432	0	0	- 0	432	19.86207
politicalSci	0	229	1	ŏ	0	167	4	34	435	20
psychology	1	14	0	ō	40	1	334	16	406	18.66667
sociology	1	11	0	2	17	3	4	478	516	23.72414
column tota	82	406	32	16	512	187	387	553	2175	100
col:%ofTota	3.7701149	18.67	1.4713	0.74	23.54	8.598	17.793	25.42529	2175	100
and the second house	A makely askyra		and a stand							
remember:	A matrix column	ns=cites, n	ows=cited	inlines ()	for example	anthropol	loov cites os	vehology four ti	imes)	
"cited" = row	labeled disciplines	are cited b	v column lab	eled disci	olines (for	example a	nthropology	is cited by psyc	theleav twice	e)
transmission of	f neurometrie me	tels eltatis	n data		prince (rer -			is clear of porte		~/
transpose of	apthropology	communi	on data	000073	info & lit	nolitical	nevcholog	saciology	row total	6 of Total Cited
anthropolog	80	0	0	geogra	0	poncical:	psycholog 1	1	82	3.770115
communicat	0	152	Ő	Ő	Ő	229	14	11	406	18.66667
economics	0	0	31	0	0	1	0	0	32	1.471264
geography	0	0	0	14	0	0	0	2	16	0.735632
info. & librar	0	10	11	2	432	0	40	17	512	23.54023
politicalScie	0	15	1	0	0	167	1	3	187	8.597701
psychology	30	1	14	0	0	4	334	4	387	17.7931
sociology	1	3	20	1	0	34	16	478	553	25.42529
column tota	111	181	77	17	432	435	406	516	2175	100
col:%ofiota	5.1034483	8.322	3.5402	0.78	19.86	20	18.667	23.72414	2175	100
remember:	At matrix (trans	pose matr	ix) is colum	ns=cite	a, rows=c	ites				
Symmetric M	Matrix1 (lower tr	riangle of a	asymmetric	matrix)						
	anthropology	communi	economics	geogra	informati	political	psycholog	sociology	row total	5
anthropolog	80	152	0	0	0	220	14	11	82	
economics	0	152	21	0	0	225	14		400	
assesshi				14		â		2	16	
geography info&libSci	0	v 0	0	14	422	0	40		400	
politicalSci	0	229	1	0	432	167	40		409	
psychology	1	14	ô	Ő	40	1	334	4	394	
sociology	1	11	0	2	17	3	4	478	516	
column tota	82	406	22	16	400	401	204	516	2226	
column coca	02	400	32	10	409	401	334	310	2336	
Symmetric I	Matrix 2 (upper)	triangle of	acummetri	r matrix	1					
Symmetric	anthropology	communi	economics	geogra	/ informati	political	psycholog	sociology	row total	c
anthropolog	80	0	0	0	0	0	30	1	111	
communicat	0	152	0	0	10	15	1	3	181	
economics	0	0	31	0	11	1	14	20	77	
geography	0	0	0	14	2	0	0	1	17	
info&libSci	0	10	11	2	432	0	0	ô	455	
politicalSci	0	15	1	0	0	167	4	34	221	
psychology	30	1	14	0	0	4	334	16	399	
sociology	1	3	20	1	0	34	16	478	553	
column tota	111	181	77	17	455	221	399	553	2014	
									2014	



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Appendix W-3d

2007	WITH	self	citations
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means of upper/lower triangles from assymetric matrix values (this matrix is symmetric)

	anthropology	communi	economics	geogra	info. & lit	politicals	psycholog	sociology	row totals
anthropolog	80	0	0	0	0	0	15.5	1	96.5
communicat	0	152	0	0	5	122	7.5	7	293.5
economics	0	0	31	0	5.5	1	7	10	\$4.5
geography	0	0	0	14	1	0	0	1.5	16.5
info. & librar	0	5	5.5	1	432	0	20	8.5	472
politicalScier	0	122	1	0	0	167	2.5	18.5	311
psychology	15.5	7.5	7	0	20	2.5	334	10	396.5
sociology	1	7	10	1.5	8.5	18.5	10	478	534.5
column total	96.5	293.5	54.5	16.5	472	311	396.5	534.5	

absolute value differences of upper/lower triangles from assymetric matrix values (this matrix is symmetric)

	anthropology	communi	economics	geogra	info. & lit	politicals	psycholog	sociology	row totals
anthropolog	80	0	0	0	0	0	29	0	109
communicat	0	152	0	0	10	214	13	8	397
economics	0	0	31	0	11	0	14	20	76
geography	0	0	0	14	2	0	0	1	17
info. & librar	0	10	11	2	432	0	40	17	512
politicalScier	0	214	0	0	0	167	3	31	415
psychology	29	13	14	0	40	3	334	12	445
sociology	0	8	20	1	17	31	12	478	567
column total	109	397	76	17	512	415	445	567	2538
			• •				• •		2538

	anthropology	communi	economics	geogra	info. & lit	political5	psycholog	sociology	row totals
anthropolog	7301	33	440	1	0	154	10116	678	18723
communicat	33	23439	199	23	4320	37419	2925	3325	71683
economics	440	199	1679	42	4752	934	5437	9806	23289
geography	1	23	42	201	864	34	96	540	1801
info. & librar	0	4320	4752	864	186624	0	17280	7344	221184
politicalScier	154	37419	934	34	0	81503	5253	19288	144585
psychology	10116	2925	5437	96	17280	5253	113610	9822	164539
sociology	678	3325	9806	540	7344	19288	9822	228924	279727
column total	18723	71683	23289	1801	221184	144585	164539	279727	925531

Matrix produ	ct At*A (pre mi	(itiplied)							
	anthropology	communi	economics	geogra	info. & lit	political	psycholog	sociology	row totals
anthropolog	6402	25	0	2	57	4	2738	574	9802
communicat	25	75862	229	22	2267	40570	5788	13724	138487
economics	0	229	962	0	341	198	438	654	2822
geography	2	22	0	200	62	6	8	970	1270
info. & librar	57	2267	341	62	188738	252	13592	9018	214327
politicalScier	4	40570	198	6	252	28125	1043	7193	77391
psychology	2738	5788	438	8	13592	1043	112685	7705	143997
sociology	574	13724	654	970	9018	7193	7705	230307	270145
column total	9802	138487	2822	1270	214327	77391	143997	270145	858241 858241



Appendix W-4a

WITHOUT SELF	CITATIONS									
Note: column la	bels are disc	iplines wh	ose 2008 to	op impact	t journals	were e	xamined;	row label	s (at left) rep	resent
citations/discipl	ine of top 5 in	mpact fac	tor journals	in top jo	urnal by	disciplin	ie.			
asymmetric ma	trix 2008 cita	tion data	(2011)							
a	nthropology	commun	economics	geograp	informat	politica	psycholo	sociology	row total	%ofTotalCited
anthropology	0	1	0	1	0	0	2	9	13	4.3624161
economics	0	11		1	20	15	17	41	105	35,234899
geography	0	Ô	0	ô	0	0	0	2	2	0.6711409
info&libScl	0	1	0	0	0	0	3	0	4	1.3422819
politicalSci	0	11	0	22	0	0	0	4	37	12.416107
psychology	4	24	5	1	18	0	0	6	58	19.463087
sociology	0	27	7	5	13	6	0	0	58	19.463087
column totals	4	75	16	30	62	24	23	64	298	100
col:%ofTotal	1.34228	25.17	5.3691	10.07	20.81	8.05	7.718	21.477	298	
	at la caluma		and a stand						100	
remember: A m	atrix column	s=cites, r	ows=cited	inlines /fr	er ovamele	anthron	ology cites	newsholog	(four times)	
"cited" = row labe	led disciplines	are cited b	v column lab	eled discip	lines (for)	example	anthropolo	av is cited i	by psychology I	twice)
										,
transpose of as	ymmetric ma	trix 2008	citation dat	a (2011)						
a	nthropology	commun	economics	geograp	info. & I	politica	psycholo	sociology	row totals	%ofTotalCited
anthropology	0	0	0	0	0	0	4	0	4	1.3422819
communication	1	0	11	0	1	11	24	- 2/	/5	25.16/785
geography	1		1	0	0	22	1	5	30	10.067114
info. & library s	Ô	11	20	Ő	Ő	0	18	13	62	20.805369
politicalScience	0	3	15	0	0	0	0	6	24	8.0536913
psychology	2	1	17	0	3	0	0	0	23	7.7181208
sociology	9	2	41	2	0	4	6	0	64	21.47651
column totals	13	21	105	2	4	37	58	58	298	100
col:%ofTotalCit	4.36242	7.047	35.235	0.671	1.342	12.4	19.46	19.463	100	
									200	
									298	
remember: At r	natrix (trans;	oose matr	ix) is colum	ns=cited	, rows=c	tes			298	
remember: At r	natrix (trans;	oose matr	ix) is colum	ns=cited	, rows=c	tes			298	
remember: At r Symmetric Mati	natrix (transp ix1 (lower tri	oose matr	ix) is colum 2008/2011 :	ns=cited	, rows=c	tes			298	
remember: At r Symmetric Matr a	natrix (transp ix1 (lower tri nthropology	oose matr angle of : commun	ix) is colum 2008/2011 economics	ns-cited asymmet geograp	, rows=c ric matri: informat	ites () politica	psycholo	sociology	298 row totals	
remember: At r Symmetric Mate anthropology	natrix (trans; ix1 (lower tri nthropology 0	iangle of a commun	ix) is colum 2008/2011 : economics 0	ns=cited asymmet geograp 0	, rows=c ric matri: informat	tes () politica 0	psycholo 4	sociology 0	298 row totals	
remember: At r Symmetric Matri a anthropology communication	natrix (transp ix1 (lower tri nthropology 0 0	angle of angle of angle of a	ix) is colum 2008/2011 economics 0 11	ns=cited asymmet geograp 0 0	, rows=c ric matri: informat 0 1	() politica 0 11	psycholo 4 24	sociology 0 27	298 row totals 4 74	
symmetric Matri anthropology communication economics	natrix (transp ix1 (lower tri nthropology 0 0 0	iangle of 3 commun 0 11	ix) is colum 2008/2011 - economics 0 111 0	ns=cited asymmet geograp 0 0 0	, rows=c ric matri: informat 0 1 0	() politica 0 11 0	psycholo 4 24 5	sociology 0 27 7	298 row totals 4 74 23	
symmetric Matri anthropology communication economics geography	natrix (transp ix1 (lower tri nthropology 0 0 0 0	iangle of 3 commun 0 11 0	ix) is colum 2008/2011 - economics 0 111 0 0	ns=cited asymmet geograp 0 0 0 0	, rows=c ric matri: informat 0 1 0 0	tes politica 0 11 0 22	psycholo 4 24 5 1	sociology 0 27 7 5	298 row totals 4 74 23 28	
remember: At r Symmetric Matri a anthropology communication economics geography info&libScl politicalSci	natrix (transp ix1 (lower tri nthropology 0 0 0 0 0 0 0	angle of i commun 0 11 0 11	ix) is colum 2008/2011 - economics 0 111 0 0 0 0	ns=cited asymmet geograp 0 0 0 0 0	, rows=c ric matri: informal 0 1 0 0 0 0	tes politica 0 11 0 22 0 0	psycholo 4 24 5 1 18 0	sociology 0 27 7 5 13	298 row totals 4 74 23 28 32 32	
remember: At r <u>Symmetric Matri</u> a anthropology communication economics geography info&libScl politicalScl psychology	ix1 (lower tri nthropology 0 0 0 0 0 0 0 0 0 0	angle of 3 commun 0 11 0 1 11 24	ix) is colum 2008/2011 (economics 0 111 0 0 0 0 0 0 0 5	ns=cited asymmet geograp 0 0 0 0 0 0 0 0 0 0 0 0 0	, rows=c informat 0 1 0 0 0 0 0 0 0 0 0 0 0	tes politica 0 111 0 222 0 0 0	psycholo 4 24 5 1 18 0 0	sociology 0 27 7 5 13 6 0	298 row totals 4 74 23 28 32 39 52	
remember: At r <u>Symmetric Matri</u> a anthropology communication economics geography info&libScl politicalScl psychology sociology	ix1 (lower tri nthropology 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	angle of 1 commun 0 111 0 1 111 24	ix) is colum 2008/2011 a economics 0 11 0 0 0 0 0 0 5 7 7	ns=cited geograp 0 0 0 0 0 0 22 1 5	, rows=c informat 0 1 0 0 0 0 0 0 0 0 1 8	tes politica 0 11 0 22 0 0 0 0 0 0 0 0 0 0 0 0 0	psycholo 4 24 5 1 18 0 0 0	sociology 0 27 7 5 13 6 0 0	298 298 row totals 4 74 23 28 32 39 52 52 58	
remember: At r <u>Symmetric Matri</u> a anthropology communication economics geography info&libScl politicalScl psychology sociology column totals	ix1 (lower tri nthropology 0 0 0 0 0 0 0 4 0 4 4	angle of 3 commun 0 0 11 0 1 1 11 24 27 74	ix) is colum 2008/2011 : economics 0 111 0 0 0 0 0 0 5 7 7 23	ns=cited asymmet geograp 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	, rows=c informat 0 1 1 0 0 0 0 0 0 0 1 8 13 3 3 2	tes politica 0 111 0 222 0 0 0 0 6 39	psycholo 4 24 1 18 0 0 0 0 52	sociology 0 27 7 5 13 6 0 0 0 58	298 298 70w totals 4 74 23 28 32 39 52 52 58 310	
remember: At r <u>Symmetric Matri</u> a anthropology communication economics geography info&libScl politicalScl politicalScl psychology sociology column totals	natrix (transp ix1 (lower tri nthropology 0 0 0 0 0 0 0 4 0 4 0 4	angle of 2 commun 0 0 11 0 1 1 11 24 27 74	ix) is colum 2008/2011 : economics 0 111 0 0 0 0 0 0 5 7 23	ns=cited geograp 0 0 0 0 0 0 0 0 22 1 1 5 28	, rows=c informat 0 1 1 0 0 0 0 0 0 1 8 13 32	tes politica 0 111 0 222 0 0 0 0 0 0 0 0 0 0 0 0 0 0	psycholo 4 24 1 1 8 0 0 0 0 52	sociology 0 27 7 5 13 6 0 0 0 58	298 298 70w totals 4 74 23 28 32 39 52 52 58 310 310	
remember: At r <u>Symmetric Matri</u> a anthropology communication economics geography info&libScl politicalScl politicalScl psychology sociology column totals	natrix (transp ix1 (lower tri nthropology 0 0 0 0 0 0 0 0 4 0 4 0 4	angle of 3 commun 0 0 11 0 1 1 11 24 27 74	ix) is colum 2008/2011 : economics 0 111 0 0 0 0 0 0 0 5 7 23	ns=cited geograp 0 0 0 0 0 0 0 0 22 1 1 5 28	, rows=c informat 0 1 0 0 0 0 0 0 1 8 13 32	tes politica 0 111 0 222 0 0 0 0 0 0 0 0 0 0 0 0 0 0	psycholo 4 24 1 18 8 0 0 0 0 52	sociology 0 27 7 5 13 6 0 0 0 58	298 298 74 23 28 32 39 52 58 310 310	
remember: At r <u>Symmetric Matri</u> a anthropology communication economics geography info&libSci politicalSci psychology sociology column totals	natrix (transp ix1 (lower tri nthropology 0 0 0 0 0 0 0 4 0 4 4	angle of 3 commun 0 11 0 11 11 24 27 74	ix) is colum 2008/2011 : economics 0 111 0 0 0 0 0 0 0 5 7 23	ns=cited geograp 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	, rows=c informal 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	tes politica 0 111 0 22 0 0 0 0 0 6 39	psycholo 4 24 5 1 1 8 0 0 0 52	sociology 0 27 7 5 13 6 0 0 58	298 298 74 23 28 32 39 52 58 310 310	
sociology sociology sociology sociology sociology sociology sociology sociology sociology	ix1 (lower tr nthropology 0 0 0 0 0 0 0 4 0 4 4 0 4	iangle of i commun 0 11 0 1 1 11 24 27 74 74	ix) is colum 2008/2011 : economics 0 11 0 0 0 0 0 0 0 0 0 0 0 0 0	asymmet geograp 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ric matrix informal 0 1 0 0 0 0 0 0 0 0 0 0 0 1 8 13 32	tes politica 0 111 0 222 0 0 0 0 0 0 0 0 0 0 0 0 0	psycholo 4 24 5 1 1 18 0 0 0 0 52	sociology 0 27 7 5 13 6 0 0 58	298 298 74 23 28 32 39 52 58 310 310	
remember: At r Symmetric Matri a anthropology communication economics geography info&libSci politicalSci psychology sociology column totals Symmetric Matri a anthropology	ix1 (lower tr nthropology 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	angle of i commun 0 11 0 1 11 24 27 74 riangle of commun	ix) is colum 2008/2011 : economics 0 11 0 0 0 0 0 0 0 0 0 0 0 0 0	asymmet geograp 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ric matrix informal 0 1 0 0 0 0 0 0 0 0 0 0 0 1 8 13 32 32 tric matrix	tes politica 0 111 0 222 0 0 0 0 0 0 0 0 0 0 0 0 0	psycholo 4 24 5 1 1 8 0 0 0 52 52 psycholo	sociology 0 27 7 5 13 6 0 0 58 58 sociology	298 298 74 23 28 32 39 52 58 310 310 310	
remember: At r Symmetric Materia anthropology communication economics geography info&libSci politicalSci psychology sociology column totals Symmetric Materia anthropology	natrix (trans; ix1 (lower tr nthropology 0 0 0 0 0 0 0 4 0 4 1 1 1 1	angle of i commun 0 11 0 1 1 1 1 2 4 27 74 74 74 74	ix) is colum 2008/2011 : economics 0 111 0 0 0 0 0 0 5 7 233 2008/2011 economics 0 4	asymmet geograp 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ric matrix information 0 1 0 0 0 0 0 0 0 0 1 8 13 32 32 tric matrix Information 0 1 1	tes politica 0 111 0 22 0 0 0 0 0 0 0 0 0 0 0 0 0	psycholo 4 24 5 1 18 0 0 0 52 psycholo 2 1	sociology 0 27 7 5 13 6 0 0 0 58 sociology 9 9	298 298 74 74 23 28 32 39 52 58 310 310 310 310 22	
remember: At r Symmetric Materia anthropology communication economics geography info&libSci politicalSci psychology sociology column totals Symmetric Materia anthropology communication	natrix (trans; ix1 (lower tr nthropology 0 0 0 0 0 0 4 4 0 4 4 0 4 4 0 1 0 1	angle of i commun 0 11 0 1 1 11 24 27 74 74 riangle of commun 1 0	ix) is colum 2008/2011 : economics 0 111 0 0 0 0 0 0 0 0 0 0 0 2 0 2 0 2 0 2 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0	ns=cited geograp 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ric matrix information 0 1 0 0 0 0 0 0 0 1 8 13 32 32 2 13 13 13 13 13 13 13 13 13 13 13 13 13	tes politica 0 0 111 0 222 0 0 0 0 0 0 0 0 0 0 0 0 0	psycholo 4 24 5 1 18 0 0 0 52 psycholo 2 1 17 17 17 18 18 18 18 18 18 18 18 18 18	sociology 0 27 7 5 13 6 0 0 0 58 sociology 9 9 2 2	298 298 74 23 28 32 39 52 58 310 310 310 310 22 200	
remember: At r Symmetric Mate a anthropology communication economics geography info&libSci politicalSci psychology column totals Symmetric Mate a anthropology communication economics geography	natrix (trans; ix1 (lower tr nthropology 0 0 0 0 0 0 4 4 0 4 4 0 4 4 0 1 1 0 1 1	angle of i commun 0 11 0 1 1 11 24 27 74 74 74 74 74 74	ix) is colum 2008/2011 : economics 0 11 0 0 0 0 0 0 0 0 0 0 0 0 0	asymmet geograp 0 0 0 0 0 0 0 0 0 0 0 0 22 1 1 5 28 3 symmet geograp 1 0 0 1 0	ric matrix information 0 1 0 0 0 0 0 0 1 8 13 32 13 32 13 13 13 13 13 12 0 111	tes politica 0 0 111 0 22 0 0 0 0 0 0 0 0 0 0 0 0 0	psycholo 4 24 5 1 18 0 0 0 0 52 psycholo 2 1 17 0	sociology 0 27 7 5 13 6 0 0 0 58 sociology 9 9 2 2 41	298 298 74 23 28 32 39 52 58 310 310 310 310 310 22 98	
remember: At r Symmetric Mate a anthropology communication economics geography info&libSci politicalSci psychology column totals Symmetric Mate a anthropology communication economics geography info&libSci	natrix (trans; ix1 (lower tr nthropology 0 0 0 0 0 4 4 0 4 4 0 4 4 0 1 0 1 0 1 0	angle of 3 commun 0 0 11 0 1 1 1 1 1 2 4 27 74 74 74 74 74 74 74 74 74 74 74 74 74	ix) is colum 2008/2011 : economics 0 11 0 0 0 0 0 0 0 0 0 0 0 0 0	asymmet geograp 0 0 0 0 0 0 0 0 0 0 22 1 1 5 28 3 28 3 28 3 28 0 1 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ric matrix information 0 1 0 0 0 0 0 0 1 8 13 32 13 32 13 13 32 11 11 20 0 0 0	tes politica 0 0 111 0 22 0 0 0 0 0 0 0 0 0 0 0 0 0	psycholo 4 24 5 1 18 0 0 0 0 52 psycholo 2 1 17 0 3	sociology 0 27 7 5 13 6 0 0 0 58 sociology 9 9 2 2 41 2 0	298 298 74 74 23 28 32 39 52 58 310 310 310 310 310 310 4 34	
remember: At r Symmetric Mate a anthropology communication economics geography info&libSci politicalSci psychology column totals Symmetric Mate a anthropology communication economics geography info&libSci politicalSci politica	natrix (trans; ix1 (lower tr nthropology 0 0 0 0 0 4 4 0 4 4 0 4 4 0 1 1 0 0 1 0 0 0 1 0 0 0 0	angle of 3 commun 0 0 11 0 1 1 1 1 1 2 4 27 74 74 74 74 74 74 74 74 74 1 0 0 11 1 1 0 0 1 1 1 1 1 1 1 1 1 1 2 4 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ix) is colum 2008/2011 : economics 0 11 0 0 0 0 0 0 0 0 0 0 0 2008/2011 economics 0 4 0 1 2008/2011 : 0 0 0 0 0 0 0 0 0 0 0 0 0	asymmet geograp 0 0 0 0 0 0 0 0 0 0 22 1 1 5 28 3 28 3 9 28 3 28 0 1 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ric matrix information 0 1 0 0 0 0 0 1 8 13 32 13 32 13 32 13 13 32 11 10 0 0 111 20 0 0 0 0 0 0	tes politica 0 111 0 22 0 0 0 0 0 0 0 0 0 0 0 0 0	psycholo 4 24 5 1 18 0 0 0 52 psycholo 2 1 17 0 3 0	sociology 0 27 7 5 13 6 0 0 0 58 sociology 9 9 2 41 2 0 0 4	298 298 74 74 23 28 32 39 52 58 310 310 310 310 310 310 4 34 22	
remember: At r Symmetric Matri a anthropology communication economics geography info&libScl politicalScl psychology column totals Symmetric Matri a anthropology communication economics geography info&libScl politicalScl psychology	natrix (transp ix1 (lower tr nthropology 0 0 0 0 0 4 4 0 4 4 0 4 4 0 1 0 1 0 0 1 0 0 1 0 0 2	angle of 3 commun 0 11 0 1 11 24 27 74 74 74 74 74 74 74 74 74 11 0 0 4 0 11 1 3 1	ix) is colum 2008/2011 : economics 0 11 0 0 0 0 0 0 0 0 0 0 2008/2011 economics 0 4 0 1 2008/2011 1 2008/2011 1 2 0 1 2 0 0 0 0 0 0 0 0 0 0 0 0 0	asymmet geograp 0 0 0 0 0 0 0 0 0 0 0 0 222 1 1 5 28 28 3 28 3 28 3 28 3 0 0 1 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0	ric matrix information 0 1 0 0 0 0 0 1 18 13 32 13 32 13 32 13 13 32 13 13 0 0 111 20 0 0 0 0 13	tes politica 0 111 0 22 0 0 0 0 0 0 0 0 111 0 0 0 0 0 0 0 0 0 0 0 0 0	psycholo 4 24 5 1 1 8 0 0 0 0 52 52 52 52 7 52 7 1 7 0 3 0 0 0 0	sociology 0 27 7 5 13 6 0 0 0 58 sociology 9 2 2 41 2 0 0 4 4 6	298 298 74 74 23 28 32 39 52 58 310 310 310 310 310 310 4 4 4 4 22 29	
remember: At r Symmetric Mate a anthropology communication economics geography info&libScl politicalScl psychology column totals Symmetric Mate a anthropology communication economics geography info&libScl politicalScl psychology sociology sociolo	natrix (transp ix1 (lower tr nthropology 0 0 0 0 0 4 4 0 4 4 0 4 4 0 1 0 1 0 0 1 0 0 1 0 0 0 1 0 0 0 2 9 9	angle of 3 commun 0 11 0 1 11 24 27 74 74 74 74 74 74 74 74 74 11 1 0 0 11 1 1 2 3 1 1 2	ix) is colum 2008/2011 : economics 0 11 0 0 0 0 0 0 0 0 0 2008/2011 economics 0 4 0 1 2008/2011 1 1 2 0 1 1 2 0 1 1 2 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0	asymmet geograp 0 0 0 0 0 0 0 0 22 1 1 5 28 3 28 3 28 3 28 0 1 0 0 1 0 0 0 0 1 0 0 0 0 0 0 0 0 0	ric matrix information 0 1 0 0 0 0 0 1 18 13 32 13 32 13 32 13 13 32 13 13 0 0 0 0 0 0 0 0 0 0 0 0 11 1 20 0 0 0 1 1 1 0 0 0 0	tes politica 0 0 111 0 222 0 0 0 0 0 0 0 0 0 15 0 0 0 0 0 4	psycholo 4 24 5 1 18 0 0 0 52 psycholo 2 1 17 0 3 0 0 6	sociology 0 27 7 5 13 6 0 0 0 58 sociology 9 2 2 41 2 0 4 4 6 0	298 298 74 74 23 28 32 39 52 58 310 310 310 310 310 310 4 4 4 4 22 98 4 4 34 22 99 64	
remember: At r Symmetric Mater a anthropology communication economics geography info&libScl politicalScl psychology column totals Symmetric Mater a anthropology communication economics geography info&libScl politicalScl psychology sociology column totals	natrix (transp ix1 (lower tr nthropology 0 0 0 0 0 4 4 0 4 4 0 4 4 0 1 0 1 0 0 1 1 0 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0	angle of 3 commun 0 11 0 1 1 1 1 2 4 27 74 7 4 7 4 7 4 7 4 0 0 1 1 1 3 1 1 2 2 2 2	ix) is colum 2008/2011 : economics 0 11 0 0 0 0 0 0 0 0 2008/2011 economics 0 2008/2011 economics 0 1 1 2008/2011 economics 1 2 2 2 2 2 2 2 2 2 2 2 2 2	asymmet geograp 0 0 0 0 0 0 0 0 22 1 1 5 28 3 28 3 28 3 28 0 1 0 0 1 0 0 0 0 1 0 0 0 0 0 0 0 0 0	ric matrix information 0 1 0 0 0 0 0 1 18 13 32 13 32 13 32 13 13 32 13 13 32 13 13 0 0 0 111 200 0 0 1 11 200 0 0 1 1 20 0 1 1 20 1 20 1 20 20 20 20 20 20 20 20 20 20 20 20 20	tes politica 0 0 111 0 222 0 0 0 0 0 0 0 0 0 0 0 0 0	psycholo 4 24 5 1 18 0 0 0 52 psycholo 2 1 17 0 3 0 0 0 6 20 1 17 0 3 0 0 0 0 0 0 0 0 0 0 0 0 0	sociology 0 27 7 5 13 6 0 0 58 sociology 9 2 2 41 2 0 4 4 1 6 0 0 6 4	298 298 74 74 23 28 32 39 52 58 310 310 310 310 310 310 22 98 4 34 22 99 64 29 64	
remember: At r Symmetric Matri a anthropology communication economics geography info&libSci politicalSci psychology column totals Symmetric Matri a anthropology communication economics geography info&libSci politicalSci psychology sociology column totals	natrix (transp ix1 (lower tr nthropology 0 0 0 0 0 4 4 0 4 4 0 4 4 0 1 0 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0	angle of 2 commun 0 11 0 1 11 24 27 74 74 74 74 74 74 74 74 74 74 74 74 74	ix) is colum 2008/2011 : economics 0 11 0 0 0 0 0 0 0 2008/2011 economics 0 4 0 1 2008/2011 1 98	asymmet geograp 0 0 0 0 0 0 0 0 22 1 1 5 28 3 28 3 28 3 28 3 28 0 1 0 0 1 0 0 0 0 2 2 4	ric matrix information 0 1 0 0 0 0 0 1 1 1 1 20 0 0 1 11 20 0 0 0	tes politica 0 0 111 0 222 0 0 0 0 0 0 0 0 0 15 0 0 0 0 0 4 22 22 0 0 0 0 0 0 0 0 0 0 0 0 0	psycholo 4 24 5 1 18 0 0 0 52 psycholo 2 1 17 0 3 0 0 0 6 29	sociology 0 27 7 5 13 6 0 0 58 sociology 9 2 2 41 2 0 4 4 6 0 0 64	298 298 4 74 23 28 32 39 52 58 310 310 310 310 310 310 22 98 4 4 34 22 99 64 286 29 64	



Appendix W-4b

2008 WITHOUT self sitations

incurs of upper/loner changes non asymetric matrix values (this matrix is symmetric) 2000/2012									
i	anthropology	communi	economics	geograp	info. & li	politica	psycholo	sociology	row totals
anthropology	0	0.5	0	0.5	0	0	3	4.5	8.5
communication	0.5	0	7.5	0	6	7	12.5	14.5	48
economics	0	7.5	0	0.5	10	7.5	11	24	60.5
geography	0.5	0	0.5	0	0	11	0.5	3.5	16
info. & library se	0	6	10	0	0	0	10.5	6.5	33
politicalScience	0	7	7.5	11	0	0	0	5	30.5
psychology	3	12.5	11	0.5	10.5	0	0	3	40.5
sociology	4.5	14.5	24	3.5	6.5	5	3	0	61
column totals	8.5	48	60.5	16	33	30.5	40.5	61	298

means of upper/lower triangles from assymetric matrix values (this matrix is symmetric) - 2008/2011

absolute value differences upper/lower triangles from assymetric matrix values (matrix is symmetric)2008/2011

	anthropology	communi	economics	geograp	info. & li	politica	psycholo	sociology	row totals
anthropology	0	1	0	1	0	0	2	9	13
communication	1	0	7	0	10	8	23	25	74
economics	0	7	0	1	20	15	12	34	89
geography	1	0	1	0	0	22	1	3	28
info. & library s	0	10	20	0	0	0	15	13	58
politicalScience	0	8	15	22	0	0	0	2	47
psychology	2	23	12	1	15	0	0	6	59
sociology	9	25	34	3	13	2	6	0	92
column totals	13	74	89	28	58	47	59	92	460
	-		-						460

2008 Matrix product A*At (post mulitiplied) / 2011

	anthropology	communi	economics	geograp	info. & li	politica	psycholo	sociology	row totals
anthropology	87	20	415	18	7	69	79	32	727
communication	20	151	364	4	3	8	230	189	969
economics	415	364	2717	82	62	307	871	652	5470
geography	18	4	82	4	0	8	12	0	128
info. & library s	7	3	62	0	10	11	24	27	144
politicalScience	69	8	307	8	11	621	310	407	1741
psychology	79	230	871	12	24	310	978	922	3426
sociology	32	189	652	0	27	407	922	1008	3237
column totals	727	969	5470	128	144	1741	3426	3237	15842 15842

2008 Matrix product At*A (pre multiplied) / 2011

	anthropology	communi	economics	geograp	info. & li	politica	psycholo	sociology	row totals
anthropology	16	96	20	4	72	0	0	24	232
communication	96	1549	309	413	1003	327	192	648	4537
economics	20	309	90	40	225	54	4	38	780
geography	4	413	40	512	103	45	19	144	1280
info. & library s	72	1003	225	103	1014	411	351	950	4129
politicalScience	0	327	54	45	411	270	258	621	1986
psychology	0	192	4	19	351	258	303	717	1844
sociology	24	648	38	144	950	621	717	1822	4964
column totals	232	4537	780	1280	4129	1986	1844	4964	19752 19752



Appendix W-4c

WITH SELF (CITATIONS		*checked 7	7-1-11						
Note: colum	n labels are disc	; iplines wh	ose 2008 to	op impa	ct journa	ils were e	xamined;	row labels (at	left) represe	int
citations/dis	cipline of top 5 i	mpact fac	tor journals	in top j	ournal b	y disciplir	ie.			
asymmetric	matrix 2008 cita	ation data	(2011)							
	anthropology	communi	economics	geogra	informa	politicalS	psycholog	sociology	row total	6ofTotalCited
anthropolog	2229	1	0	1	0	0	2	9	2242	54.05014
communicat	0	165	4	0	11	3	1	2	186	4.484089
economics	0	11	307	1	20	15	17	41	412	9.932498
geography	0	0	0	158	0	0	0	2	160	3.857281
info&libSci	0	1	0	0	236	0	3	0	240	5.785921
politicalSci	0	11	0	22	0	113	0	4	150	3.616201
psychology	4	24	5	1	18	0	240	6	298	7.184185
sociology	0	27	7	5	13	6	0	402	460	11.08968
column tota	2233	240	323	188	298	137	263	466	4148	100
col:%ofTota	53.833173	5.786	7.7869	4.53	7.18	3.303	6.3404	11.23433	4148	100
remember:	A matrix column	s=cites, n	ows=cited							
"cites" = colur	mn labeled discipli	nes cite rov	v labeled disc	iplines (I	for examp	ole anthrop	ology cites (osychology four	times)	
"cited" = row	labeled disciplines	are cited b	y column lab	eled disci	plines (fo	r example	anthropolog	y is cited by ps	ychology twice)
		taly 2000	والمعالم ماري	- /0011						
transpose of	asymmetric ma	trix 2008	citation dat	a (2011) 	a ellitice M	an aboli i		and the second se	I all also being a
anthropology	anchropology	communi	economics	geogra	info. &	politicals	psycholog	sociology	row totals	soriotalCited
anthropolog	2229	165	0	0	0	0	4	0	2233	53.83317
economics	1	105	207	0	1	11	24	2/	240	7 796005
geography	1		307	158	0	22		5	188	4 532305
info & librar	0	11	20	1.50	236		18	13	298	7 184185
politicalScier	0	3	15	0	0	113	0	6	137	3.302797
psychology	2	1	17	Ő	3	0	240	ő	263	6.340405
sociology	9	2	41	2	0	4	6	402	466	11,23433
column tota	2242	196	412	160	240	150	200	460	4140	100
col:%ofTota	54 050145	4 494	0.0325	3.96	5 79	3 616	7 1942	11 09969	4140	100
001.70011008	34.030143	4,404	3.3323	3.00	3.73	3.010	7.1042	11.00900	4140	100
remember:	At matrix (trans	nose matr	iv) is colum	ns=citer	d rows=	cites				
remember.	or mount (croins	pose mac	ix) is column	13-0100	u, roma-	61068				
Symmetric N	Matrix1 (lower tr	iangle of 2	2008/2011 ;	asymme	tric mat	rix)				
	anthropology	communi	economics	geogra	informa	political	psycholog	sociology	row totals	
anthropolog	2229	0	0	0	0	0	4	0	2233	
communicat	0	165	11	0	1	11	24	27	239	
economics	0	11	307	0	0	0	5	7	330	
geography	0	0	0	158	0	22	1	5	186	
info&libSci	0	1	0	0	236	0	18	13	268	
politicalSci	0	11	0	22	0	113	0	6	152	
psychology	4	24	5	1	18	0	240	0	292	
sociology	0	27	7	5	13	6	0	402	460	
column tota	2222	220	220	196	268	150	202	460	4160	
commit tota	2233	239	330	100	200	192	292	400	4160	
									4160	
Commetrie 1	Antrix 2 (unners)	nanala of	2009/2011	3.0400.00	otric ma	triv)				
Symmetric	hatrix 2 (upper)	communi	2008/2011	asymm	letric ma	(IIX)	novcholog	cacialaau	row totale	
anthropolog	2220	1	A	geogra	anorma 0	pontical	payonolog	sociology	2242	
communicat	1	165	4	0	11	3	2	2	197	
		100	207		20	15	17		405	
economics	0	4	307	1	20	15	17	41	405	
geography	1	0	1	158	0	0	0	2	162	
into&il0Sci	0	11	20	0	236	0	3	0	2/0	
policicalsci	0	3	15	0	0	113	240	4	135	
psychology	2	1	17	0	3	0	240	6	269	
sociology	9	2	41	2	0	4	6	402	466	
column tota	2242	187	405	162	270	135	269	465	4136	
									4136	



Appendix W-4d

2008 WITH self citation

means of upper/lower triangles from assymetric matrix values (this matrix is symmetric) - 2008/2011

	anthropology	communi	reconomics	geogra	dinfo. &	politicalS	psycholog	sociology	row totals
anthropolog	2228	0.5	0	0.5	0	0	3	4.5	2236.5
communicat	0.5	165	7.5	0	6	7	12.5	14.5	213
economics	0	7.5	306	0.5	10	7.5	11	24	366.5
geography	0.5	0	0.5	158	0	11	0.5	3.5	174
info. & librar	0	6	10	0	254	0	10.5	6,5	287
politicalScier	0	7	7.5	11	0	113	0	5	143.5
psychology	3	12.5	11	0.5	10.5	0	240	3	,280.5
sociology	4.5	14.5	24	3.5	6.5	5	3	402	463
column total	2236.5	213	366.5	174	287	143.5	280.5	463	

absolute value differences of upper/lower triangles from assymetric matrix values (this matrix is symmetric) - 2008/2011

	anthropology	communi	economics	geogra	info. 8.	politicals	psycholog	sociology	row totals
anthropolog	2228	1	0	1	0	0	2	9	2241
communicat	1	165	7	0	10	8	23	25	239
economics	0	7	306	1	20	15	12	34	395
geography	1	0	1	158	0	22	1	3	186
info, & librar	0	10	20	0	254	0	15	13	312
politicalScien	0	8	15	22	0	113	0	2	160
psychology	2	23	12	1	15	0	240	6	299
sociology	9	25	34	3	13	2	6	402	494
column total	2241	239	395	186	312	160	299	494	1

2008 Matrix product A*At (post mulitiplied) / 2011

	anthropology	communi	economics	geogra	info, & I	politicals	psycholog	sociology	row totals
anthropolog	4968528	185	415	176	7	69	9475	3650	4982505
communicat	185	27376	3407	4	2764	2162	4430	5448	45776
economics	415	3407	96966	240	4782	2002	6486	19283	133581
geography	176	4	240	24968	0	3484	170	1594	30636
info, & librar	7	2764	4782	0	55706	11	4992	3095	71357
politicalScier	69	2162	2002	3484	11	13390	310	2693	24121
psychology	9475	4430	6486	170	4992	310	58578	3334	87775
sociology	2650	5448	19283	1594	3095	2693	3334	162612	201709
column total	4982505	45776	133581	30636	71357	24121	87775	201709	5577460 5577460

2008 Matrix product At*A (pre multiplied) / 2011

	anthropology	communi	economics	geogra	info, & I	politicals	psycholog	sociology	row totals
anthropolog	4968457	2325	20	2233	72	0	5418	20085	4998610
communicat	2325	28774	4346	413	3054	2065	6117	11832	58926
economics	20	4346	94339	347	6365	4659	6423	15439	131938
geography	2233	413	347	25476	103	2531	259	2470	33832
info. & librar	72	3054	6365	103	56710	411	5379	6176	78270
politicalScier	0	2065	4659	2531	411	13039	258	3485	26448
psychology	5418	6117	6423	259	5379	258	57903	2157	83914
sociology	20085	11832	15439	2470	6176	3485	2157	163426	225070
column total	4998610	58926	131938	33832	78270	26448	83914	225070	5637008 5637008

المنسارات المستشارات

Appendix W-5a

WITHOUT SELF	CITATIONS									
Note: column la	bels are disc	iplines wh	tose 2009 t	op impac	t journal:	s were e	xamined	; row labe	ls (at left) rep	present
citations/discipl	ine of top 5 i	mpact fac	tor journals	in top jo	urnal by	disciplin	ie.			
asymmetric ma	trix citation o	lata								
a	nthropology	commun	economics	geograp	informat	politica	psycholo	sociology	row total	%ofTotalCited
anthropology	0	6	0	0	2	0	4	2	14	2.306425
communication	0	0	0	0	3	0	17	8	28	4.6128501
economics	0	2	0	165	18	31	9	17	242	39.868204
geography	0	0	0	0	0	0	0	4	4	0.6589786
info&libSci	0	42	0	0	0	0	0	2	44	7.2487644
politicalSci	0	13	4	4	2	0	30	14	67	11.037891
psychology	19	10	10	1	59	5	0	2	106	17.462932
sociology	0	40	9	17	28	4	4	0	102	16.803954
column totals	19	113	23	187	112	40	64	49	607	100
col:%ofTotal	3.13015	18.62	3.7891	30.81	18.45	6.59	10.54	8.0725	607	100
remember: A m	natrix column	s=cites, r	ows=cited							
"cites" = column	labeled discipli	nes cite rov	v labeled disc	iplines (fo	or example	e anthrop	ology cites	s psychology	/ four times)	
"cited" = row labe	eled disciplines	are cited b	y column lab	eled discip	lines (for	example	anthropolo	gy is cited	by psychology	twice)
transmost of our	ummatele con	الاحقام برامغ	an data							
transpose or as	ethropology	commun	on data	0000730	info & I	politica	pouchola	cociology	row totale	% of Total Cited
anthronology	null opology	Commun	economics	geograp	inio. α i	politica	psycholo 10	SUCIDIOGY	10 10	3 1301483
communication	6	0	2	0	42	12	10	40	112	18 616145
economics	0	0	2	0	42	4	10	40	23	3 7891269
geography	0	0	165	0	0	4	1	17	187	30.807249
info, & library s	2	3	18	0	ő	2	59	28	112	18,4514
politicalScience	0	0	31	0	0	0	5	4	40	6.5897858
psychology	4	17	9	Ő	Ő	30	Ő	4	64	10.543657
sociology	2	8	17	4	2	14	2	0	49	8.0724876
column totals	14	28	242	4	44	67	106	102	607	100
col:%ofTotalCite	2.30643	4.613	39.868	0.659	7.249	11	17.46	16.804	607	100
remember: At r	natrix (trans	pose matr	ix) is colum	ns=cited	, rows=c	ites				
Symmetric Mate	rix1 (lower tr	iangle of a	asymmetric	matrix)		1001				
5	nthropology	commun	economics	geograp	informa	politica	psycholo	sociology	row totals	
anthropology	0	0	0	0	0	0	19	0	19	
communication	0	0	2	0	42	13	10	40	107	
economics	0	۷ د	v	0	0	4	10	9	23	
geography	0	0	0	0	0	4	1	17	22	
info&libSci	0	42	0	0	0	2	59	28	131	
politicalSci	0	13	4	4	2	0	5	4	32	
psychology	19	10	10	1	59	5	0	4	108	
sociology	0	40	9	17	28	- 4	- 4	0	102	
column totals	19	107	25	22	131	32	108	102	546	
									546	
Symmetric Mate	rix 2 (upper t	riangle of	asymmetri	c matrix)						
a	nthropology	commun	economics	geograp	informat	politica	psycholo	sociology	row totals	
anthropology	0	6	0	0	2	0	4	2	14	
communication	6	0	0	0	3	0	17	8	34	
economics	0	0	0	165	18	31	9	17	240	
geography	0	0	165	0	0	0	0	4	169	
info&libSci	2	3	19	0	0	0	0	2	25	
politicalSci	0	0	31	0	0	0	30	14	75	
psychology	4	17	9	0	0	30	0	2	62	
raciology		0	17			14		-	40	
column totals	2	34	240	4	2	14	62	40	49	
Containing Containing			610	100			~~		660	
									668	

Appendix W-5b

2009 WITHOUT self citation

means of upper/lower triangles from assymetric matrix values (this matrix is symmetric)

	anthropology	commun	economics	geograp	info, & I	politica	psycholo	sociology	row totals
anthropology	0	3	0	0	1	0	11.5	1	16.5
communication	3	0	1	0	22.5	6.5	13.5	24	70.5
economics	0	1	0	82.5	9	17.5	9.5	13	132.5
geography	0	0	82.5	0	0	2	0.5	10.5	95.5
info. & library s	1	22.5	9	0	0	1	29.5	15	78
politicalScience	0	6.5	17.5	2	1	0	17.5	9	53.5
psychology	11.5	13.5	9.5	0.5	29.5	17.5	0	3	85
sociology	1	24	13	10.5	15	9	3	0	75.5
column totals	16.5	70.5	132.5	95.5	78	53.5	85	75.5	_

absolute value differences of upper/lower triangles from assymetric matrix values (this matrix is symmetric)

4	anthropology	commun	economics	geograp	info. & li	politica	psycholo	sociology	row totals
anthropology	0	6	0	0	2	0	15	2	25
communication	6	0	2	0	39	13	7	32	99
economics	0	2	0	165	18	27	1	8	221
geography	0	0	165	0	0	4	1	13	183
info. & library s	2	39	18	0	0	2	59	26	146
politicalScience	0	13	27	.4	2	0	25	10	81
psychology	15	7	1	1	59	25	0	2	110
sociology	2	32	8	13	26	10	2	0	93
column totals	25	99	221	183	146	81	110	93	958 958

8	anthropology	commun	economics	geograp	info. & li	politica	psycholo	sociology	row totals
anthropology	60	90	118	8	256	230	182	312	1256
communication	90	362	343	32	16	628	193	152	1816
economics	118	343	28884	68	118	1230	1436	3549	35746
geography	8	32	68	16	8	56	8	0	196
info. & library se	256	16	118	8	1768	574	424	1680	4844
politicalScience	230	628	1230	56	574	1301	320	800	5139
psychology	182	193	1436	8	424	320	4072	2179	8814
sociology	312	152	3549	0	1680	800	2179	2786	11458
column totals	1256	1816	35746	196	4844	5139	8814	11458	69269

a	nthropology	commun	economics	geograp	info, & I	politica	psycholo	sociology	row totals
anthropology	361	190	190	19	1121	95	0	38	2014
communication	190	3673	512	1072	1784	272	592	332	8427
economics	190	512	197	179	850	86	156	76	2246
geography	19	1072	179	27531	3513	5188	1673	2863	42038
info. & library s	1121	1784	850	3513	4606	965	393	480	13712
politicalScience	95	272	86	5188	965	1002	295	537	8440
psychology	0	592	156	1673	393	295	1302	717	5128
sociology	38	332	76	2863	480	537	717	577	5620
column totals	2014	8427	2246	42038	13712	8440	5128	5620	87625 87625



appendix ii se

Note: colum										
alkakia an (dia	in labels are disc	iplines wh	ose 2009 t	op impa	ct journal:	s were ex	amined; ro	w labels (at l	eft) represen	it
citations/dis	cipline of top 5 i	mpact fac	tor journals	in top j	ournal by	discipline				
asymmetric	matrix citation of	data								
	anthropology	communi	economics	geogra	informati	political9	psycholog	sociology	row total	6ofTotalCited
anthropolog	219	6	0	0	2	0	4	2	233	9.906463
communicat	0	168	0	0	3	0	17	8	196	8.333333
economics	0	2	222	165	18	31	9	17	464	19.72789
geography	0	0	0	189	0	0	0	4	193	8.205782
info&libSci	0	42	0	0	283	0	0	2	327	13.90306
politicalSci	0	13	4	4	2	169	30	14	236	10.03401
psychology	19	10	10	1	59	5	188	2	294	12.5
sociology	0	40	9	17	28	4	4	307	409	17.38946
column tota	238	281	245	376	395	209	252	356	2352	100
col:%ofTota	10.119048	11.95	10.417	16	16.79	8.886	10.714	15.13605	2352	100
remember:	A matrix column	s=cites, n	ows=cited							
"cites" = colur	mn labeled discipli	nes cite rov	abeled disc	iplines (I	for example	anthropol	logy cites ps	ychology four ti	imes)	
"cited" = row	labeled disciplines	are cited b	y column lab	eled disci	plines (for	example a	nthropology	is cited by psyc	hology twice)	
transpose of	f asymmetric ma	trix citatio	on data							
	anthropology	communi	economics	geogra	info. & lit	politicalS	psycholog	sociology	row totals	6ofTotalCited
anthropolog	219	0	0	0	0	0	19	0	238	10.11905
communicat	6	168	2	0	42	13	10	40	281	11.94728
economics	0	0	222	0	0	4	10	9	245	10.41667
geography	0	0	165	189	0	4	1	17	376	15.98639
info. & librar	2	3	18	0	283	2	59	28	395	16.79422
politicalScie	0	0	31	0	0	169	5	4	209	8.886054
psychology	4	17	9	0	0	30	188	4	252	10.71429
sociology	2	8	17	4	2	14	2	307	356	15.13605
column tota	233	196	464	193	327	236	294	409	2352	100
col:%ofTota	9.9064626	8.333	19.728	8.21	13.9	10.03	12.5	17.38946	2352	100
	ACTITACTIX (crains)	pose matr	ix) is colum	ns=cite	d, rows=c	tes				100
	Actinactix (trans)	pose matr	ix) is colum	ns=cite	d, rows=c	tes				100
Symmetric M	Matrix1 (lower tr	pose matr	ix) is colum	ns=cite matrix)	d, rows=c	tes				100
Symmetric N	Matrix1 (lower tr anthropology	iangle of a	ix) is colum symmetric economics	ns=citer matrix) geogra	d, rows=c informati	political	psycholog	sociology	row totals	100
Symmetric M anthropolog	Matrix1 (lower tr anthropology 219	iangle of a communi 0	ix) is colum symmetric economics 0	ns=citer matrix) geogra 0	d, rows=c informati 0	political	psycholog 19	sociology 0	row totals	100
Symmetric M anthropolog communicat	Matrix1 (lower tr anthropology 219 0	iangle of a communi 0 168	ix) is colum asymmetric economics 0 2	matrix) geogra 0	informati 0 42	political 0 13	psycholog 19 10	sociology 0 40	row totals 238 275	100
Symmetric M anthropolog communicat economics	Matrix1 (lower tr anthropology 219 0 0	iangle of a communi 0 168 2	ix) is colum symmetric economics 0 2 222	matrix) geogra 0 0 0	d, rows=c informati 0 42 0	political o	psycholog 19 10 10	sociology 0 40 9	row totals 238 275 247	
Symmetric M anthropolog communicat economics geography	Matrix1 (lower tr anthropology 219 0 0	pose matr iangle of a communi 0 168 2 0	ix) is colum asymmetric economics 0 2 222 0	matrix) geogra 0 0 189	informati 0 42 0	political 0 13 4 4	psycholog 19 10 10	sociology 0 40 9 17	row totals 238 275 247 211	
Symmetric M anthropolog communicat economics geography info&libSci	Matrix1 (lower tr anthropology 219 0 0 0	iangle of a communi 0 168 2 0 42	ix) is colum asymmetric economics 0 2 222 0 0 0	matrix) geogra 0 0 189 0	informati 0 42 0 0 283	political 0 13 4 4 2	psycholog 19 10 10 10 1 59	sociology 0 40 9 17 28	row totals 238 275 247 211 414	
Symmetric ! anthropolog communicat economics geography info&libScl politicalSci	Matrix1 (lower tr anthropology 219 0 0 0 0 0	iangle of a communi 0 168 2 0 42 13	ix) is colum economics 0 2 222 0 0 0 4	matrix) geogra 0 0 189 0 4	d, rows=c	political 0 13 4 4 2 169	psycholog 19 10 10 10 1 59 5	sociology 0 40 9 17 28 4	row totals 238 275 247 211 414 201	
Symmetric ! anthropolog communicat economics geography info&libScl politicalSci psychology	Matrix1 (lower tr anthropology 219 0 0 0 0 0 0 19	iangle of a communi 0 168 2 0 42 13 10	ix) is colum economics 0 2 2222 0 0 0 4 10	matrix) geogra 0 0 189 0 4 1	d, rows=c	tes political 0 13 4 4 4 2 169 5	psycholog 19 10 10 10 59 5 188	sociology 0 40 9 17 28 4 4 4	row totals 238 275 247 211 414 201 296	
Symmetric I anthropolog communicat economics geography info&libScl politicalScl psychology sociology	Matrix1 (lower tr anthropology 219 0 0 0 0 0 0 19 0	pose matri iangle of a communi 0 168 2 0 42 13 10 40	ix) is colum asymmetric economics 0 2 2222 0 0 0 4 4 10 9	matrix) geogra 0 0 189 0 4 1 17	informati 0 42 0 283 2 59 28	political 0 13 4 4 2 169 5 4	psycholog 19 10 10 10 1 59 5 188 4	sociology 0 40 9 17 28 4 4 4 307	row totals 238 275 247 211 414 201 296 409	
Symmetric ! anthropolog communicat economics geography info&libScl politicalScl psychology sociology column tota	Matrix1 (lower tr anthropology 219 0 0 0 0 0 0 0 0 0 0 238	pose matri iangle of a communi 0 168 2 0 42 13 10 40 275	ix) is colum asymmetric economics 0 2 2222 0 0 0 4 10 9 247	ns=citer matrix) geogra 0 0 0 189 0 4 1 17 211	informati 0 42 0 283 2 59 28 414	tes political 1 0 13 4 4 2 169 5 4 201	psycholog 19 10 10 10 1 59 5 188 4 296	sociology 0 40 9 17 28 4 4 307 409	row totals 238 275 247 211 414 201 296 409 2291	
Symmetric I anthropolog communicat economics geography info&libSci politicalSci psychology sociology column tota	Matrix1 (lower tr anthropology 219 0 0 0 0 0 0 0 0 0 238	iangle of a communi 0 168 2 0 42 13 10 40 275	ix) is colum economics 0 2 2222 0 0 4 10 9 247	matrix) geogra 0 0 189 0 4 1 17 211	d, rows=c informati 0 42 0 0 283 2 59 28 414	tes political 0 13 4 4 2 169 5 4 201	psycholog 19 10 10 10 1 59 5 188 4 296	sociology 0 40 9 17 28 4 4 307 409	row totals 238 275 247 211 414 201 296 409 2291 2291	
Symmetric I anthropolog communicat economics geography info&libScl politicalSci psychology sociology column tota	Matrix1 (lower tr anthropology 219 0 0 0 0 0 0 0 0 0 0 238 Matrix 2 (upper t	pose matri iangle of a communi 0 168 2 0 42 13 10 40 275	ix) is colum asymmetric economics 0 2 222 0 0 0 4 10 9 247 asymmetric	matrix) geogra 0 0 189 0 4 1 17 211	informati 0 42 0 283 2 59 28 414	tes political 0 13 4 4 4 2 169 5 4 201	psycholog 19 10 10 10 59 5 188 4 296	sociology 0 40 9 17 28 4 4 307 409	row totals 238 275 247 211 414 201 296 409 2291 2291	
Symmetric I anthropolog communicat economics geography info&libScl politicalSci psychology sociology column tota Symmetric N	Matrix1 (lower tr anthropology 219 0 0 0 0 0 19 0 238 Matrix 2 (upper t anthropology	iangle of a communi 0 168 2 0 42 13 10 40 275	ix) is colum economics 0 2 2222 0 0 0 4 10 9 247 asymmetric economics	matrix) geogra 0 0 189 0 4 1 17 211	informati 0 42 0 0 283 2 59 28 414	political 0 13 4 4 2 169 5 4 201	psycholog 19 10 10 10 19 59 5 188 4 296	sociology 0 40 9 17 28 4 4 307 409 sociology	row totals 238 275 247 211 414 201 296 409 2291 2291 2291	
Symmetric I anthropolog communicat economics geography info&libSci politicalSci psychology sociology column tota Symmetric N	Matrix1 (lower tr anthropology 219 0 0 0 0 0 0 0 0 0 0 238 4atrix 2 (upper t anthropology 219	pose matri iangle of a communi 0 168 2 0 42 13 10 40 275 criangle of communi	ix) is colum economics 0 2 2222 0 0 0 4 10 9 247 247 asymmetric economics	matrix) geogra 0 0 0 189 0 4 1 17 211 211 211 c matrix geogra	d, rows=c informati 0 42 0 0 283 2 59 28 414 414 1 informati	tes political 0 13 4 4 2 169 5 4 201 political 0	psycholog 19 10 10 1 59 5 188 4 296 psycholog 4	sociology 0 40 9 17 28 4 4 307 409 sociology	row totals 238 275 247 211 414 201 296 409 2291 2291 2291 2291	
Symmetric I anthropolog communicat economics geography info&libSci politicalSci psychology sociology column tota Symmetric N anthropolog	Matrix1 (lower tr anthropology 219 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	pose matr iangle of a communi 0 168 2 0 42 13 10 40 275 riangle of communi 6 168	ix) is colum economics 0 2 2222 0 0 0 4 10 9 247 247 asymmetric economics 0 0	matrix) geogra 0 0 0 189 0 0 4 1 17 211 211 211 c matrix geogra 0 0	d, rows=c informati 0 42 0 0 283 2 59 28 414 1 1 informati 2 2 2	tes political 0 13 4 4 2 169 5 4 201 political 0 0 0	psycholog 19 10 10 1 59 5 188 4 296 psycholog 4 17	sociology 0 40 9 17 28 4 4 307 409 sociology 2 8	row totals 238 275 247 211 414 201 296 409 2291 2291 2291 2291 2291	
Symmetric I anthropolog communicat economics geography info&libScl politicalScl psychology sociology column tota Symmetric N anthropolog communicat	Matrix1 (lower tr anthropology 219 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	pose matr iangle of a communi 0 168 2 0 42 13 10 40 275 riangle of communi 6 168	ix) is colum asymmetric economics 0 2 2222 0 0 0 0 4 4 10 9 247 247 asymmetric economics 0 0	matrix) geogra 0 0 0 189 0 4 1 17 211 211 211 c matrix geogra 0 0	d, rows=c informati 0 42 0 0 283 2 59 28 414 informati 2 3 3	tes political 0 13 4 4 2 169 5 4 201 political 0 0 0 0	psycholog 19 10 10 1 59 5 188 4 296 psycholog 4 17 0	sociology 0 40 9 17 28 4 4 307 409 sociology 2 8	row totals 238 275 247 211 414 201 296 409 2291 2291 2291 2291 2291 2291 2291	
Symmetric I anthropolog communicat economics geography info&libScl politicalScl psychology sociology column tota Symmetric N anthropolog communicat economics	Matrix1 (lower tr anthropology 219 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	pose matr iangle of a communi 0 168 2 0 42 13 10 40 275 communi 6 168 0 0	ix) is colum asymmetric economics 0 2 2222 0 0 0 0 4 4 10 9 247 247 asymmetric economics 0 0 0 0 2222	ns-cites matrix) geogra 0 0 0 189 0 4 1 17 211 2711 c matrix geogra 0 0 0 165	d, rows=c informati 0 42 0 283 2 59 28 414) informati 2 3 18	tes political 0 13 4 4 2 169 5 4 201 political 0 0 31	psycholog 19 10 10 1 59 5 188 4 296 psycholog 4 17 9 9	sociology 0 40 9 17 28 4 4 307 409 sociology 2 8 17	row totals 238 275 247 211 414 201 296 409 2291 2291 2291 2291 2291 2291 2291 22	
Symmetric I anthropolog communicat economics geography info&libScl politicalScl psychology sociology column tota Symmetric N anthropolog communicat economics geography	Matrix1 (lower tr anthropology 219 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	pose matr iangle of a communi 0 168 2 0 42 13 10 40 275 communi 6 168 0 0 0	ix) is colum asymmetric economics 0 2 2222 0 0 0 0 4 10 9 247 247 asymmetric economics 0 0 0 222 2165	matrix) geogra 0 0 0 189 0 4 1 1 7 211 211 211 211 200 6 9 0 0 0 0 165 1899	informati 0 42 0 283 2 59 28 414 1 1 informati 2 3 1 8 0	tes political 1 0 13 4 4 2 169 5 4 201 political 1 0 0 0 31 0 0	psycholog 19 10 10 10 11 59 5 188 4 296 296 296 4 177 9 0 0	sociology 0 40 9 17 28 4 4 307 409 sociology 2 8 17 4	row totals 238 275 247 211 414 201 296 409 2291 2291 2291 2291 2291 2291 2291 22	
Symmetric I anthropolog communicat economics geography info&libSci politicalSci psychology sociology column tota Symmetric N anthropolog communicat economics geography info&libSci	Matrix1 (lower tr anthropology 219 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	pose matri iangle of a communi 0 168 2 0 42 13 10 40 275 communi 6 168 0 0 0 3 3	ix) is colum asymmetric economics 0 2 2222 0 0 0 4 10 9 247 247 247 247 247 247 247 247 247 247	matrix) geogra 0 0 0 189 0 4 1 1 7 211 211 211 211 200 6 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	d, rows=c informati 0 42 0 283 22 59 28 414 11 11 2 3 18 0 283	tes political 1 13 4 4 2 169 5 4 201 political 1 0 0 31 0 0	psycholog 19 10 10 10 11 59 5 188 4 296 296 4 177 9 0 0	sociology 0 40 9 17 28 4 4 307 409 sociology 2 8 17 4 2 8	row totals 238 275 247 211 414 201 296 409 2291 2291 2291 2291 2291 2291 2291 22	
Symmetric I anthropolog communicat economics geography info&libScl politicalSci psychology sociology column tota Symmetric N anthropolog communicat economics geography info&libScl politicalSci	Matrix1 (lower tr anthropology 219 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	pose matri iangle of a communi 0 168 2 0 42 13 10 40 275 communi 6 168 0 0 0 3 0	ix) is colum asymmetric economics 0 2 2222 0 0 0 4 10 9 247 247 247 247 247 247 247 247 247 247	matrix) geogra 0 0 0 189 0 4 1 17 211 211 211 211 200 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	d, rows=c informati 0 42 0 283 22 59 28 414 10 10 10 283 18 0 283 0 0 283 0 0 0 0 0 0 0 0 0 0 0 0 0	tes political 0 13 4 4 2 169 5 4 201 political 0 0 0 0 13 0 0 0 0 0 13 13 13 13 13 13 13 13 13 13	psycholog 19 10 10 10 1 59 5 188 4 296 296 296 296 296 296 296 296 296 296	sociology 0 40 9 17 28 4 4 307 409 sociology 2 8 17 4 2 8 17 4 17 4 2 17 4 17 4 17 17 17 17 17 17 17 17 17 17	row totals 238 275 247 211 414 201 296 409 2291 2291 2291 2291 2291 2291 2291 22	
Symmetric I anthropolog communicat economics geography info&libScl politicalSci psychology sociology column tota <u>Symmetric N</u> anthropolog communicat economics geography info&libScl politicalSci psychology	Matrix1 (lower tr anthropology 219 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	pose matri iangle of a communi 0 168 2 0 42 13 10 40 275 communi 6 168 0 0 0 3 0 0 17	ix) is colum asymmetric economics 0 2222 0 0 0 4 10 9 247 247 247 247 247 247 247 247 247 247	matrix) geogra 0 0 189 0 4 1 17 211 211 211 211 211 211 211 9 c matrix geogra 0 0 0 165 189 0 0 0 0	d, rows=c informati 0 42 0 0 283 28 414 1 informati 2 3 18 0 283 0 0 0 0 0 0 0 0 0 0 0 0 0	tes political 0 13 4 4 2 169 5 4 201 political 0 0 0 31 0 0 0 169 30	psycholog 19 10 10 10 10 19 59 5 188 4 296 296 296 296 296 296 296 296 296 296	sociology 0 40 9 17 28 4 4 307 409 sociology 2 8 17 4 2 8 17 4 2 14 2	row totals 238 275 247 211 414 201 296 409 2291 2291 2291 2291 2291 2291 2291 22	
Symmetric I anthropolog communicat economics geography info&libScl politicalSci psychology sociology column tota Symmetric N anthropolog communicat economics geography info&libScl politicalSci psychology sociology	Matrix1 (lower tr anthropology 219 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	pose matri iangle of a communi 0 168 2 0 42 13 10 40 275 communi 6 168 0 0 0 3 0 0 17 8	ix) is colum asymmetric economics 0 2222 0 0 0 4 10 9 247 247 247 247 247 247 247 247 247 247	matrix) geogra 0 0 189 0 189 0 4 1 17 211 17 211 17 211 211 211 0 0 0 0 165 189 0 0 0 0 0 4	d, rows=c informati 0 42 0 0 283 28 414 informati 2 3 18 0 283 0 0 283 0 283 0 283 0 283 0 283 0 283 0 283 0 283 285 285 285 285 285 285 285 285	tes political 0 13 4 4 2 169 5 4 201 political 0 0 0 0 31 0 0 0 169 30 14	psycholog 19 10 10 10 10 10 19 59 5 188 4 296 2 5 5 188 4 296 2 9 9 0 0 0 30 188 2	sociology 0 40 9 17 28 4 4 307 409 sociology 2 8 17 40 2 8 17 40 307 307 307 307 307 307 307 30	row totals 238 275 247 211 414 201 296 409 2291 2291 2291 2291 2291 2291 2291 22	
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Appendix W-5d

2009 WITH self citation

means of upper/lower triangles from assymetric matrix values (this matrix is symmetric)

	anthropology	communi	beconomics	geogra	dinfo, & lit	politicals	psycholog	sociology	row totals
anthropology	219	3	0	0	1	0	11.5	1	235.5
communicat	3	168	1	0	22.5	6.5	13.5	24	238.5
economics	0	1	222	82.5	9	17.5	9.5	13	354.5
geography	0	.0	82.5	189	0	2	0.5	10.5	284.5
info, & librar	1	22.5	9	0	283	1	29.5	15	361
politicalScier	0	6.5	17.5	2	1	169	17.5	9	222.5
psychology	11.5	13.5	9.5	0.5	29.5	17.5	188	3	273
sociology	1	24	13	10.5	15	9	3	307	382.5
column total	235.5	238.5	354.5	284.5	361	222.5	273	382.5	

absolute value differences of upper/lower triangles from assymetric matrix values (this matrix is symmetric).

	anthropology	communi	economics	geogra	info. & lit	politicals	psycholog	sociology	row totals
anthropolog	219	6	0	0	2	0	15	2	244
communicat	6	168	2	0	39	13	7	32	267
economics	0	2	222	165	18	27	1	8	443
geography	0	0	165	189	0	4	1	13	372
info. & librar	2	39	18	0	283	2	59	26	429
politicalScier	0	13	27	- 4	2	169	25	10	250
psychology	15	7	1	1	59	25	188	2	298
sociology	2	32	8	13	26	10	2	307	400
column total	244	267	443	372	429	250	298	400	2703

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	anthropology	communi	economics	geogra	info. & lib	politicalS	psycholog	sociology	row totals
anthropolog	48021	1098	118	8	822	230	5095	926	56318
communicat	1098	28586	679	32	7921	2812	5069	9328	55525
economics	118	679	78168	31253	5212	7357	5348	10766	138901
geography	8	32	31253	35737	8	812	197	4441	72488
info. & librar	822	7921	5212	8	81857	1140	17121	10218	124299
politicalScier	230	2812	7357	812	1140	29862	6805	5774	54792
psychology	5095	5069	5348	197	17121	6805	39416	3545	82596
sociology	926	9328	10766	4441	10218	5774	3545	97035	142033
column tota	56318	55525	138901	72488	124299	54792	82596	142033	726952 726952

Matrix produ	ct At*A (ore m	(beildiffu							
	anthropology	communi	economics	geogra	info. & lit	political5	psycholog	sociology	row totals
anthropolog	48322	1504	190	19	1559	95	4448	476	56613
communicat	1504	31897	956	1072	14174	2469	5328	13956	71356
economics	190	956	49481	36809	4846	7644	4034	6613	110573
geography	19	1072	36809	63252	3513	5864	1861	8838	121228
info. & librar	1559	14174	4846	3513	84695	1303	11485	9642	131217
politicalScier	95	2469	7644	5864	1303	29563	6305	4131	57374
psychology	4448	5328	4034	1861	11485	6305	36646	2321	72428
sociology	476	13956	6613	8838	9642	4131	2321	94826	140803
column total	56613	71356	110573	1E+05	131217	57374	72428	140803	761592


Note column tabel: and incipilines whose 93% to impact journals were examined: row tables (at left) represent citations/discipline of top 5 anthrepology communia economics geograph row total col TotalCited anthrepology 0 7 1 0 0 3 3 14 3.0090991 communiati 0 0 0 2 0 3 7 12 7.72207723 geograph 1 0 <	WITHOUT SE	LF CITATIONS									
argmentio matrix olation data anthropology communication provided informatic politicals' psychology sociology row total Sociology row total Sociology anthropology communication Communication Communication Sociology row total Sociology Communication <	Note: column	labels are discipli	ı ines whose	1979 top imp	act iourn	als were ex	amined: ro	ow labels (at	left) represent	citations/disc	ipline of top 5
argmentiomatik okation data anthropolog communication of the second	impact factor	journals in top jo	urnal by dis:	cipline.	aoripan				ien, represent	011011010100	pinte or top o
anthropologic anthropologic communication communic economics 0 percent 0 o <th< td=""><td>esummetric m</td><td>· · · · · · · · · · · · · · · · · · ·</td><td>,</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	esummetric m	· · · · · · · · · · · · · · · · · · ·	,								
anthropolog original	asymmetric	anthropology	communic	economics	neonrar	informatio	noliticalS	nsucholog	sociologu	row total	%ofTotalCited
communication 0 0 0 2 0 3 7 12 7.782207782 economics 0 <	anthropology	0	0	7	1	0	0	3	3	14	9.090909091
economics 0 0 4 0 2 0 33 23.3786233 geograph 1 0 </td <td>communicati</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>2</td> <td>0</td> <td>3</td> <td>7</td> <td>12</td> <td>7.792207792</td>	communicati	0	0	0	0	2	0	3	7	12	7.792207792
geograph 1 0<	economics	0	0	0	4	0	2	0	30	36	23.37662338
Book of the second se	geograph	1	0	0	0	0	0	0	2	2	1949051949
Inclusion 0	info&libSci		0	0	0	0	0	0		0	1.040001040
projection 0 <th0< td=""><td>noliticalSci</td><td>0</td><td>2</td><td>24</td><td>0</td><td>0</td><td>0</td><td>1</td><td>17</td><td>44</td><td>28 57142857</td></th0<>	noliticalSci	0	2	24	0	0	0	1	17	44	28 57142857
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construction intervention interventon intervention intervention </td <td>col%ofTotal</td> <td>1298701299</td> <td>14 28571</td> <td>20 12987</td> <td>5 8442</td> <td>3 24675</td> <td>4 54545</td> <td>7 142857</td> <td>43 50649351</td> <td>154</td> <td>100</td>	col%ofTotal	1298701299	14 28571	20 12987	5 8442	3 24675	4 54545	7 142857	43 50649351	154	100
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Odminutation O <t< td=""><td>anthropology</td><td>0</td><td>0</td><td>0</td><td>1</td><td>0</td><td>0</td><td>1</td><td>0</td><td>2</td><td>1.298701299</td></t<>	anthropology	0	0	0	1	0	0	1	0	2	1.298701299
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col:xofTotal 9.0909091 7.792208 23.376623 1.9481 0 28.5714 12.33766 16.88311688 154 100 remember: At matrix (transpose matrix) is columns=cited, rows-cites anthropology oommunice geographic file <	column totals	14	12	36	3	0	44	19	26	154	100
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economics 0 0 0 0 24 0 0 24 geography 1 0 0 0 0 0 0 0 3 0 3 info&libSci 0 0 0 0 0 0 0 3 0 3 politicalSci 0 2 24 0 0 0 0 5 31 psychology 1 7 0 0 3 0 4 15 sociology 0 13 0 4 0 5 4 0 26 column totals 2 22 24 5 3 31 15 26 128 sociology 0 13 0 4 0 0 128 128 symmetric Matrix 2 (upper triangle of asymmetric matrix) anthropology communic economics geography 1 0 0 3 3 14	communicati	0	0	0	0	0	2	7	13	22	
geography 1 0 0 0 0 0 4 5 info&libSci 0 0 0 0 0 0 3 0 3 politicalSci 0 2 24 0 0 0 3 0 3 psychology 1 7 0 0 3 0 4 15 sociology 0 13 0 4 0 5 4 0 26 column totals 2 22 24 5 3 31 15 26 128 symmetric Matrix 2 (upper triangle of asymmetric matrix)	economics	0	0	0	0	0	24	0	0	24	
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psychology 1 7 0 0 3 0 0 4 15 sociology 0 13 0 4 0 5 4 0 26 column totals 2 22 24 5 3 31 15 26 128 Symmetric Matrix 2 (upper triangle of asymmetric matrix) anthropology communic economics geograph informatic political s psychology sociology row totals anthropology 0 0 7 1 0 0 3 14 communicati 0 0 0 2 0 3 14 geography 1 0 4 0 2 0 33 14 political Sci 0 0 2 0 33 14 2 geography 1 0 4 0 0 0 2 7 info&ibSci 0 0 <td< td=""><td>politicalSci</td><td>0</td><td>2</td><td>24</td><td>0</td><td>0</td><td>0</td><td>0</td><td>5</td><td>31</td><td></td></td<>	politicalSci	0	2	24	0	0	0	0	5	31	
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communicati 0 0 0 0 2 0 3 7 12 economics 7 0 0 4 0 2 0 3 7 12 geography 1 0 4 0 2 0 30 43 geography 1 0 4 0 0 0 2 7 info&libSci 0 2 0 0 0 0 2 7 politicalSci 0 0 0 0 0 0 2 7 politicalSci 0 0 2 0 0 0 117 20 psychology 3 3 0 0 0 11 17 20 sociology 3 7 30 2 0 17 8 0 67 column totals 14 12 43 7 2 20	anthropology	0	0	7	1	0	0	3	3	14	
economics 7 0 0 4 0 2 0 30 43 geography 1 0 4 0 0 0 2 7 info&libSci 0 2 0 0 0 0 2 7 politicalSci 0 0 2 0 0 0 1 17 20 psychology 3 3 0 0 0 1 17 20 sociology 3 7 30 2 0 17 8 0 67 column totals 14 12 43 7 2 20 15 67 180	communicati	0	0	0	0	2	0	3	7	12	
geography 1 0 4 0 0 0 2 7 info&libSci 0 2 0 0 0 0 0 2 7 politicalSci 0 0 0 0 0 0 0 2 7 politicalSci 0 0 2 0 0 0 11 17 20 psychology 3 3 0 0 0 1 0 8 15 sociology 3 7 30 2 0 17 8 0 67 column totals 14 12 43 7 2 20 15 67 180	economics	7	0	0	4	0	2	0	30	43	
info&libSci 0 2 0 0 0 0 2 politicalSci 0 0 2 0 0 0 1 17 20 psychology 3 3 0 0 0 1 0 8 15 sociology 3 7 30 2 0 17 8 0 67 column totals 14 12 43 7 2 20 15 67 180	geography	1	0	4	0	0	0	0	2	7	
politicalSci 0 0 2 0 0 1 17 20 psychology 3 3 0 0 0 1 17 20 psychology 3 3 0 0 0 1 0 8 15 sociology 3 7 30 2 0 17 8 0 67 column total 14 12 43 7 2 20 15 67 180	info&libSci	0	2	0	0	0	0	0	0	2	
psychology 3 3 0 0 1 0 8 15 sociology 3 7 30 2 0 17 8 0 67 column totals 14 12 43 7 2 20 15 67 180	politicalSci	0	0	2	0	0	0	1	17	20	
sociology 3 7 30 2 0 17 8 0 67 column totals 14 12 43 7 2 20 15 67 180	psychology	3	3	0	0	0	1	0	8	15	
column totals 14 12 43 7 2 20 15 67 180	sociology	3	7	30	2	0	17	8	0	67	
	column totals	14	12	43	7	2	20	15	67	180	
									15	180	

Appendix X-1a



Appendix X-1b

1979 WITHOUT self citations means of upper/lower triangles from assymetric matrix values (this matrix is symmetric)

	anthropology	communi	economics	geogra	info. & lit	politicals	psycholog	sociology	row totals
anthropolog	0	0	3.5	1	0	0	2	1.5	8
communicat	0	0	0	0	1	1	5	10	17
economics	3.5	0	0	2	0	13	0	15	33.5
geography	1	0	2	0	0	0	0	3	6
info. & librar	0	1	0	0	0	0	1.5	0	2.5
politicalScier	0	1	13	0	0	0	0.5	11	25.5
psychology	2	5	0	0	1.5	0.5	0	6	15
sociology	1.5	10	-15	3	0	11	6	0	46.5
column total	8	17	33.5	6	2.5	25.5	15	46.5	

absolute value differences of upper/lower triangles from assymetric matrix values (this matrix is symmetric).

	anthropology	communi	economics	geogra	info. & lit	politicalS	psycholog	sociology	row totals
anthropolog	0	0	7	0	0	0	2	3	12
communicat	0	0	0	0	2	2	4	6	14
economics	7	0	0	- 4	0	22	0	30	63
geography	0	0	4	0	0	0	0	2	6
info. & librar	0	2	0	0	0	0	3	0	5
politicalScier	0	2	22	0	0	0	1	12	37
psychology	2	4	0	0	3	1	0	4	14
sociology	3	6	30	2	0	12	4	0	57
column total	12	14	63	6	5	37	14	57	208

	anthropology	communi	economics	geogra	info. & lit	politicalS	psycholog	sociology	row totals
anthropolog	68	30	94	6	0	222	24	16	460
communicat	30	62	210	14	0	122	62	12	512
economics	94	210	920	60	0	510	240	26	2060
geography	6	14	60	5	0	34	17	0	136
info, & librar	0	0	0	0	0	0	0	0	0
politicalScier	222	122	510	34	0	870	150	30	1938
psychology	24	62	240	17	0	150	123	91	707
sociology	16	12	26	0	0	30	91	226	401
column total	460	512	2060	136	0	1938	707	401	6214

	anthropology	communi	economics	geogra	info. & lit	politicalS	psycholog	sociology	row totals
anthropolog	2	7	0	0	3	0	0	10	22
communicat	7	222	48	52	21	65	54	90	559
economics	0	48	625	7	0	0	45	429	1154
geography	0	52	7	33	0	28	19	123	262
info. & librar	3	21	0	0	13	0	6	38	81
politicalScier	0	65	0	28	0	29	20	60	202
psychology	0	54	45	19	6	20	35	47	226
sociology	10	90	429	123	38	60	47	1315	2112
column total	22	559	1154	262	81	202	226	2112	4618



WITH SELF (CITATIONS									
Note: colum	n labels are disc	iplines wh	ose 1979 to	p impac	t iournals	were exa	mined: ro	w labels (at le	ft) represent	t
citations/dis	cipline of top 5 i	mpact fac	tor journals	in top jo	ournal by	discipline				
asymmetric	matrix citation d	lata								
asymmetric	anthropology	commun	economic	geogra	information	political	psycholo	sociology	row total	6 of Total Cited
anthropolo	436	0	7	1	0	0	3	3	450	31.293463
communica	0	34	0	0	2	0	3	7	46	3.1988873
economics	0	0	150	4	0	2	0	30	186	12.934631
geography	1	0	0	16	0	0	0	2	19	1.3212796
info&libSci	0	0	0	0	21	0	0	0	21	1.4603616
politicalSci	0	2	24	0	0	25	1	17	69	4.798331
psychology	1	7	0	0	3	0	162	8	181	12.586926
sociology	0	13	0	4	0	5	4	440	466	32.40612
column total	438	56	181	25	26	32	173	507	1438	100
col:%ofTotal	30 4589708	3 8943	12 5869	1 74	1 8081	2 225	12 031	35 257302	1438	100
201. 3001101201	30.4303700	5.0545	12.5005	1.74	1.0001	2.225	12.001	55.257502	1450	100
remember:	A matrix column	e-cites r	owe-cited							
"cites" = colur	nn labeled discipli	nes cite row	/ labeled disci	plines (f	or example	anthropol	oav cites psy	chology four tir	mes)	
"cited" = row	labeled disciplines	are cited b	y column labe	eled disci	plines (for e	example an	thropology i	is cited by psych	hology twice)	
transpose of	asymmetric ma	trix citatio	n data							
	anthropology	communi	economics	geogra	info. & lib	politicalS	psycholog	sociology	row totals	6 of Total Cited
anthropolog	436	0	0	1	0	0	1	0	438	30.458971
communicat	0	34	150	0	0	2		13	55	3.8942976
geography	/	0	150	16	0	24	0	4	181	1 7385257
info, & librar	0	2		10	21	0	3		25	1.8080668
politicalScier	0	0	2	0	0	25	0	5	32	2.2253129
psychology	3	3	0	0	0	1	162	4	173	12.030598
sociology	3	7	30	2	0	17	8	440	507	35.257302
column total	450	46	186	19	21	69	181	466	1438	100
col:%ofTotal	31.2934631	3.1989	12.9346	1.32	1.4604	4.798	12.587	32.40612	1438	100
remember: /	At matrix (trans	pose matr	ix) is colum	ns=cited	l, rows=ci	tes				
Symmetric N	Atrix1 (lower tr	iangle of a	symmetric	matrix)						
<u>oynineene i</u>	anthropology	communi	economics	geogra	informati	political	psycholog	sociology	row totals	
anthropolog	436	0	0	1	0	0	1	0	438	
communicat	0	34	0	0	0	2	7	13	56	
economics	0	0	150	0	0	24	0	0	174	
geography	1	0	0	16	0	0	0	4	21	
info&libSci	0	0	0	0	21	0	3	0	24	
politicalSci	0	2	24	0	0	25	0	5	56	
psychology	1	7	0	0	3	0	162	4	177	
sociology	0	13	0	4	0	5	4	440	466	
column total	438	56	174	21	24	56	177	466	1412	
									1412	
Symmetric N	Aatrix 2 (upper t	riangle of	asymmetric	matrix)	2					
	anthropology	communi	economics	geogra	informati	political	psycholog	sociology	row totals	
anthropolog	436	0	7	1	0	0	3	3	450	
communicat	0	34	0	0	2	0	3	7	46	
economics	7	0	150	4	0	2	0	30	193	
geography	1	0	4	16	0	0	0	2	23	
info&libSci	0	2	0	0	21	0	0	0	23	
politicalSci	0	0	2	0	0	25	1	17	45	
psychology	3	3	0	0	0	1	162	8	177	
sociology	3	7	30	2	0	17	8	440	507	
column total	450	46	193	23	23	45	177	507	1464	
									1464	

Appendix X-1c



Appendix X-1d

1979 WITH self citation means of upper/lower triangles from assymetric matrix values (this matrix is symmetric)

	anthropology	communi	economics	geogra	info. & lit	politicals	psycholog	sociology	row totals
anthropolog	436	0	3.5	1	0	0	2	1.5	444
communicat	0	34	0	0	1	1	5	10	51
economics	3.5	0	150	2	0	13	0	15	183.5
geography	1	0	2	16	0	0	0	3	22
info. & librar	0	1	0	0	21	0	1.5	0	23.5
politicalScier	0	1	13	0	0	25	0.5	11	50.5
psychology	2	5	0	0	1.5	0.5	162	6	-177
sociology	1.5	10	15	3	0	11	6	440	486.5
column total	444	51	183.5	22	23.5	50.5	177	486.5	

absolute value differences of upper/lower triangles from assymetric matrix values (this matrix is symmetric).

	anthropology	communi	economics	geogra	Info. & lit	politicalS	psycholog	sociology	row totals
anthropolog	436	0	7	0	0	0	2	3	448
communicat	0	34	0	0	2	2	4	6	48
economics	7	0	150	4	0	22	0	30	213
geography	0	0	4	16	0	0	0	2	22
info. & librar	0	2	0	0	21	0	3	0	26
politicalScie	0	2	22	0	0	25	1	12	62
psychology	2	4	0	0	3	1	162	4	176
sociology	3	6	30	2	0	12	4	440	497
column total	448	48	213	22	26	62	176	497	1492

	anthropology	communi	economics	oeoora	info 8 lit	politicals	osycholog	sociology	row totals
	ununoporogy	communan	CCONTONIECS	geogra	and. of the	ponocaio	psycholog	sociology	Ton totals
anthropolog	190164	- 30	1144	458	0	222	946	1335	194300
communicat	30	1218	210	14	42	190	786	3534	6024
economics	1144	210	23420	124	0	4160	240	13226	42524
geography	458	14	124	261	0	34	17	944	1852
info. & librar	0	42	0	0	441	0	63	0	546
politicalScie	222	190	4160	34	0	1495	312	7635	14048
psychology	946	786	240	17	63	312	26367	4259	32990
sociology	1336	3534	13226	944	0	7635	4259	193826	224760
column tota	194300	6024	42524	1852	546	14048	32990	224760	517044 517044

	anthropology	communi	economics	geogra	info, & lit	politicalS	psycholog	sociology	row totals
anthropolog	190098	7	3052	452	3	0	1470	1318	196400
communicat	7	1378	48	52	89	115	1290	6048	9027
economics	3052	48	23125	607	0	900	45	4929	32706
geography	452	52	607	289	0	28	19	1915	3362
info. & librar	3	89	0	0	454	0	492	38	1076
politicalScier	0	115	900	28	0	654	45	2685	4427
psychology	1470	1290	45	19	492	45	26279	3103	32743
sociology	1318	6048	4929	1915	38	2685	3103	194915	214951
column total	196400	9027	32706	3362	1076	4427	32743	214951	494692



Appendix X-2a

WITHOUT SI	ELF CITATIONS									
Note: colum	n labels are disc	iplines wh	ose 1980 to	op impa	t journals	were ex	amined; ro	w labels (at l	eft) represer	t
citations/dis	cipline of top 5 i	mpact fac	tor journals	in top j	ournal by	discipline				
asymmetric	matrix citation of	data								
	anthropology	commun	economic	geogra	informa	politica	psycholo	sociology	row total	6ofTotalCited
anthropolo	0	0	0	2	0	0	0	4	6	3.092784
communic	0	0	0	0	9	0	1	9	19	9.793814
economics	0	0	0	15	0	1	17	24	57	29.38144
geography	0	0	0	0	0	0	0	3	3	1.546392
info&libSci	0	0	0	0	0	0	0	0	0	0
politicalSci	0	4	18	2	0	0	8	18	50	25.7732
psychology	0	4	1	0	3	0	0	6	14	7.216495
sociology	0	7	3	8	0	0	27	0	45	23.19588
column tota	0	15	22	27	12	1	53	64	194	100
col:%ofTota	0	7.732	11.34	13.9	6.186	0.515	27.32	32.98969	194	100
remember:	A matrix column	is=cites, n	ows=cited	lallana di				and a state of the second		
"cites" = colu	Inn labeled disciplines	are cited b	v labeled disc	iplines (i elect disci	or example olines (for)	example a	ogy cites ps	is cited by new	imes) theleau twice)	
cited = row	labeled disciplines	are cited b	y column iao	elea aisci	prines (ror i	example a	tairopology	is clied by psyc	nology (whoe)	
transpose of	asymmetric ma	trix citatio	on data							
	anthropology	communi	economics	geogra	info. & lit	politicalS	psycholog	sociology	row totals	6ofTotalCited
anthropolog	0	0	0	0	0	0	0	0	0	0
communicat	0	0	0	0	0	4	4	7	15	7.731959
economics	0	0	0	0	0	18	1	3	22	11.34021
geography info_& librar	2	0	15	0	0	2	3	8	12	6 185567
politicalScie	0	0	1	0	0	0	0	0	12	0.515464
psychology	Ő	1	17	Ő	Ő	8	Ő	27	53	27.31959
sociology	4	9	24	3	0	18	6	0	64	32.98969
column tota	6	19	57	3	0	50	14	45	194	100
col:%ofTota	3.0927835	9.794	29.381	1.55	0	25.77	7.2165	23.19588	194	100
remember:	At matrix (trans	pose matr	ix) is colum	ns=cite	d, rows=c	ites				
Symmetric M	Aatrix1 (lower tr	iangle of a	symmetric	matrix)						
	anthropology	communi	economics	geogra	informati	political	psycholog	sociology	row totals	
anthropolog	0	0	0	0	0	0	0	0	0	
communicat	0	0	0	0	0	4	4	7	15	
economics	0	0	0	0	0	18	1	3	22	
geography	0	0	0	0	0	2	0	8	10	
info&libSci	0	0	0	0	0	0	3	0	3	
politicalSci	0	4	18	2	0	0	0	0	24	
psychology	0	4	1	0	3	0	0	27	35	
sociology	0	7	3	8	0	0	27	0	45	
column tota	0	15	22	10	3	24	35	45	154	
									154	
Symmetric A	Astrix 2 (upper l	riangle of	acummatel	mately	1					
aymmetric i	anthropology	communi	economics	deoora	/ informati	political	psycholog	sociology	row totals	
anthropolog	0	0	0	2	0	0	0	4	6	
communicat	0	0	Ő	0	9	0	1	9	19	
economics	0	0	0	15	0	1	17	24	57	
geography	2	0	15	0	0	0	0	3	20	
info&libSci	0	9	0	0	0	0	0	0	9	
politicalSci	0	0	1	0	0	0	8	18	27	
psychology	0	1	17	0	0	8	0	6	32	
sociology	4	9	24	3	0	18	6	0	64	
column tota	6	19	57	20	9	27	32	64	234	
									234	



Appendix X-2b

1980 WITHOUT self citation

means of upper/lower triangles from assymetric matrix values (this matrix is symmetric)

	anthropology	communi	economics	geogra	info. & lit	politicals	psycholog	sociology	row totals
anthropolog	0	0	0	1	0	0	0	2	3
communicat	0	0	0	0	4.5	2	2.5	8	17
economics	0	0	0	7.5	0	9.5	9	13.5	39.5
geography	1	0	7.5	0	0	1	0	5.5	15
info. & librar	0	4.5	0	0	0	0	1.5	0	6
politicalScier	0	2	9.5	1	0	0	4	9	25.5
psychology	0	2.5	9	0	1.5	4	0	16.5	33.5
sociology	2	8	13.5	5.5	0	9	16.5	0	54.5
column total	3	17	39.5	15	6	25.5	33.5	54.5	194

absolute value differences of upper/lower triangles from assymetric matrix values (this matrix is symmetric)

	anthropology	communi	economics	geogra	info. & li	politicals	psycholog	sociology	row totals
anthropolog	0	0	0	2	0	0	0	4	6
communicat	0	0	0	0	. 9	4	3	2	18
economics	0	0	0	15	0	17	16	21	69
geography	2	0	15	0	0	2	0	5	24
info. & librar	0	9	0	0	0	0	3	0	12
politicalScier	0	4	17	2	0	0	8	18	49
psychology	0	3	16	0	3	8	0	21	51
sociology	4	2	21	5	0	18	21	0	71
column total	6	18	69	24	12	49	51	71	300

Matrix	product	A*At (post mulitipli	ed)

the second										
	anthropology	communi	economics	geogra	info. &	lit	politicals	psycholog	sociology	row totals
anthropolog	20	36	126	12		0	76	24	16	310
communicat	36	163	233	27	1	0	170	81	27	737
economics	126	233	1091	72		0	598	144	579	2843
geography	12	27	72	9		0	54	18	0	192
info. & librar	0	0	0	0		0	0	0	0	0
politicalScier	76	170	598	54		0	732	142	314	2086
psychology	24	81	144	18		0	142	62	31	502
sociology	16	27	579	0		0	314	31	851	1818
column total	310	737	2843	192		0	2086	502	1818	8488

	anthropology	communi	economics	geogra	info. & lit	politicals	psycholog	sociology	row totals
anthropology	0	0	0	0	0	0	0	0	0
communicat	0	81	97	64	12	0	221	96	571
economics	0	97	334	60	3	0	225	330	1049
geography	0	64	60	297	0	15	487	404	1327
info. & librar	0	12	3	0	90	0	9	99	213
politicalScier	0	0	0	15	0	1	17	24	57
psychology	0	221	225	487	9	17	1083	561	2603
sociology	0	96	330	404	99	24	561	1042	2556
column total	0	571	1049	1327	213	57	2603	2556	8376 8376



Appendix	X-2c
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WITH SELF (CITATIONS										ſ
Note: column labels are disciplines whose 1980 top impact journals were examined: row labels (at left) represent											
citations/dis	cipline of top 5	mpact fac	tor journals	in top j	ournal by	discipline					
asymmetric	matrix citation of	lata									-
	anthropology	commun	economic	geogra	informa	politica	psycholo	sociology	row total	6ofTotalCited	Ē
anthropolo	57	0	0	2	0	0	0	4	63	5.550661	ſ
communic	0	58	0	0	9	0	1	9	77	6.784141	ſ
economics	0	0	155	15	0	1	17	24	212	18.67841	ſ
geography	0	0	0	44	0	0	0	3	47	4.140969	Ĩ
info&libSci	0	0	0	0	6	0	0	0	6	0.528634	ľ
politicalSci	0	4	18	2	0	4	8	18	54	4.757709	ſ
psychology	0	4	1	0	3	0	134	6	148	13.03965	ſ
sociology	0	7	3	8	0	0	27	483	528	46.51982	ſ
column tota	57	73	177	71	18	5	187	547	1135	100	ſ
col:%ofTota	5.0220264	6.432	15.595	6.26	1.586	0.441	16.476	48.19383	1135	100	ľ
remember:	A matrix column	s=cites, n	ows=cited								
"cites" = colur	mn labeled discipli	nes cite row	v labeled disc	iplines (I	for example	anthropol	ogy cites ps	ychology four ti	imes)		Ē
"cited" = row	labeled disciplines	are cited b	y column lab	eled disci	plines (for	example ar	nthropology	is cited by psyc	hology twice)		Ĺ
											L
transpose of	asymmetric ma	trix citatio	on data		info 8 lit	nelitical	noveholog	cociology	row totals	Coffee Cited	
anthropolog	anthropology 57	communi	economics	geogra	inio. a ili	politicals	psycholog	sociology	TOW LOLAIS	5.022026	ŀ
communicat	0	58	0	ő	0	4	4	7	73	6.431718	
economics	0	0	155	Ő	0	18	1	3	177	15.59471	
geography	2	0	15	44	0	2	0	8	71	6.255507	ſ
info. & librar	0	9	0	0	6	0	3	0	18	1.585903	Ē
politicalScie	0	0	1	0	0	4	0	0	5	0.440529	Ē
psychology	0	1	17	0	0	8	134	27	187	16.47577	
sociology	4	9	24	3	0	18	6	483	547	48.19383	L
column tota	63	77	212	47	6	54	148	528	1135	100	Ŀ
col: %of lota	5.5506608	6.784	18.678	4.14	0.529	4.758	13.04	46.51982	1135	100	-
remember:	At matrix (trans	pose matr	ix) is colum	ns=cite	a, rows=c	ites					-
											Ē
Symmetric N	Matrix1 (lower tr	iangle of a	asymmetric	matrix)							
	anthropology	communi	economics	geogra	informati	political	psycholog	sociology	row totals		
anthropolog	57	0	0	0	0	0	0	0	57		
communicat	0	58	0	0	0	4	4	7	73		
economics	0	0	155	0	0	18	1	3	177		-
geography	0	0	0	44	0	2	0	8	54		1
info&libSci	0	0	0	0	6	0	3	0	9		L
politicalSci	0	4	18	2	0	4	0	0	28		-
psychology	0	4	1	v	3	0	134	21	169		-
sociology	0	7	3	8	0	0	27	483	528		L
column tota	57	73	177	54	9	28	169	528	1095		
Symmetric N	Matrix 2 (upper 1	triangle of	asymmetric	c matrix)						L
	anthropology	communi	economics	geogra	Informati	political	psycholog	sociology	row totals		-
anthropolog	57	0	0	2	0	0	0	4	63		-
communicat	0	58	0	0	9	0	1	9	//		-
economics	0	0	155	15	0	1	17	24	212		ŀ
geography	2	0	15	44	0	0	0	3	64		-
politicalSci	0	9	0	0	6	0	0	10	15		-
pointicalaci	0	1	17	0	0	4	134	18	166		-
cacialacau		1	24	2	-	10	1.04	400	E47		-
column tota	4	77	24	54	15	18	165	483	547		-
0000			616	~	1.5		100	547	1175		-
									11/5		



Appendix X-2d

1980 WITH self citation

means of upper/lower triangles from assymetric matrix values (this matrix is symmetric)

anthr	opology	communi	economics	geogra	info. & lit	politicals	psycholog	sociology	row totals
anthropolog	57	0	0	1	0	0	0	2	60
communicat	0	58	0	0	4.5	2	2.5	8	75
economics	0	0	155	7.5	0	9.5	9	13.5	194.5
geography	1	0	7.5	44	0	1	0	5.5	59
info. & librar	0	4.5	0	0	6	0	1.5	0	12
politicalScier	0	2	9.5	1	0	4	4	9	29.5
psychology	0	2.5	9	0	1.5	4	134	16.5	167.5
sociology	2	8	13.5	5.5	0	9	16.5	483	537.5
column tota	60	75	194.5	59	12	29.5	167.5	537.5	

absolute value differences of upper/lower triangles from assymetric matrix values (this matrix is symmetric).

anthropology		communi	economics	geogra	ira info, & lib	politicals	psycholog	sociology	row totals
anthropolog	57	0	0	2	0	0	0	4	63
communicat	0	58	0	0	9	- 4	3	2	76
economics	0	0	155	15	0	17	16	21	224
geography	2	0	15	44	0	2	0	5	68
Info. & libra	0	9	0	0	6	0	3	0	18
politicalScie	0	4	17	2	0	4	8	18	53
psychology	0	3	16	0	3	8	134	21	185
sociology	4	2	21	5	0	18	21	483	554
column tota	63	76	224	68	18	53	185	554	1241
	-					- 10 - H			1241

Matrix product	A*At ()	post muliti	plied)						
anthr	opology	communi	economics	geogra	info. & lit	politicalS	psycholog	sociology	row totals
anthropolog	3269	36	126	100	0	76	24	1948	5579
communicat	36	3527	233	27	54	402	447	4780	9506
economics	126	233	25116	732	0	3392	2577	12636	44812
geography	100	27	732	1945	.0	142	18	1801	4765
info. & librai	0	54	0	0	36	0	18	0	108
politicalScie	76	402	3392	142	0	748	1214	9008	14982
psychology	24	447	2577	18	18	1214	18018	6547	28863
sociology	1948	4780	12636	1801	0	9008	6547	234140	270860
column tota	5579	9506	44812	4765	108	14982	28863	270860	379475

			11 2 2 2						
ant	hropology	communi	economics	geogra	info. & lit	politicalS	psycholog	sociology	row totals
anthropolog	3249	0	0	114	0	0	0	228	3591
communicat	0	3445	97	64	534	16	815	3999	8970
economics	0	97	24359	2385	3	227	2994	5499	35564
geography	114	64	2385	2233	0	23	487	4400	9706
info, & libra	0	534	3	0	126	0	411	99	1173
politicalScie	0	16	227	23	0	17	49	96	428
psychology	0	815	2994	487	411	49	19039	14406	38201
sociology	228	3999	5499	4400	99	96	14406	234331	263058
column tota	3591	8970	35564	9706	1173	428	38201	263058	360691



Appendix X-3a

WITHOUT SE	ELF CITATIONS										
Note: column labels are disciplines whose 1981 top impact journals were examined; row labels (at left) represent											
citations/dis	cipline of top 5	impact fac	tor journals	in top j	ournal by	discipline					
asymmetric	matrix citation	data									
	anthropology	commun	economic	geogra	informa	politica	psycholo	sociology	row total	6ofTotalCited	
anthropolo	0	0	0	0	0	0	3	11	14	6.306306	
communic	0	0	0	0	0	0	90	11	101	45.4955	
economics	0	1	0	3	0	2	5	15	26	11.71171	
geography	0	0	0	0	0	0	0	0	0	0	
info&libSci	0	0	0	0	0	0	0	0	0	0	
politicalSci	0	5	17	1	0	0	2	8	33	14.86486	
psychology	0	6	1	16	2	0	0	2	27	12.16216	
sociology	1	10	1	1	1	3	4	0	21	9.459459	
column tota	1	22	19	21	3	5	104	47	222	100	
col:%ofTota	0.4504505	9.91	8.5586	9.46	1.351	2.252	46.847	21.17117	222	100	
remember:	A matrix column	sucites n	ows=cited								
"cites" = colur	remember: A matrix columns=cites, rows=cited "cites" = column labeled disciplines cite row labeled disciplines (for example anthropology cites osychology four times)										
"cited" = row	labeled disciplines	are cited b	y column lab	eled disci	plines (for	example a	nthropology	is cited by psyc	hology twice)		
transpose of	asymmetric ma	trix citatio	on data								
	anthropology	communi	economics	geogra	info. & lit	politicals	psycholog	sociology	row totals	6ofTotalCited	
anthropolog	0	0	0	0	0	0	0	1	1	0.45045	
communicat	0	0	1	0	0	17	6	10	22	9.90991	
geography	0	0	3	0	0	1/	16	1	21	9.459459	
info, & librar	0	0	0	0	0	0	2	1	3	1.351351	
politicalScie	ő	Ő	2	Ő	Ő	Ő	0	3	5	2.252252	
psychology	3	90	5	0	0	2	0	4	104	46.84685	
sociology	11	11	15	0	0	8	2	0	47	21.17117	
column tota	14	101	26	0	0	33	27	21	222	100	
col:%ofTota	6.3063063	45.5	11.712	0	0	14.86	12.162	9.459459	222	100	
remember:	At matrix (trans	pose matr	ix) is colum	ns=cite	d, rows=c	ites					
Symmetric M	Aatrix1 (lower tr	iangle of a	symmetric	matrix)							
Synniether	anthropology	communi	economics	geogra	informati	political	psycholog	sociology	row totals		
anthropolog	0	0	0	0	0	0	0	1	1		
communicat	0	0	1	0	0	5	6	10	22		
economics	0	1	0	0	0	17	1	1	20		
geography	0	0	0	0	0	1	16	1	18		
info&libSci	0	0	0	0	0	0	2	1	3		
politicalSci	0	5	17	1	0	0	0	3	26		
psychology	0	6	1	16	2	0	0	4	29		
sociology	1	10	1	1	1	3	4	0	21		
column tota	1	22	20	18	3	26	29	21	140		
Symmetric N	Aatrix 2 (upper)	triangle of	asymmetric	c matrix	1						
officience	anthropology	communi	economics	geogra	informati	political	psycholog	sociology	row totals		
anthropolog	0	0	0	0	0	0	3	11	14		
communicat	0	0	0	0	0	0	90	11	101		
economics	0	0	0	3	0	2	5	15	25		
geography	0	0	3	0	0	0	0	0	3		
info&libSci	0	0	0	0	0	0	0	0	0		
politicalSci	0	0	2	0	0	0	2	8	12		
psychology	3	90	5	0	0	2	0	2	102		
sociology	11	11	15	0	0	8	2	0	47		
column tota	14	101	25	3	0	12	102	47	304		
									304		



1981 WITHOUT self-citation												
means of upper/lower triangles from assymetric matrix values (this matrix is symmetric)												
	anthropology	commun	economics	geogra	info. & lil	political	psycholog	sociology				
anthropolog	0	0	0	0	0	0	1.5	6				
communica	0	0	0.5	0	0	2.5	48	10.5				
economics	0	0.5	0	1.5	0	9.5	3	8				
geography	0	0	1.5	0	0	0.5	8	0.5				
info. & libra	0	0	0	0	0	0	1	0.5				
politicalScie	0	2.5	9.5	0.5	0	0	1	5.5				
psychology	1.5	48	3	8	1	1	0	3				
sociology	6	10.5	8	0.5	0.5	5.5	3	0				
column tota	7.5	61.5	22.5	10.5	1.5	19	65.5	34				
absolute va	lue differences	of upper	lower triar	ngles fr	om assyn	netric ma	atrix value	es (this matri				
	anthropology	commun	economics	geogra	info. & lil	political	psycholog	sociology				
anthropolog	0	0	0	0	0	0	3	10				
communica	0	0	1	0	0	5	84	1				
economics	0	1	0	3	0	15	4	14				
geography	0	0	3	0	0	1	16	1				
info. & libra	0	0	0	0	0	0	2	1				
politicalScie	0	5	15	1	0	0	2	5				
psychology	3	84	4	16	2	2	0	2				
sociology	10	1	14	1	1	5	2	0				
column tota	13	91	37	21	3	28	113	34				
Manhaine and		an uliticality	~~									
Matrix prod	anthropology	commun	economics	geogra	info & lil	political	nsycholog	sociology				
anthropolog	130	391	180	geogre 0	0	94	22	12				
communica	200	8221	615	0	0	268	22	360				
economics	180	615	264	0	0	138	84	30				
geography	100	010	204	0	0	100	0	0				
info & libra	0	0	0	0	0	0	0	0				
politicalScie	94	268	138	0	0	383	79	76				
psychology	22	22	84	0	0	79	301	79				
sociology	12	360	39	0	0	76	79	129				
column tota	829	9877	1320	0	0	1038	587	695				
				· · · · · ·								
Matrix prod	uct At*A (pre n	nultiplied										
	anthropology	commun	economics	geogra	info. & lil	political	psycholog	sociology				
anthropolog	1	10	1	1	1	3	4	0				
communica	10	162	101	114	22	32	55	67				
economics	1	101	291	34	3	3	38	138				
geography	1	114	34	267	33	9	21	85				
info. & libra	1	22	3	33	5	3	4	4				
politicalScie	3	32	3	9	3	13	22	30				
psychology	4	55	38	21	4	22	8154	1114				
sociology	0	67	138	85	4	30	1114	535				
column tota	21	563	609	564	75	115	9412	1973				

Appendix X-3b



Appendix X-3c

WITH SELF (CITATIONS									
Note: colum	n labels are disc	ciplines wh	ose 1981 to	p impa	ct journals	were ex	amined; ro	w labels (at l	eft) represer	t
citations/dis	cipline of top 5 i	impact fac	tor journals	in top j	ournal by	discipline	. ·	-		
asymmetric	matrix citation	data								
	anthropology	commun	economic	geogra	informa	politica	psycholo	sociology	row total	6ofTotalCited
anthropolo	584	0	0	0	0	0	3	11	598	33.00221
communic	0	70	0	0	0	0	90	11	171	9.437086
economics	0	1	144	3	0	2	5	15	170	9.381898
geography	0	0	0	50	0	0	0	0	50	2.759382
info&libSci	0	0	0	0	35	0	0	0	35	1.931567
politicalSci	0	5	17	1	0	16	2	8	49	2,704194
psychology	0	6	1	16	2	0	192	2	219	12.08609
sociology	1	10	1	1	1	3	4	499	520	28.69757
column tota	585	92	163	71	38	21	296	546	1812	100
col:%ofTota	32.284768	5.077	8.9956	3.92	2.097	1.159	16.336	30.13245	1812	100
remember:	A matrix column	s=cites, n	ows=cited							
"cites" = colur	mn labeled discipli	nes cite rov	abeled disc	iplines (f	for example	anthropol	logy cites ps	ychology four ti	imes)	
"cited" = row	labeled disciplines	are cited b	y column lab	eled disci	plines (for	example a	nthropology	is cited by psyc	hology twice)	
transpose of	asymmetric ma	strix citatio	on data		lafa 0 lik	a a lible a M				Collected Stored
anthropolog	anthropology	communi	economics	geogra	into, & lit	politicals	psycholog	sociology	row totals	soriotalLited
communicat		70	1	0	0	5	6	10	900	5.077263
economics	0	0	144	ŏ	0	17	1	1	163	8,995585
geography	ő	0	3	50	0	1	16	î	71	3.918322
info. & librar	0	0	0	0	35	0	2	1	38	2.09713
politicalScier	0	0	2	0	0	16	0	3	21	1.15894
psychology	3	90	5	0	0	2	192	4	296	16.33554
sociology	11	11	15	0	0	8	2	499	546	30.13245
column tota	598	171	170	50	35	49	219	520	1812	100
col:%ofTota	33.002208	9.437	9.3819	2.76	1.932	2.704	12.086	28.69757	1812	100
remember:	At matrix (trans	pose matr	ix) is colum	ns=cited	d, rows=c	ites				
Symmetric N	Aatrix1 (lower tr	riangle of a	symmetric	matrix)						
	anthropology	communi	economics	geogra	informati	political	psycholog	sociology	row totals	
anthropolog	584	0	0	0	0	0	0	1	585	
communicat	0	70	1	0	0	5	6	10	92	
economics	0	1	144	0	0	17	1	1	164	
geography	0	0	0	50	0	1	16	1	68	
info&libSci	0	0	0	0	35	0	2	1	38	
politicalSci	0	5	17	1	0	16	0	3	42	
psychology	0	6	1	16	2	0	192	4	221	
sociology	1	10	1	1	1	3	4	499	520	
column tota	585	92	164	68	38	42	221	520	1730	
									1730	
Symmetric N	fatrix 2 (upper t	triangle of	asymmetric	c matrix)					
	anthropology	communi	economics	geogra	informati	political	psycholog	sociology	row totals	
anthropolog	584	20	0	0	0	0	3	11	598	
communicat	0	70	0	0	0	0	90	11	1/1	
economics	0	0	144	3	0	2	5	15	169	
geography	0	0	3	50	0	0	0	0	53	
noliticalSci	0	0	0	0	35	0	0	0	35	
poincialisci	3	90	2 5	0	0	10	192	2	20	
cociolectu		11	15	~	0	-		400	546	
column tota	598	171	15	53	35	28	294	499	1894	
	570		107			2.0	201		1004	
									1894	



Appendix X-3d

means of upp	er/lower	triangles	from assy	metric	matrix val	ues (this	matrix is	symmet	ric)
anthr	opology	communi	economia	geogra	info. & III	politicals	psycholo	sociolog	row totals
anthropolog	584	0	0	0	0	0	1.5	6	591.5
communicat	0	70	0.5	0	0	2.5	48	10.5	131.5
economics	0	0.5	144	1.5	0	9.5	3	8	166.5
geography	0	0	1.5	50	0	0.5	8	0.5	60.5
info. & librar	0	0	0	0	35	0	1	0.5	36.5
politicalScier	0	2.5	9.5	0.5	0	16	1	5.5	35
psychology	1.5	48	3	8	1	1	192	3	257.5
sociology	6	10.5	8	0.5	0.5	5.5	3	499	533
column total	591.5	131.5	166.5	60.5	36.5	35	257 5	533	

1981 WITH self citation

absolute value differences of upper/lower triangles from assymetric matrix values (this matrix is symmetric)

anthr	ropology	communi	economia	geogra	info. & lit	politicalS	psycholo	sociolog	row totals
anthropolog	584	0	0	0	0	0	3	10	597
communicat	0	70	1	0	0	5	84	1	161
economics	0	1	144	3	0	15	4	14	181
geography	0	0	3	50	0	1	16	1	71
info. & librar	0	0	0	0	35	0	2	1	38
politicalScier	0	5	15	1	0	16	2	5	44
psychology	3	84	4	16	2	2	192	2	305
sociology	10	1	14	1	1	5	2	499	533
column total	597	161	181	71	38	44	305	533	1930

Matrix produ	ct A*At (post mulit	iolied)						
anth	ropology	communi	economia	geogra	info. & lit	politicals	psychok	sociolog	row totals
anthropolog	341186	391	180	0	0	94	598	6085	348534
communicat	391	13121	685	0	0	618	17722	6549	39086
economics	180	685	21000	150	0	2618	1188	7668	33489
geography	0	0	150	2500	0	50	800	50	3550
info. & librar	0	0	0	0	1225	0	70	35	1330
politicalScien	94	618	2618	50	0	639	463	4116	8598
psychology	598	17722	1188	800	70	463	37165	1845	59851
sociology	6085	6549	7668	50	35	4116	1845	249130	275478
column total	348534	39086	33489	3550	1330	8598	59851	275478	769916

Matrix produ	ct At*A (ore multio	(ied)	_				· · · · · · · ·	
anth	ropology	communi	economi	geogra	info. & lit	political	psychole	sociolog	row totals
anthropolog	341057	10	1	1	1	3	1756	6923	349752
communicat	10	5062	245	114	22	112	7507	5827	18899
economics	1	245	21027	466	3	563	950	2797	26052
geography	1	114	466	2767	33	25	3093	584	7083
info. & librar	1	22	3	33	1230	3	388	503	2183
politicalScier	3	112	563	25	3	269	54	1655	2684
psychology	1756	7507	950	3093	388	54	45018	3494	62260
sociology	6923	5827	2797	584	503	1655	3494	249536	271319
column total	349752	18899	26052	7083	2183	2684	62260	271319	740232 740232



Appendix X-4a

	ELF CITATIONS									
Note: colum	n labels are disc	iplines wh	ose 1982 to	p impa	t journals	were exa	amined; ro	w labels (at l	eft) represen	t
citations/dis	cipline of top 5 i	mpact fac	tor journals	in top j	ournal by	discipline				
asymmetric	matrix citation of	lata								
	anthropology	commun	economic	aeoara	informa	political	psycholo	sociology	row total	6ofTotalCited
anthropolo	0	0	0	0	0	0	0	4	4	2.051282
communic	0	0	0	Ő	12	0	2	17	31	15.89744
economics	0	0	0	2	2	4	0	19	27	13.84615
geography	0	0	0	0	0	0	1	1	2	1.025641
infollibSci	0	0	0	1	0	0			- 1	0.512921
politicalSci	0	10	20		0	0	12		51	26 15295
politicalSci	0	11	13		0	5	13	7	36	18 46154
sociology	0	14	2	10	0	8		,	43	22.05128
column tota	0	35	35	13	14	17	25	56	195	100
col:%ofTota	0	17.95	17,949	6.67	7,179	8.718	12.821	28,71795	195	100
001170011000		17.55	271040	0.07		0.710	16.061	20.72755	100	100
remember:	A matrix column	s=citos n	owe=cited							
"cites" = colu	mn labeled discipli	nes cite row	labeled disc	iplines ()	for example	anthropol	ogy cites ps	vchology four ti	mes)	
"cited" = row	labeled disciplines	are cited b	y column lab	eled disci	plines (for	example ar	thropology	is cited by psyc	hology twice)	
transpose of	^r asymmetric ma	trix citatio	on data							
	anthropology	communi	economics	geogra	info. & lit	politicalS	psycholog	sociology	row totals	6ofTotalCited
anthropolog	0	0	0	0	0	0	0	0	0	0
communicat	0	0	0	0	0	10	11	14	35	17.94872
economics	0	0	0	0	0	20	13	2	35	17.94872
geography info_& librar	0	12	2	0	1	0	0	10	13	7 170497
noliticalScie	0	12	4	0	0	0	5	8	17	8 7179497
psychology	0	2	0	1	0	13	0	9	25	12.82051
sociology	4	17	19	1	0	8	7	0	56	28,71795
column tota	4	31	27	2	1	51	36	43	195	100
col:%ofTota	2.0512821	15.9	13.846	1.03	0.513	26.15	18.462	22.05128	195	100
remember:	At matrix (trans	pose matr	ix) is colum	ns=cite	d, rows=c	tes				
Commentation I										
	tabled flamos b	less less fu	and the late							
Symmetric	Aatrix1 (lower tr	iangle of a	symmetric	matrix)	informati	nolitical	novshalaa	sasialamu	row totals	
anthropolog	Aatrix1 (lower tr anthropology	iangle of a communi	symmetric economics	matrix) geogra	informati	political	psycholog	sociology	row totals	
anthropolog	Aatrix1 (lower tr anthropology 0	iangle of a communi 0	economics 0	matrix) geogra 0	informati 0	political	psycholog 0	sociology 0 14	row totals 0 35	
anthropolog communicat economics	Aatrix1 (lower tr anthropology 0 0 0	iangle of a communi 0 0	economics 0 0	matrix) geogra 0 0	informati 0 0	political 0 10 20	psycholog 0 11 13	sociology 0 14 2	row totals 0 35 35	
anthropolog communicat economics	Aatrix1 (lower tr anthropology 0 0 0	iangle of a communi 0 0 0	economics 0 0 0	matrix) geogra 0 0 0	informati 0 0	political 0 10 20	psycholog 0 11 13 0	sociology 0 14 2	row totals 0 35 35	
anthropolog communicat economics geography info&libSci	Aatrix1 (lower tr anthropology 0 0 0 0 0	iangle of a communi 0 0 0 0	economics 0 0 0 0 0	matrix) geogra 0 0 0	informati 0 0 1	political 0 10 20 0	psycholog 0 11 13 0	sociology 0 14 2 10	row totals 0 35 35 11	
anthropolog communicat economics geography info&libSci politicalSci	Aatrix1 (lower tr anthropology 0 0 0 0 0 0 0 0	iangle of a communi 0 0 0 0 0	economics 0 0 0 0 0 0 0 20	matrix) geogra 0 0 0 0 1	informati 0 0 1 0 0	political 0 10 20 0 0	psycholog 0 11 13 0 0 5	sociology 0 14 2 10 0 8	row totals 0 35 35 11 1 43	
anthropolog communicat economics geography info&libScl politicalScl psychology	Aatrix1 (lower tr anthropology 0 0 0 0 0 0 0 0 0 0 0	iangle of a communi 0 0 0 0 0 10 11	economics 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	matrix) geogra 0 0 0 0 1 0 0	Informati 0 0 1 0 0 0	political 0 10 20 0 0 0 5	psycholog 0 111 13 0 0 0 5 0	sociology 0 14 2 10 0 8 9	row totals 0 35 35 11 1 1 43 38	
anthropolog communicat economics geography info&libScl politicalScl psychology sociolnov	Aatrix1 (lower tr anthropology 0 0 0 0 0 0 0 0 0 0 0	iangle of a communi 0 0 0 0 0 10 11	economics 0 0 0 0 0 0 0 20 13	matrix) geogra 0 0 0 0 1 0 0 10	informati 0 0 0 1 0 0 0	political 0 10 20 0 0 0 5 8	psycholog 0 111 13 0 0 5 5 0 0	sociology 0 14 2 10 0 8 9 0	row totals 0 35 35 11 1 43 38 43	
anthropolog communicat economics geography info&libScl politicalScl psychology sociology	Aatrix1 (lower tr anthropology 0 0 0 0 0 0 0 0 0 0 0	iangle of a communi 0 0 0 0 10 11 11	symmetric economics 0 0 0 0 0 20 13 2 2 25	matrix) geogra 0 0 0 0 1 0 0 10	Informati 0 0 0 1 0 0 0 0	political 0 10 20 0 0 0 5 8 8	psycholog 0 111 13 0 0 5 0 9 9	sociology 0 14 2 10 0 8 9 0	row totals 0 35 35 11 1 43 38 43	
anthropolog communicat economics geography info&libScl politicalScl psychology sociology column tota	Aatrix1 (lower tr anthropology 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	iangle of a communi 0 0 0 0 0 10 11 11 14 35	economics 0 0 0 0 0 0 0 20 13 2 35	matrix) geogra 0 0 0 0 1 0 0 10 10	informati 0 0 1 1 0 0 0 0 0 1	political 0 10 20 0 0 0 5 8 8 43	psycholog 0 11 13 0 0 0 5 0 9 9 38	sociology 0 14 2 10 0 8 9 0 43	row totals 0 35 35 11 1 43 38 43 206	
anthropolog communicat economics geography info&libScl politicalScl psychology sociology column tota	Aatrix1 (lower tr anthropology 0 0 0 0 0 0 0 0 0 0 0 0 0	iangle of a communi 0 0 0 0 0 10 11 11 14 35	economics 0 0 0 0 0 0 0 0 20 13 2 35	matrix) geogra 0 0 0 0 1 0 10 10	informati 0 0 1 1 0 0 0 0 0 1	political 0 20 0 0 5 8 43	psycholog 0 11 13 0 0 5 0 9 38	sociology 0 14 2 10 0 8 9 0 43	row totals 0 35 35 11 1 43 38 43 206 206	
anthropolog communicat economics geography info&libSci politicalSci psychology sociology column tota	Aatrix1 (lower tr anthropology 0 0 0 0 0 0 0 0 0 0 0 0	iangle of a communi 0 0 0 0 10 11 14 35	economics 0 0 0 0 0 0 20 13 2 35	matrix) geogra 0 0 0 0 1 0 10 10 11	informati 0 0 1 0 0 0 0 0 1	political = 0 20 0 0 5 8 43	psycholog 0 11 13 0 0 5 0 9 38	sociology 0 14 2 10 0 8 9 0 43	row totals 0 35 35 11 43 43 43 206 206	
anthropolog communicat economics geography info&libSci politicalSci psychology sociology column tota Symmetric N	Aatrix1 (lower tr anthropology 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	iangle of a communi 0 0 0 10 11 14 35	economics 0 0 0 0 0 20 13 2 35 35	matrix) geogra 0 0 0 1 0 10 10 11	informati 0 0 1 0 0 0 0 1	political : 0 20 0 0 5 8 43	psycholog 0 111 13 0 0 5 0 9 38	sociology 0 14 2 10 0 8 9 0 43	row totals 0 35 35 11 1 43 38 43 206 206 206	
anthropolog communicat economics geography info&libSci politicalSci psychology sociology column tota Symmetric N	Aatrix1 (lower tr anthropology 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	iangle of a communi 0 0 0 0 10 11 14 35 communi	economics 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	matrix) geogra 0 0 0 1 0 0 10 10 11 11 2 c matrix geogra	informati 0 0 1 0 0 0 0 1 1 0 0 0 0	political : 0 20 0 0 5 8 43 43 political	psycholog 0 11 13 0 0 5 0 9 38 38 9 9 9 38	sociology 0 14 2 10 0 8 9 0 43 sociology	row totals 0 35 35 11 1 43 38 43 206 206 206 206 row totals	
anthropolog communicat economics geography info&libSci politicalSci psychology column tota Symmetric N anthropolog communicat	Aatrix1 (lower tr anthropology 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	iangle of a communi 0 0 0 0 10 11 14 35 communi 0 0	economics 0 0 0 0 0 0 0 0 0 0 20 13 20 13 2 35 35 asymmetric economics 0 0	matrix) geogra 0 0 0 1 0 0 10 10 11 11 2 c matrix geogra 0 0	informati 0 0 1 0 0 0 0 1 1 informati 0 0 12	political : 0 20 0 0 5 8 43 43 political : 0 0	psycholog 0 111 3 0 0 5 0 9 9 38 9 9 38 9 9 9 38 0 0 2	sociology 0 14 2 10 0 8 9 0 43 sociology 4 17	row totals 0 35 35 11 1 43 38 43 206 206 206 206 row totals 4 31	
anthropolog communicat economics geography info&libSci politicalSci psychology column tota Symmetric N anthropolog communicat	Aatrix1 (lower tr anthropology 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	iangle of a communi 0 0 0 0 10 11 14 35 communi 0 0	economics 0 0 0 0 0 0 0 0 20 13 2 35 asymmetric economics 0 0 0 0 0 0 0 0 0 0 0 0 0	matrix) geogra 0 0 0 1 0 10 10 11 11 2 c matrix geogra 0 0	informati 0 0 1 0 0 0 0 0 1 1 0 0 12 2	political : 0 20 0 0 5 8 8 43 23 20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	psycholog 0 111 13 0 0 5 0 9 9 38 9 9 38 9 9 9 38 0 0 2 0 0	sociology 0 14 2 10 0 8 9 0 43 sociology 4 17 10	row totals 0 35 35 11 1 43 38 43 206 206 206 206 70w totals 4 31 37 4 31 32 206 206 206 206 206 206 206 20	
anthropolog communicat economics geography info&libSci politicalSci psychology sociology column tota Symmetric N anthropolog communicat economics	Aatrix1 (lower tr anthropology 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	iangle of a communi 0 0 0 0 0 10 11 14 35 communi 0 0 0 0	economics 0 0 0 0 0 0 0 0 20 13 2 35 asymmetric economics 0 0 0 0 20 13 2 35 35 0 0 0 0 0 0 0 0 0 0 0 0 0	matrix) geogra 0 0 0 1 0 10 10 11 11 c matrix geogra 0 0 0	informati 0 0 1 0 0 0 0 0 0 0 1 1 1 1 1 1 0	political : 0 20 0 0 5 8 8 43 43 90litical : 0 0 4	psycholog 0 111 3 0 0 5 0 9 9 388 9 9 9 388 0 9 9 0 2 0 0 2	sociology 0 14 2 10 0 8 9 0 43 sociology 4 17 19 1	row totals 0 35 35 11 1 43 38 43 206 206 206 206 7 w totals 4 31 27 4 31 27 4 31 4 32 4 33 4 33 4 33 4 33 4 33 4 33 5 4 35 4 35 4 35 4 35 4 35 4 35 4 35 4 35 4 35 4 35 4 35 4 35 4 35 4 35 4 35 4 35 4 35 4 35 4 38 4 31 20 4 4 31 20 4 4 31 20 4 4 31 20 4 4 31 20 4 4 31 20 4 4 31 20 4 4 31 20 4 4 31 20 4 4 4 31 20 4 4 4 4 31 20 4 4 4 4 4 4 4 4 4 4 4 4 4	
anthropolog communicat economics geography info&libSci politicalSci psychology sociology column tota Symmetric N anthropolog communicat geography info&libSci	Aatrix1 (lower tr anthropology 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	iangle of a communi 0 0 0 0 0 10 11 14 35 communi 0 0 0 0 0 0	economics 0 0 0 0 0 0 0 0 20 13 2 35 asymmetric economics 0 0 0 0 20 13 2 35 35 35 35 35 35 35 35 35 35	matrix) geogra 0 0 0 1 0 0 10 10 11 11 2 c matrix geogra 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Informati 0 0 1 0 0 0 0 1 1 Informati 0 12 2 0 0	political : 0 10 20 0 0 0 5 8 43 43 political : 0 0 4 0 0 0 0 0 0 0 0 0 0 0 0 0	psycholog 0 11 13 0 0 5 0 9 38 9 9 38 psycholog 0 2 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0	sociology 0 14 2 10 0 8 9 0 43 sociology 4 17 19 1 0	row totals 0 35 35 11 1 43 38 43 206 206 206 206 7 0 1 4 31 27 4 14 14 1 27 4 14 1 27 4 14 1 1 1 1 1 1 1 1 1 1 1 1 1	
anthropolog communicat economics geography info&libSci politicalSci psychology sociology column tota Symmetric N anthropolog communicat geography info&libSci politicalSci	Aatrix1 (lower tr anthropology 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	iangle of a communi 0 0 0 0 0 10 11 14 35 communi 0 0 0 0 0 0 0 0 0 0 0	asymmetric economics 0 0 0 0 0 20 13 20 13 2 35 35 35 asymmetric economics 0 0 0 0 2 2 4	matrix) geogra 0 0 0 1 0 0 10 10 11 11 2 c matrix geogra 0 0 0 0 0 0 0	Informati 0 0 1 0 0 0 0 1 1 Informati 0 12 2 0 0 0 0 0 0 0 0 0 0 0 0 0	political : 0 10 20 0 0 5 8 43 political : 0 0 4 0 0 0 0 0 0 0 0 0 0 0 0 0	psycholog 0 11 13 0 0 5 0 9 38 psycholog 0 2 0 1 0 13	sociology 0 14 2 10 0 8 9 0 43 sociology 4 17 19 1 0 8	row totals 0 35 35 11 1 43 38 43 206 206 206 206 7 0 4 31 27 4 14 27 4 14 25	
anthropolog communicat economics geography info&libSci politicalSci psychology column tota Symmetric N anthropolog communicat geography info&libSci politicalSci psychology	Aatrix1 (lower tr anthropology 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	iangle of a communi 0 0 0 0 0 10 11 14 35 communi 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	asymmetric economics 0 0 0 0 0 20 13 20 13 2 35 35 35 asymmetric economics 0 0 0 0 2 2 4 4 0	matrix) geogra 0 0 0 1 0 10 10 10 11 11 c matrix geogra 0 0 0 0 0 0 0 1	Informati 0 0 1 0 0 0 0 1 Informati 0 12 2 0 0 0 0 0 0 0 0 0 0 0 0 0	political : 0 10 20 0 0 5 8 43 43 political : 0 0 4 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1	psycholog 0 111 3 0 0 5 0 9 9 388 9 9 9 388 0 9 9 0 2 0 0 2 0 0 1 1 3 0 0	sociology 0 14 2 10 0 8 9 0 43 sociology 4 17 19 1 0 8 7	row totals 0 35 35 111 1 43 38 43 206 206 206 206 7 206 206 206 206 4 31 27 4 14 27 4 12 27 4 27 27 27 27 27 27 27 27 27 27	
anthropolog communicat economics geography info&libSci politicalSci psychology column tota Symmetric N anthropolog communicat geography info&libSci politicalSci psychology sociology	Aatrix1 (lower tr anthropology 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	iangle of a communi 0 0 0 0 0 10 11 14 35 communi 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	asymmetric economics 0 0 0 0 0 20 13 20 13 2 35 35 35 asymmetric economics 0 0 0 0 2 2 4 0 0	matrix) geogra 0 0 0 1 0 10 10 11 11 c matrix geogra 0 0 0 0 0 0 1 1	Informati 0 0 1 0 0 0 0 1 1 Informati 0 1 2 0 0 0 0 0 0 0 0 0 0 0 0 0	political : 0 10 20 0 0 5 8 43 43 political : 0 0 4 0 0 0 13 8	psycholog 0 11 13 0 0 5 0 9 38 9 9 38 9 9 38 0 2 0 1 1 0 1 3 0 7 7	sociology 0 14 2 10 0 8 9 0 43 sociology 4 17 19 1 0 8 7 0	row totals 0 35 35 11 1 43 38 43 206 206 206 206 7 206 206 206 206 4 31 27 4 14 25 23 5 5 5 5 5 5 5 5 5 5 5 5 5	
anthropolog communicat economics geography info&libSci politicalSci psychology column tota Symmetric N anthropolog communicat geography info&libSci politicalSci psychology sociology column tota	Aatrix1 (lower tr anthropology 0 <	iangle of a communi 0 0 0 0 0 10 11 14 35 communi 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	symmetric economics 0 0 0 0 0 20 13 20 13 2 35 35 35 asymmetric economics 0 0 0 0 2 2 4 4 0 19 27	matrix) geogra 0 0 0 1 0 10 10 10 11 1 2 c matrix geogra 0 0 0 0 1 1 1 4	Informati 0 0 1 0 0 0 0 1 1 Informati 0 1 2 0 0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1	political : 0 10 20 0 0 5 8 43 43 political : 0 0 0 4 0 0 13 8 25	psycholog 0 11 13 0 0 5 0 9 9 388 9 9 9 388 0 9 9 0 2 0 0 1 1 0 0 1 3 0 0 7 7 2 3	sociology 0 14 2 10 0 8 9 0 43 sociology 4 17 19 1 0 8 7 0 56	row totals 0 35 35 11 1 43 38 43 206 206 206 206 206 7 206 206 206 206 206 206 206 206	
anthropolog communicat economics geography info&libSci politicalSci psychology column tota Symmetric N anthropolog communicat geography info&libSci politicalSci psychology sociology column tota	Aatrix1 (lower tr anthropology 0 <	iangle of a communi 0 0 0 0 10 11 14 35 communi 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	symmetric economics 0 0 0 0 0 20 13 2 35 35 35 asymmetric economics 0 0 0 0 2 2 4 4 0 19 27	matrix) geogra 0 0 0 1 0 10 10 11 10 11 1 2 c matrix geogra 0 0 0 0 1 1 1 4	Informati 0 0 1 0 0 0 0 1 1 Informati 0 12 2 0 0 0 0 0 14	political : 0 10 20 0 0 5 8 43 43 political : 0 0 0 4 0 0 13 8 25	psycholog 0 11 3 0 0 5 0 9 9 388 9 9 388 0 9 9 388 0 2 0 0 1 1 0 0 1 3 0 0 7 7 2 3	sociology 0 14 2 10 0 8 9 0 43 50 10 10 43 50 10 10 8 7 19 1 0 8 7 0 56	row totals 0 35 35 111 1 43 38 43 206 206 206 206 206 7 w totals 4 31 277 4 14 25 23 56 184 194	



Appendix X-4b

means of upper	/lower tr	angles fro	m assym	etric ma	trix value	s (this ma	trix is sym	metric)	
anth	ropology	communi	economic	geogra	info, & lit	politicals	psycholog	sociology	row total
anthropolog	0	0	0	0	0	0	0	2	2
communicat	0	0	0	0	6	5	6.5	15.5	33
economics	0	0	0	1	1	12	6.5	10.5	31
geography	0	0	1	0	0.5	0	0.5	5.5	7.5
info. & librar	0	6	1	0.5	0	0	0	0	7.5
politicalScier	0	5	12	0	0	0	9	8	34
psychology	0	6.5	6.5	0.5	0	9	0	8	
sociology	2	15.5	10.5	5.5	0	8	8	0	49.5
column total	2	33	31	7.5	7.5	34	30.5	49.5	·

1982 WITHOUT self citation

absolute value differences of upper/lower triangles from assymetric matrix values (this matrix is symmetric)

a	nthropology	communi	economic	geogra	info. & lit	politicals	psycholog	sociology	row totals
anthropolog	0	0	0	0	0	0	0	4	4
communicat	0	0	0	0	12	10	9	3	34
economics	0	0	0	2	2	16	13	17	50
geography	0	0	2	0	1	0	1	9	13
info. & libra	0	12	2	1	0	0	0	0	15
politicalScie	0	10	16	0	0	0	8	0	34
psychology	0	9	13	1	0	8	0	2	33
sociology	4	3	17	9	0	0	2	0	35
column tota	4	34	50	13	15	34	33	35	218

anthr	opology	communi	economic	geogra	info. & lit	political	psycholog	sociology	row totals
anthropolog	16	68	76	4	0	32	28	0	224
communicat	68	437	347	19	0	162	119	18	1170
economics	76	347	385	19	2	152	153	52	1186
geography	4	19	19	2	0	21	7	9	81
info. & librar	0	0	2	0	1	0	0	10	13
politicalScier	32	162	152	21	0	733	426	297	1823
psychology	28	119	153	7	0	426	364	220	1317
sociology	0	18	52	9	10	297	220	445	1051
column total	224	1170	1186	81	13	1823	1317	1051	6865 6865

anth	ropology	communi	economic	geogra	info. & lit	politicals	psycholog	sociology	row totals
anthropolog	0	0	0	0	0	0	0	0	0
communicat	0	417	371	140	0	167	256	157	1508
economics	0	371	573	20	0	81	278	251	1574
geography	0	140	20	105	4	88	90	38	485
info. & librar	0	0	0	4	148	8	24	242	426
politicalScier	0	167	81	88	8	105	72	111	632
psychology	0	256	278	90	24	72	255	139	1114
sociology	0	157	251	38	242	111	139	780	1718
column total	0	1508	1574	485	426	632	1114	1718	7457



Appendix X-4c

WITH SELEC	TATIONS									1
Mate column	lakala se diasiali	 	1000	:				1-(1)		ielie e chee F
impact factor	i labels are discipii i journals in ton joi	ines whose urbal bu disi	1982 (Op Imp cipline	act journ	ials were ei	amined; ro	ow labels (at	iertj represent	citations/disc	ipline of top 5
Impactractor	Jodinais in top Jo	amar by also	opine.							
<u>asymmetric n</u>	natrix citation data	1								
	anthropology	communic	economics	geograp	informatio	politicalS	psycholog	sociology	row total	*ofTotalCited
anthropology	4/3	0	0	0	0	0	0	4	4//	33.31005587
communicati	0	83	110	0	12	0	2	17	119	7.360833800
economics	0	0	112	2	2	4	0	13	138	3.706703311
geograph	0	0	0	20	0	0	1	1	22	1.536312849
info&libSci	0	0	0	1	10	0	0	0	11	0.768156425
politicalSci	0	10	20	0	0	8	13	8	59	4.120111732
psychology	0	11	13	0	0	5	142	7	178	12.4301676
sociology	0	14	2	10	U	8	9	389	432	30.16759777
column totals	473	118	147	33	24	25	167	445	1432	100
col:%ofTotal	33.03072626	8.240223	10.265363	2.3045	1.67598	1.74581	11.66201	31.07541899	1432	100
remember: A	matrix columns=c	vites, rows=	cited			ala ay akta	f			
"cites = colum	n iabelea alsciplines Ibolod dissiplines as	cite row lab	eiea aiscipiines Iuma Isbalad di	; (ror exa issinlings)	mpie anthrop (for example	ology cites	psychology i an is sited by	our times j		
cited =10wik	ibeled disciplines an		ianni iabelea ai	scipilles [ror example	antinopolo	gy is cited by	psychology (wie	.ej	
transpose of	asummetric matri	x citation d	ata							
	anthropology	communic	economics	geograp	info. & libr	politicalS	psycholog	sociology	row totals	%ofTotalCited
anthropology	473	0	0	0	0	0	0	0	473	33.03072626
communicati	0	83	0	0	0	10	11	14	118	8.240223464
economics	0	0	112	0	0	20	13	2	147	10.26536313
geography into & library	0	12	2	20	10	0	0	10	33	2.304469274
noliticalScien	0	0	4	0	0	8	5	8	24	1745810056
psuchologu	Ő	2	0	1	0	13	142	9	167	11.66201117
socioloau	4	17	19	1	0	8	7	389	445	31.07541899
column totals	477	114	139	22	11	59	178	432	1432	100
col:%ofTotal	33.31005587	7.960894	9.7067039	1.5363	0.76816	4.12011	12.43017	30.16759777	1432	100
remember: Al	t matrix (transpos	e matrix) is	columns=cite	ed, rows:	cites					
Cummetrie M	atrial (leases trian a	de ef seume	mateia emateiu)							
Symmetric M	anthropology	le or asymi Leommunia	economics	l neograf	informatio	political s	nsucholog	sociology	row totals	
anthropology	473	0	economics 0	geograf 0	0	political 3	0 Disgenolog		473	
communicati	0	83	0	Ö	0	10	11	14	118	
economics	0	0	112	0	0	20	13	2	147	
geographu	0	0	0	20	1	0	0	10	31	
info&libSci	0	0	0	1	10	0	0	0	11	
politicalSci	0	10	20	0	0	8	5	8	51	
psychology	0	11	13	0	0	5	142	9	180	
sociologu	0	14	2	10	0	8	9	389	432	
column totals	473	119	14.7	31	11	51	190	432	14.4.3	
column totals	110		111				100	402	1443	
Symmetric M	latrix 2 (upper trian	gle of asym	nmetric matri	x)						
	anthropology	communic	economics	geograp	informatio	political s	psycholog	sociology	row totals	
anthropology	473	0	0	0	0	0	0	4	477	
communicati	0	83	0	0	12	0	2	17	114	
economics	0	0	112	2	2	4	0	19	139	
geography	0	0	2	20	0	0	1	1	24	
info&libSci	0	12	2	0	10	0	0	0	24	
politicalSci	0	0	4	0	0	8	13	8	33	
psychology	0	2	0	1	0	13	142	7	165	
sociology	4	17	19	1	0	8	7	389	445	
column totals	477	114	139	24	24	33	165	445	1421	
									1421	

Appendix X-4d

anthr	opology	communi	economi	geogra	info, & lit	politicals	psycholog	sociology	row totals
anthropolog	473	0	0	0	0	0	0	2	475
communicat	0	83	0	0	6	5	6.5	15.5	116
economics	0	0	112	1	1	12	6.5	10.5	143
geography	0	0	1	20	0.5	0	0.5	5.5	27.5
info. & librar	0	6	1	0.5	10	0	0	0	17.5
politicalScier	0	5	12	0	0	8	9	8	42
psychology	0	6.5	6.5	0.5	0	9	142	8	172.5
sociology	2	15.5	10.5	5.5	0	8	8	389	438.5
column total	475	116	143	27.5	17.5	42	172.5	438.5	

absolute value differences of upper/lower triangles from assymetric matrix values (this matrix is symmetric)

anth	ropology	communi	economi	geogra	info. & lit	politicals	psycholog	sociology	row totals
anthropolog	473	0	0	0	0	0	0	- 4	477
communicat	0	83	0	0	12	10	9	3	117
economics	0	0	112	2	2	16	13	17	162
geography	0	0	2	20	1	0	1	9	33
info. & librar	0	12	2	1	10	0	0	0	25
politicalScier	0	10	16	0	0	8	8	0	42
psychology	0	9	13	1	0	8	142	2	175
sociology	4	3	17	9	0	0	2	389	424
column total	477	117	162	33	25	42	175	424	1455

Matrix product	t A*At (po	st mulitipli	ied)						
ant	hropology	communi	economi	geogra	info. & lit	politicals	psycholog	sociology	row totals
anthropolog	223745	68	76	4	0	32	28	1556	225509
communicat	68	7326	347	19	120	992	1316	7793	17981
economics	76	347	12929	59	22	2424	1609	7667	25133
geography	4	19	59	402	20	21	149	598	1272
info, & librar	0	120	22	20	101	0	0	10	273
politicalScier	32	992	2424	21	0	797	2312	3473	10051
psychology	28	1316	1609	149	0	2312	20528	4221	30163
sociology	1556	7793	7667	598	10	3473	4221	151766	177084
column total	225509	17981	25133	1272	273	10051	30163	177084	487466

Matrix product	LAL [®] A (or	e multiolie	d)		Second Second		1.1	A.L	
ant	hropology	communi	economi	geogra	info. & lit	political	psycholog	sociology	row totals
anthropolog	223729	0	0	0	0	0	0	1892	225621
communicat	0	7306	371	140	996	247	1984	7014	18058
economics	0	371	13117	244	224	689	2124	3157	19926
geography	0	140	244	505	14	88	110	3948	5049
Info. & librar	0	996	224	14	248	8	24	242	1756
politicalScier	0	247	689	88	8	169	886	3287	5374
psychology	0	1984	2124	110	24	886	20419	4634	30181
sociology	1892	7014	3157	3948	242	3287	4634	152101	176275
column total	225621	18058	19926	5049	1756	5374	30181	176275	482240



Appendix X-5a

WITHOUT SE	ELF CITATIONS									
Note: colum	n labels are disc	iplines wh	ose 1983 to	p impa	ct journals	were exa	amined; ro	w labels (at lo	eft) represen	t
citations/dis	cipline of top 5 i	impact fac	tor journals	in top j	ournal by	discipline				
asymmetric	matrix citation	data								
	anthropology	commun	economic	geogra	informa	political	psycholo	sociology	row total	6ofTotalCited
anthropolo	0	0	0	0	0	1	2	14	17	11.48649
communic	0	0	0	1	3	1	2	10	17	11.48649
economics	0	0	0	12	0	2	0	28	42	28.37838
geography	0	0	0	0	0	0	0	0	0	0
info&libSci	0	0	0	0	0	0	0	0	0	0
noliticalSci	0	9	0	5	0	0	0	14	36	24 32432
pointicalist	0	1		0	1	0	0	3	50	3 378378
sociology	0	21	1	6	0	1	2		31	20.94595
column tota	0	30	10	24	4	5	6	69	148	100
col:%ofTota	0	20.27	6.7568	16.2	2,703	3,378	4.0541	46.62162	148	100
001.70011000	· · · ·	20.27	0.7500	10.2	2.700	0.070	4.0044	40.02102	140	100
to momb on	A matrix column	e elter e	an a shad							
"cites" = colu	A matrix column	nes cite rou	ows=cited	inlines //	for example	anthropol	nau citae ne	whology four ti	mos)	
cites = colu	Init labeled disciplines	are cited by	v column Jahr	plines (i alad disci	of example	wamnie ar	ogy cites ps	is cited by new	hology twice)	
cited = row	labered disciplines	are cited o	y column lao	elea also	prines (ror i	example a	iciii opoiogy	is clied by paye	nology (moe)	
transpose of	f asymmetric ma	trix citatio	n data							
	anthropology	communi	economics	geogra	info. & lit	politicalS	psycholog	sociology	row totals	6ofTotalCited
anthropolog	0	0	0	0	0	0	0	0	0	0
communicat	0	0	0	0	0	8	1	21	30	20.27027
economics	0	0	0	0	0	9	0	1	10	6.756757
geography	0	1	12	0	0	5	0	6	24	16.21622
info. & librar	0	3	0	0	0	0	1	0	4	2.702703
politicalSciel	1	1	2	0	0	0	0	1	5	3.378378
psychology	2	2	0	0	0	0	0	2	6	4.054054
sociology	14	10	28	0	0	14	3	0	69	46.62162
col:%ofTota	11 496496	11 49	28 378	0	0	24 32	3 3784	20 94595	140	100
cor. soon oca	11.400400	11.49	20.370	v v	V	24.32	3.3704	20.94595	140	100
remember:	At matrix (trans	pose matr	ix) is colum	ns=cite	a, rows-c	tes				
Symmetric N	Matrix1 (lower tr	iangle of a	symmetric	matrix)						
	anthropology	communi	economics	geogra	informati	political :	psycholog	sociology	row totals	
anthropolog	0	0	0	0	0	0	0	0	0	
communicat	0	0	0	0	0	8	1	21	30	
economics	0	0	0	0	0	9	0	1	10	
geography	0	0	0	0	0	5	0	6	11	
info&libSci	0	0	0	0	0	0	1	0	1	
politicalSci	0	8	9	5	0	0	0	1	23	
psychology	0	1	0	0	1	0	0	2	4	
sociology	0	21	1	6	0	1	2	0	31	
column tota	0	30	10	11	1	23	4	31	110	
									110	
Symmetric M	Matrix 2 (upper 1	triangle of	asymmetric	c matrix)					
	anthropology	communi	economics	geogra	informati	political :	psycholog	sociology	row totals	
anthropolog	0	0	0	0	0	1	2	14	17	
communicat	0	0	0	1	3	1	2	10	17	
economics	0	0	0	12	0	2	0	28	42	
geography	0	1	12	0	0	0	0	0	13	
info&libSci	0	3	0	0	0	0	0	0	3	
politicalSci	1	1	2	0	0	0	0	14	18	
psychology	2	2	0	0	0	0	0	3	7	
sociology	14	10	28	0	0	14	3	0	69	
column tota	17	17	42	13	3	18	7	69	185	
									186	



Appendix X	-5b
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anth	ropology	communi	economics	geogra	info. & lit	political	psycholog	sociology	row totals
anthropolog	0	0	0	0	0	0.5	1	7	8.5
communicat	0	0	0	0.5	1.5	4.5	1.5	15.5	23.5
economics	0	0	0	6	0	5.5	0	14.5	26
geography	0	0.5	6	0	0	2.5	0	3	12
info. & librar	0	1.5	0	0	0	0	0.5	0	2
politicalScier	0.5	4.5	5.5	2.5	0	0	0	7.5	20.5
psychology	1	1.5	0	0	0.5	0	0	2.5	5.5
sociology	7	15.5	14.5	3	0	7.5	2.5	0	50
column total	8.5	23.5	26	12	2	20.5	5.5	50	

1983 WITHOUT self citation means of upper/lower triangles from assymetric matrix values (this matrix is symmetric)

absolute value differences of upper/lower triangles from assymetric matrix values (this matrix is symmetric)

a	nthropology	communi	economics	geogra	info. & lit	political	psycholog	sociology	row totals
anthropolog	0	0	0	0	0	1	2	14	17
communicat	0	0	0	1	3	7	1	11	23
economics	0	0	0	12	0	7	0	27	46
geography	0	1	12	0	0	5	0	6	24
info, & librar	0	3	0	0	0	0	1	0	4
politicalScien	1	7	7	5	0	0	0	13	33
psychology	2	1	0	0	1	0	0	1	5
sociology	14	11	27	6	0	13	1	0	72
column total	17	23	46	24	4	33	5	72	224

Matrix product A*At (post mulitiplied)

a	nthropology	communi	economics	geogra	info. & lit	politicalS	psycholog	sociology	row totals
anthropolog	201	145	394	0	0	196	42	- 5	983
communicat	145	115	294	0	0	145	33	11	743
economics	394	294	932	0	0	452	84	74	2230
geography	0	0	0	0	0	0	0	0	0
info. & librar	0	0	0	0	0	0	0	0	0
politicalScier	196	145	452	0	0	366	50	207	1416
psychology	42	33	84	0	0	50	11	21	241
sociology	5	11	74	0	0	207	21	483	801
column total	983	743	2230	0	0	1416	241	801	6414 6414

3	anthropology	communi	economics	geogra	info. & lit	political	psycholog	sociology	row totals
anthropolog	0	0	0	0	0	0	0	0	0
communicat	0	506	93	166	1	21	42	115	944
economics	0	93	82	51	0	1	2	126	355
geography	0	166	51	206	3	31	14	416	887
info. & librar	0	1	0	3	10	3	6	33	56
politicalScien	0	21	1	31	3	7	6	80	149
psychology	0	42	2	14	6	6	12	48	130
sociology	0	115	126	416	33	80	48	1285	2103
column total	0	944	355	887	56	149	130	2103	4624 4624



Appendix X-5c

WITH SELF (CITATIONS									
Note: colum	n labels are disc	ciplines wh	ose 1983 to	op impac	t journals	were ex	amined; ro	w labels (at lo	eft) represen	it
citations/dis	cipline of top 5	impact fac	tor journals	in top j	ournal by	discipline				
asymmetric	matrix citation	data								
	anthropology	commun	economic	geogra	informa	politica	psycholo	sociology	row total	6ofTotalCited
anthropolo	532	0	0	0	0	1	2	14	549	37.52563
communic	0	99	0	1	3	1	2	10	116	7.928913
economics	0	0	86	12	0	2	0	28	128	8.749146
geography	0	0	0	37	0	0	0	0	37	2.52905
info&libSci	0	0	0	0	4	0	0	0	4	0.273411
politicalSci	0	8	9	5	0	11	0	14	47	3.212577
psychology	0	1	0	0	1	0	130	3	135	9.227614
sociology	0	21	1	6	0	1	2	416	447	30.55366
column tota	532	129	96	61	8	16	136	485	1463	100
col:%ofTota	36.363636	8.817	6.5619	4.17	0.547	1.094	9.296	33.15106	1463	100
remember:	A matrix column	s=cites, n	ows=cited							
"cites" = colur	mn labeled discipli	ines cite rov	v labeled disc	iplines (f	for example	anthropol	logy cites ps	ychology four ti	imes)	
"cited" = row	labeled disciplines	are cited b	y column lab	eled disci	plines (for	example a	nthropology	is cited by psyc	hology twice)	
transpose of	asymmetric ma	atrix citatio	on data							
	anthropology	communi	economics	geogra	info. & lit	politicals	psycholog	sociology	row totals	6ofTotalCited
anthropolog	532	0	0	0	0	0	0	0	532	36.36364
communicat	0	99	0	0	0	0	1	21	129	6 561950
deography	0	1	12	37	0	5	0	6	50	4 169515
info, & librar	0	3	0	0	4	0	1	0	8	0.546822
politicalScie	1	1	2	Ő	0	11	Ô	1	16	1.093643
psychology	2	2	0	0	0	0	130	2	136	9.295967
sociology	14	10	28	0	0	14	3	416	485	33.15106
column tota	549	116	128	37	4	47	135	447	1463	100
col:%ofTota	37.525632	7.929	8.7491	2.53	0.273	3.213	9.2276	30.55366	1463	100
remember:	At matrix (trans	pose matr	ix) is colum	ns=cited	d, rows=c	tes				
Symmetric M	Aatrix1 (lower to	riangle of a	symmetric	matrix)						
ogninethe i	anthropology	communi	economics	geogra	informati	political	psycholog	sociology	row totals	
anthropolog	532	0	0	0	0	0	0	0	532	
communicat	0	99	0	0	0	8	1	21	129	
economics	0	0	86	0	0	9	0	1	96	
geography	0	0	0	37	0	5	0	6	48	
info&libSci	0	0	0	0	4	0	1	0	5	
politicalSci	0	8	9	5	0	11	0	1	34	
psychology	0	1	0	0	1	0	130	2	134	
sociology	0	21	1	6	0	1	2	416	447	
column tota	532	129	30	48	5	34	134	447	1425	
condition tota	556	163			~		4.04		1425	
									1765	
Symmetric N	Aatrix 2 (upper)	triangle of	asymmetric	c matrix)					
	anthropology	communi	economics	geogra	informati	political	psycholog	sociology	row totals	
anthropolog	532	0	0	0	0	1	2	14	549	
communicat	0	99	0	1	3	1	2	10	116	
economics	0	0	86	12	0	2	0	28	128	
geography	0	1	12	37	0	0	0	0	50	
info&libSci	0	3	0	0	4	0	0	0	7	
politicalSci	1	1	2	0	0	11	0	14	29	
psychology	2	2	0	0	0	0	130	3	137	
sociology	14	10	28	0	0	14	3	416	485	
column tota	549	115	128	50	7	29	137	485	1501	
									1501	



Appendix X-5d

anti	propology	communi	economics	geogra	info. & lit	politicals	psycholog	sociology	row totals
anthropolog	532	0	0	0	0	0.5	1	7	540.5
communicat	0	99	0	0.5	1.5	4.5	1.5	15.5	122.5
economics	0	0	86	6	0	5.5	0	14.5	112
geography	0	0.5	6	37	0	2.5	0	3	49
info. & librar	0	1.5	0	0	4	0	0.5	0	6
politicalScier	0.5	4.5	5.5	2.5	0	11	0	7.5	31.5
psychology	1	1.5	0	0	0.5	0	130	2.5	135.5
sociology	7	15.5	14.5	3	0	7.5	2.5	416	466
column total	540.5	122.5	112	49	6	31.5	135.5	466	

1983 WITH self citation

absolute value differences of upper/lower triangles from assymetric matrix values (this matrix is symmetric).

a	nthropology	communi	economics	geogra	info. & Et	politicalS	psycholog	sociology	row totals
anthropolog	532	0	0	0	0	1	2	14	549
communicat	0	99	0	1	3	7	1	11	122
economics	0	0	86	12	0	7	0	27	132
geography	0	1	12	37	0	5	0	6	61
info, & librar	0	3	0	0	4	0	1	0	8
politicalScier	1	7	7	5	0	11	0	13	44
psychology	2	1	0	0	1	0	130	1	135
sociology	14	11	27	6	0	13	1	416	488
column total	549	122	132	61	8	44	135	488	1539

Matrix product A*At (post mulitiplied)

a	inthropology	communi	economics	geogra	info. & Et	politicalS	psycholog	sociology	row totals
anthropolog	283225	145	394	0	0	207	302	5829	290102
communicat	145	9916	294	37	12	948	392	6250	17994
economics	394	294	8328	444	0	1248	84	11808	22600
geography	0	37	444	1369	0	185	0	222	2257
info. & librar	0	12	0	0	16	0	4	0	32
politicalScier	207	948	1248	185	0	487	50	6042	9167
psychology	302	392	84	0	4	50	16911	1529	19272
sociology	5829	6250	11808	222	0	6042	1529	173539	205219
column total	290102	17994	22600	2257	32	9167	19272	205219	566643 566643

	anthropology	communi	economics	geogra	info, & lit	politicalS	psycholog	sociology	row totals
anthropolog	283024	0	0	0	0	532	1064	7448	292068
communicat	0	10307	93	265	298	208	370	9841	21382
economics	0	93	7478	1083	0	272	2	2950	11878
geography	0	265	1083	1575	3	86	14	2912	5938
info. & librai	0	298	0	3	26	3	136	33	499
politicalScie	532	208	272	86	3	128	6	650	1885
psychology	1064	370	2	14	136	6	16912	1270	19774
sociology	7448	9841	2950	2912	33	650	1270	174341	199445
column tota	292068	21382	11878	5938	499	1885	19774	199445	552869



Appendix Y-1: Matrix Multiplication using BlueBit online Calculator (screenshot)

atrix Mul	tiplication		+		blue <mark>t</mark>	oit				
Enter ma	atrix A:			Powe	Enter	matrix B:				
0	0	0	1	0		0	7	1	0	
0	1	0			0 0	3	3			0
0	0	0	0	0	0	0	0	0	2	
2	7	13			0	3	7			
7	0	0	0	0	0	0	0	4	0	
24	0	0			2	0	30			
1	0	4	0	0	1	0	0	0	0	
0	0	4			0	0	2			
0	2	0	0	0	0	0	0	0	0	
0	3	0			0	0	0			
0	0	2	0	0	0	2	24	0	0	
0	0	5			0	1	17			
3	3	0	0	0	1	7	0	0	3	
1	0	4			0	0	8			
3	7	30	2	0	▼ 0	13	0	4	0	Y
		Value	s are delimi	ted by: Tabs	Show instruction	ons esults using (0	decin	nal d <mark>i</mark> gits.		



Online Matrix Multiplication - Results Page Powered by <u>.NET Matrix Library</u>

Matrix Multiplication Results

Input m. 0.000 0.000 1.000 0.000 0.000 1.000 0.000	atrix A: 0.000 0.000 0.000 0.000 0.000 2.000 7.000 13.000	$\begin{array}{c} 7.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 24.000\\ 0.000\\ 0.000\\ 0.000\end{array}$	$\begin{array}{c} 1.000\\ 0.000\\ 4.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 4.000\\ \end{array}$	0.000 2.000 0.000 0.000 0.000 3.000 0.000	0.000 0.000 2.000 0.000 0.000 0.000 5.000	3.000 3.000 0.000 0.000 1.000 0.000 4.000	$\begin{array}{c} 3.000 \\ 7.000 \\ 30.000 \\ 2.000 \\ 0.000 \\ 17.000 \\ 8.000 \\ 0.000 \end{array}$	
Input m 0.000 0.000 7.000 1.000 0.000 0.000 3.000 3.000	atrix B: 0.000 0.000 0.000 2.000 0.000 3.000 7.000	0.000 0.000 4.000 2.000 2.000 0.000 30.000	1.000 0.000 0.000 0.000 0.000 0.000 0.000 2.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	$\begin{array}{c} 0.000\\ 2.000\\ 24.000\\ 0.000\\ 0.000\\ 1.000\\ 1.000\\ 17.000\end{array}$	1.000 7.000 0.000 3.000 0.000 0.000 8.000	$\begin{array}{c} 0.000\\ 13.000\\ 0.000\\ 4.000\\ 0.000\\ 5.000\\ 4.000\\ 0.000\\ 0.000\end{array}$	

Matrix product A*B

68.000	30.000	94.000	6.000	0.000	222.000	24.000	16.000
30.000	62.000	210.000	14.000	0.000	122.000	62.000	12.000
94.000	210.000	920.000	60.000	0.000	510.000	240.000	26.000
6.000	14.000	60.000	5.000	0.000	34.000	17.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
222.000	122.000	510.000	34.000	0.000	870.000	150.000	30.000
24.000	62.000	240.000	17.000	0.000	150.000	123.000	91.000
16.000	12.000	26.000	0.000	0.000	30.000	91.000	226.000





Appendix Z: Text to columns (screenshot)

R.D.O.					C.reed/A	W1879citeChedMATR/CES.xica	6
A terms - 1	Append Tables	Charts	-Newtones		ai Ilai	a bive	UA16
Bart & Fran	design 4		Annual Day	in Generative		Texts Cross & Dative	
23 · T	Hentan ward	Artest	Test Doort	-	Ti	There is caused as a second as	
8143	100-1	• ##.000	30.000 94	000 6.000 C	6.000 22;	Convert Text to Columns Waard - Step 1 of 3	in a co
10 district or at 27 28 setting of the 30 second of the 30 second of the 30 second of the 31 percent of 32 or a transfer 33 percent of the 33 percent of the 34 second of the 34 second of the 35 second of the 36 second of the 37 second of the 38					T + + + +	The Yoot Waves has descented that your data in Yoot Blain. P WA is supress, showed here, or obtained the Sala Type that lens absorbing your data- tringout data type. Provide the Wa Hard Mark Mark and American and the second or and held. P WHI WHI - Hards are aligned in colores with spaces between each field. Res prevers	7000 * colors 8 0 2 0 0 2 10 0 0 0 0 0 0 0 0 0 2 0 0 0 0 0 0 0 0 0
37 38 34 44 44 44 44 44 44 44 44 44	A*8 1 mm m 10 mm a .00 50.000 50.000 220.000 5.000 220.000 5.000 220.000 5.000 121.000 22.000 121.000 15.000 12.000 5.000 12.000 5.000 12.000 5.000 12.000	44.020 518.3860 50.000 6.000 518.880 510.880 240.000 240.000	4.600 0 14.100 5.000 8.880 54.860 17.600 0.600 57	Aparting Ter- 400 272 - 0 5 000 410 5 000 410 5 000 38 5 000 18 5 000 18 6 000 18 5 000 18 6 000	04 24.0 505 43 505 43 505 17.1 505 81.1 505 152.1 505 132.1 505 91.2 51	Protes of Marcold Marc 12.3 area 1.5 area 13.3 area	
30 30 30 30 30 30 30 30 30 30 30 30 30 3	Anthropology (Anthropology)	(arrea)	2002-01-75 B	-ternada	www.ene	svor (m max) C Limit	



							PSYC		Tin
2009	ANTH	COM	ECON	GEOG	InfoLib	PoliSci	Н	SOC	(Intotals)
anthropolo									=SUM(B14
gy	0	1	0	0	1	0	1	1	0:l140)
communic									=SUM(B14
ation	0	0	0	0	1	0	1	1	1:1141)
									=SUM(B14
economics	0	1	0	1	1	1	1	1	2:1142)
I .									=SUM(B14
geography	0	0	0	0	0	0	0	1	3:1143)
info Q lik Coi	0		_	0		0	_	4	=SUM(B14
INTO&IIDSCI	0	1	0	0	0	0	0	1	4:1144)
politicalSai	0	1	1	1	1	0	1	1	=501VI(B14
politicalSci	0	1	-		1	0	I	1	5.1145)
psycholog	1	1	1	1	1	1	0	1	=301VI(D14
у	1	1		1	1	1	0	I	_SUM/B1/
sociology	0	1	1	1	1	1	1	0	7:1147)
Tout	0.000							01111/14 40	
(OUTtotal	-SUM(B140 ·B147)	=SUM(C140 ·C147)	=SUM(D140 :D147)	=SUM(E140 :E147)	=SUM(F140 :F147)	=SUM(G140 :G147)	=SUM(H140 :H147)	=SUM(1140: 1147)	=501VI(J14
s)		.0147)							0.0147)
Tlink	=SUM(B148	=SUM(C148		_SUM/E149		-811M/C149	-011M/1149	=SUM(I148	=SUM(B14
(IN+OUT)	+J140)	+J141)	=301vi(D148 +J142)	=301vi(E148 +J143)	=301vi(F148 +J144)	=301vi(G148 +J145)	+J146)	+J147)	8:1148)
TlinkMaxO	=MAX(0,B14	=MAX(0,C14	=MAX(0.D14	=MAX(0.E14	=MAX(0.F14	=MAX(0.G1	=MAX(0.H14	=MAX(0,I14	
	8-J140)	8-J141)	8-J142)	8-J143)	8-J144)	48-J145)	8-J146)	8-J147)	
tlinkMaxIN	=IVIAX(J140- B148,0)	=iviAX(0,J14 1-C148)	=MAX(J142- D148,0)	=MAX(J143- E148,0)	=MAX(J144- F148,0)	=MAX(J145- G148,0)	=MAX(J146- H148,0)	=IVIAX(J147 -I148,0)	

Appendix AA: Excel formulas in cite/cited binomial matrix



Appendix AB: Excel formulas from citation percent spread
--

4	н	1	1	К	L	M	N	0	Р	Q	R	S
.4		geography		information &		political science		psychology		sociology	k	
5	%ColumnTotal(cites	%ColumnTotal(cit	cites	%ColumnTotal(cites)	cites	%ColumnTotal(ci	cites	%ColumnTota	cites	%ColumnTotal(cite	
6	=(G6/G14)/0.01	=Y6	=(I6/I14)/0.01	=Z6	=(K6/K14)/0.01	=AA6	=(M6/M14)/0.01	= AB6	=(06/014)/0	= AC6	=(Q6/Q14)/0.	
7	=(G7/G14)/0.01	=¥7	=(I7/I14)/0.01	=27	=(K7/K14)/0.01	=AA7	=(M7/M14)/0.01	=AB7	=(07/014)/0	=AC7	=(Q7/Q14)/0.	
8	=(G8/G14)/0.01	= Y8	=(I8/I14)/0.01	=Z8	=(K8/K14)/0.01	=AA8	=(M8/M14)/0.01	=AB8	=(08/014)/0	= AC8	=(Q8/Q14)/0.	
9	=(G9/G14)/0.01	=Y9	=(I9/I14)/0.01	=Z9	=(K9/K14)/0.01	=AA9	=(M9/M14)/0.01	=AB9	=(09/014)/0	=AC9	=(Q9/Q14)/0.	
10	=(G10/G14)/0.0	= Y10	=(I10/I14)/0.01	= Z10	=(K10/K14)/0.01	=AA10	=(M10/M14)/0.01	=AB10	=(010/014)/	= AC10	=(Q10/Q14)/C	
11	=(G11/G14)/0.0	= Y11	=(I11/I14)/0.01	=Z11	=(K11/K14)/0.01	=AA11	=(M11/M14)/0.01	=AB11	=(011/014)/	=AC11	=(Q11/Q14)/C	
12	=(G12/G14)/0.0	= Y12	=(I12/I14)/0.01	= Z12	=(K12/K14)/0.01	= AA12	=(M12/M14)/0.01	=AB12	=(012/014)/	= AC12	=(Q12/Q14)/C	
13	=(G13/G14)/0.0	= Y13	=(I13/I14)/0.01	=Z13	=(K13/K14)/0.01	= AA13	=(M13/M14)/0.01	= AB13	=(013/014)/	= AC13	=(Q13/Q14)/C	
14	=SUM(H7+H8+H	=SUM(16:113	=SUM(J6:J13)	=SUM(K6:K13	=SUM(L6:L13)	=SUM(M6:M13)	=SUM(N6:N13)	=SUM(06:01	=SUM(P6:P13	=SUM(06:0	=SUM(R6:R13	=SUM(014+M14+K14+I14+G14+E14+C14)
15	=SUM(G14/S14)	94 1	=SUM(I14/S14)/0	i i i i i i i i i i i i i i i i i i i	=SUM(K14/S14)/0.01		=SUM(M14/S14)/		=SUM(014/S	1	=SUM(014/S1	=SUM(D15+F15+H15+J15+L15+N15+P15+R15)
16												
17												
18												
19		geography		information &		nolitical science		nsychology		sociology		
20	%ColumnTotal(cites	%ColumnTotal(cit	cites	%ColumnTotal(cites)	cites	%ColumnTotal(ci	cites	%ColumnTota	cites	ColumnTotal(cite	
21	=(G21/G29)/0.0	= Y21	=(I21/I29)/0.01	=Z21	=(K21/K29)/0.01	= AA21	=(M21/M29)/0.01	= AB21	=(021/029)/	= AC21	=(Q21/Q29)/C	
22	=(G22/G29)/0.0	=Y22	=(I22/I29)/0.01	=Z22	=(K22/K29)/0.01	=AA22	=(M22/M29)/0.01	=AB22	=(022/029)/	= AC22	=(Q22/Q29)/C	
23	=(G23/G29)/0.0	= Y23	=(I23/I29)/0.01	=Z23	=(K23/K29)/0.01	= AA23	=(M23/M29)/0.01	= AB23	=(023/029)/	= AC23	=(Q23/Q29)/0	
24	=(G24/G29)/0.0	= Y24	=(I24/I29)/0.01	=Z24	=(K24/K29)/0.01	= AA24	=(M24/M29)/0.01	=AB24	=(024/029)/	= AC24	=(Q24/Q29)/C	
25	=(G25/G29)/0.0	= Y25	=(125/129)/0.01	=Z25	=(K25/K29)/0.01	= AA25	=(M25/M29)/0.01	= AB25	=(025/029)/	= AC25	=(025/029)/0	
26	=(G26/G29)/0.0	= Y26	=(126/129)/0.01	=Z26	=(K26/K29)/0.01	= AA26	=(M26/M29)/0.01	= AB26	=(026/029)/	= AC26	=(026/029)/0	
27	=(G27/G29)/0.0	=Y27	=(127/129)/0.01	=Z27	=(K27/K29)/0.01	= AA27	=(M27/M29)/0.01	=AB27	=(027/029)/	= AC27	=(Q27/Q29)/C	
28	=(G28/G29)/0.0	= Y28	=(I28/I29)/0.01	=Z28	=(K28/K29)/0.01	=AA28	=(M28/M29)/0.01	=AB28	=(028/029)/	= AC28	=(Q28/Q29)/C	
29	=SUM(H22+H23	=SUM(121:12	=SUM(J21:J28)	=SUM(K21:K2	=SUM(L21:L28)	=SUM(M21:M28	=SUM(N21:N28)	=SUM(021:02	=SUM(P21:P2	=SUM(021:0	=SUM(R21:R2	=SUM(029+029+M29+K29+I29+G29+E29+C29)
30	=SUM(G29/S29)		=SUM(129/S29)/0		=SUM(K29/S29)/0.01	in the second	=SUM(M29/S29)/		=SUM(029/S		=SUM(029/52	=SUM(D30+F30+H30+J30+L30+N30+P30+R30)
21		17			Bergeringer Bergin Start		1		1	1		

Appendix AC: Excel formulas ratio spreadsheet

A	В	C	D	E	F	G
1						
2 Citation totals/discipline	ratios WITH					
3						
4	cites	cited	more likely to cite other:	s than to	more likely to be cited by	others th
5 anthropology	='1979Percents'IC29	= '1979Percents'!C60	=(B5&","&C5)	=QUOTIENT(B5,C5)	=(C5&","&B5)	=QUOTIENT(C5,B5)
6 communication	='1979Percents'!E29	='1979Percents'!E60	=(B6&","&C6)	=QUOTIENT(B6,C6)	=(C6&","&B6)	=QUOTIENT(C6,B6)
7 economics	= '1979Percents'IG29	= '1979Percents'IG60	=(B7&","&C7)	=QUOTIENT(B7,C7)	=(C7&","&B7)	=QUOTIENT(C7,B7)
8 geography	='1979Percents'!!29	='1979Percents'!!60	=(B8&","&C8)	=QUOTIENT(B8,C8)	=(C8&","&B8)	=QUOTIENT(C8,B8)
9 info&libSci	='1979Percents'!K29	='1979Percents'!K60	=(B9&","&C9)	QUOTIENT(B9,C9)	=(C9&","&B9)	=QUOTIENT(C9,B9)
10 politicalSci	= '1979Percents'!M29	='1979Percents'!M60	=(B10&","&C10)	=QUOTIENT(B10,C10)	=(C10&","&B10)	=QUOTIENT(C10,B10)
11 psychology	='1979Percents'!029	='1979Percents'!060	=(B11&'',''&C11)	=QUOTIENT(B11,C11)	=(C11&","&B11)	=QUOTIENT(C11,B11)
12 sociology	='1979Percents'lQ29	='1979Percents'!Q60	=(B12&","&C12)	=QUOTIENT(B12,C12)	=(C12&","&B12)	=QUOTIENT(C12,B12)
13 totals	=SUM(B5:B12)	=SUM(C5:C12)	-			
14						
15						
16 Citation totals/discipline	ratios WITF					
17						
18	cites	cited	more likely to cite other:	s than to	more likely to be cited by	others th
19 anthropology	2233	2242	=(B19&","&C19)	=QUOTIENT(B19,C19)	=(C19&","&B19)	=QUOTIENT(C19,B19)
20 communication	242	188	=(B20&","&C20)	=QUOTIENT(B20,C20)	=(C20&","&B20)	=QUOTIENT(C20,B20)
21 economics	323	412	=(B21&","&C21)	=QUOTIENT(B21,C21)	=(C21&","&B21)	=QUOTIENT(C21,B21)
22 geography	188	160	=(B22&","&C22)	=QUOTIENT(B22,C22)	=(C22&","&B22)	=QUOTIENT(C22,B22)
23 info&libSci	298	240	=(B23&","&C23)	=QUOTIENT(B23,C23)	=(C23&","&B23)	=QUOTIENT(C23,B23)
24 politicalSci	137	150	=(B24&","&C24)	=QUOTIENT(B24,C24)	=(C24&","&B24)	=QUOTIENT(C24,B24)
25 psychology	263	298	=(B25&","&C25)	=QUOTIENT(B25,C25)	=(C25&","&B25)	=QUOTIENT(C25,B25)
26 sociology	466	460	=(B26&","&C26)	=QUOTIENT(B26,C26)	=(C26&","&B26)	=QUOTIENT(C26,B26)
27 totals	=SUM(B19:B26)	=SUM(C19:C26)				
28						



Appendix AD: Excel formulas for graph percent data

A	B	C	D	E	F	G	H	1
34 %s for asymmetric matrix WITHOUT	s						check	
35	CITES/CITED	row%ofTotalCited					=B45-C36	<-=B45-C36
36 anthropology	=C36-B45	='1979Percents'!D61					=C45-C37	<=C45-C37
37 communication	=C37-C45	='1979Percents'!F61		CITES/CITED formula: =row%total-col%total			=D45-C38	etc.
38 economics	=C38-D45	='1979Percents'!H61		check formula: =col%total-row%total			=E45-C39	
39 geography	≠C39-E45	='1979Percents'IJ61	D				=F45-C40	
40 info. & library science	=C40-F45	='1979Percents'!L61					=G45-C41	
41 politicalScience	=C41-G45	='1979Percents'!N6:					=H45-C42	
42 psychology	=C42-H45	='1979Percents'!P61					=145-C43	
43 sociology	=C43-I45	='1979Percents'!R61						
44			U.					
45 columns:%ofTotalCites	=L45	=M45	=N45	=045	=P45	=Q45	=R45	=\$45
48 %s for asymmetric matrix WITH self-	C			В			check	
49	CITES/CITED	row%ofTotalCited	1				=B59-C50	<-=B59-C50
50 anthropology	=C50-B59	='1979Percents'!D46					=C59-C51	<=C59-C51
51 communication	=C51-C59	='1979Percents'!F46		CITES/CITED formula: =row%total-col%total			=D59-C52	etc.
52 economics	=C52-D59	='1979Percents'!H46		check formula: =col%total-row%total			=E59-C53	
53 geography	=C53-E59	='1979Percents'!]46	С				=F59-C54	
54 info. & library science	=C54-F59	='1979Percents'!L46					=G59-C55	
55 politicalScience	=C55-G59	3.6144578313253					=H59-C56	
56 psychology	=C56-H59	='1979Percents'!P46	5				=159-C57	
57 sociology	=C57-I59	='1979Percents'IR46					-	
59 col%ofTotalCited	r=L59	r=M59	"=N59	r =059	=P59	≈ Q59	r=R59	~ \$59
60 notice poli sci flips when own citation	15			A				
62 CITES/CITED	negative#=they cite others more than positive#=they are cited by others mo	tř						





Appendix AE: UCINET 2008 graph showing weighted edges



strt05NC.prt							
StrtUSINC.Crd	atura 405 0		•• Moder 1 1.	un Trit Dat			
KUN NAME N CONCEPTS	stratus-u	9NOSCS,SYI	mviatx 1-iv	vr1n,Kol			
N-CUNCEPIS	0 5						
N-DATASETS CDITEDION D	$\int D n/n = ci$	toCounts					
CONLARELS	AIN II/a-CI	lecounts					
CONLADELS	ΔΝΤΗ						
	COM	Л					
	ECON	1					
	GEOG						
	INFLI	B					
	POLSO	CI					
	PSYCI	H					
	SOC						
OPERATIONS	COMP	ARISONS					
SPECIFICATIO	DNS						
MAXVAL	20000						
END OF SPECI	FICATIO	NS					
OPTIONS 2	23,24,22,1	8,8,9,12,13	,14,15,16				
READ DATA							
(8F8.0)							
0	0	0	0	0	0	11	0
0	0	4	0	0	219	4	17
0	4	0	0	0	14	1	11
0	0	0	0	0	0	0	3
0	0	0	0	0	2	19	14
0	219	14	0	2	0	5	10
11	4	1	0	19	5	0	8
0	17	11	3	14	10	8	0
(8F8.0)	-						
0	0	0	0	0	0	18	1
0	0	0	0	0	0	1	0
0	0	0	1	0	2	16	4
0	0	1	0	0	2	0	8
0	0	0	0	0	2	18	15
0	0	2	2	2	0	0	17
18	I	16	0	18	0	0	5
	0	4	8	15	17	5	0
(8F8.0)	0	0	0	0	0	1	1
0	0	0	0	0	0	14	11
U	U	U	U	U	229	14	
U	0	0	0	U		U	0
U	U	U	U	U	U	0	2

Appendix AF-1: Example of runstream file used by v56

0	0	0	0	0	0	40	17
0	229	1	0	0	0	1	3
1	14	0	0	40	1	0	4
1	11	0	2	17	3	4	0
(8F8.0)							
0	0	0	0	0	0	4	0
0	0	11	0	1	11	24	27
0	11	0	0	0	0	5	7
0	0	0	0	0	22	1	5
0	1	0	0	0	0	18	13
0	11	0	22	0	0	0	6
4	24	5	1	18	0	0	0
0	27	7	5	13	6	0	0
(8F8.0)							
0	0	0	0	0	0	19	0
0	0	2	0	42	13	10	40
0	2	0	0	0	4	10	9
0	0	0	0	0	4	1	17
0	42	0	0	0	2	59	28
0	13	4	4	2	0	5	4
19	10	10	1	59	5	0	4
0	40	9	17	28	4	4	0

Appendix AF-2: Example of runstream file used by v56



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