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WEAK LINKS AND SCENE CLIQUES WITHIN THE SMALL WORLD OF SHAKESPEARE

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Abstract. Forms of narrative such as drama allow for the transmission of information to large audiences. The drama therefore has to contain structural elements that are easily accessible to the viewer. The structures of 10 plays by William Shakespeare were studied and shown to exhibit small world properties, in that any node (character) in a network is connected to any other node by only a few intermediate steps. It is suggested that the number of characters that are present within each scene reflect similar numbers to those of observed human support cliques. This might reflect possible cognitive limits, as when there is an increase in the number of characters within a play rather than add new characters to a scene Shakespeare has instead created new scenes, thus maintaining the scene clique size. These scene cliques are connected by a series of weak links *(keystone characters)* that maintain the flow of information within a growing network of characters. It is suggested that this might provide a useful basis for further research into the structure, purpose and development of drama.

Keywords: drama, Shakespeare, group size, small world networks, weak links

INTRODUCTION

Forms of narrative such as that of theatre or literature allow for the communication of information and ideas to large audiences. In order for mass comprehension to be possible the underlying structure of the narratives has to contain elements and ideas that are common to all members of the population. One method of achieving this is to present the information within the framework of everyday social structures. This provides a mental template onto which the audience can apply their own generic world knowledge in order to make sense of dramatic and plot elements within a literary piece (GRAESSER et al. 1999).

Several key elements of social structure analysis have been shown to follow similar principles in both Shakespeare's plays and real world observations (STILLER, NETTLE and DUNBAR 2003). These include the presence of similar conversational group sizes and work group sizes to those observed in human societies. This suggests that the social structures familiar to most people are available for tracing information within the plots. In addition, these plays demonstrate "small world" pro-

perties in that any two individuals within a play are socially linked by only a few intermediate characters ("degrees of separation"), and exhibit a high degree of social clustering. These are properties that are frequently observed within everyday social life (DE LIMA E SILVA et al. 2004; LILJEROS et al. 2001) and as such would provide a possible way for the audience to enter into the dramatic world that is presented before them.

This method of drama comprehension would be in accord with that of the "simulation" theory of mind reading. According to this theory there is a matching between the mental activity of the simulator, in this case represented by the drama or written word, and that of the target, the audience member reading or observing an action (GALLESE and GOLDMAN 1998). This would mean that when perceiving the action of others, the individual is taking on the perspectives of the simulator. In order for an audience member to take on the perspectives that are presented to them, the range of information provided has to remain within their personal experiences and cognitive limitations.

One such cognitive constraint on the number of individuals that can be actively maintained within a social group could be that of perspective taking (the ability to take another individuals point-of-view). In a recent study participants were read a story and asked to recall information regarding the points of view of various characters (STILLER and DUNBAR submitted). This was followed by a questionnaire that requested participants to list the number of people that are part of their support clique (those individuals whom they are emotionally attached to and dependent on). It was shown that there was a significant positive correlation between perspective-taking ability and the support clique size. When tracking the relationships of characters within a play, the perspective taking ability of the audience might also act as a limitation on the range of group sizes that can be actively comprehended. Therefore the most effective communication of social information would be within the boundaries of natural group sizes within which the audience can explore the diegetic world.

The notion of cognitive limitations and perspective taking highlights the complex nature of social interaction. When analysing to what extent a particular dramatic form accurately reflects everyday social situations or social cognitive thinking, it is useful to describe as completely as possible the levels and complexity within these networks. One such method is that used in "small world" studies where the interactions between characters (or nodes) can be examined and compared in tandem with the group sizes. Within literature and drama the group sizes presented fluctuate in size and can be perceived at multiple levels. Utilising calculations associated with small world methodology allows for a detailed examination of these dynamical systems in simple terms.

Many social and ecological networks show small world properties where only a small number of intermediate links are required to connect any two nodes (FERRER I

CANCHO and SOLE 2001; WATTS 1999, 2003; WILLIAMS et al. 2002). So for example in a social or ecological context this would mean that each individual (node) is connected to any other individual by only a few intermediate acquaintances. The number of intermediate acquaintances can be termed as either the degree of separation or path distance. This short path distance between individuals is possible due to the manner in which the networks develop, where new links tend to attach themselves preferentially to a few already well-established nodes (i.e., those that are well connected). In recent years, the study of small world networks has been applied across many different areas of academic study. These range from the web of human sexual contacts, co-authorship on scientific papers to the structure of the World Wide Web (BARABASI, ALBERT and YONG 2000; BARABASI et al. 2002; LILJEROS et al. 2001). These studies are important because they increase our understanding of how information is transmitted within each system and how each system develops. So when applied to drama it can provide a quantitative description of how the social structure of a play changes from scene to scene and between characters.

An additional aspect of the small world structures underpinning many social groups is the notion of weak links. A weak link can be defined as a node that interacts with two or more otherwise isolated cliques, thus providing a basis for bonding together the larger social network (GRANOVETTER 1973, 1983). In a social context the presence of a weak link provides a useful conduit for the transmission of cultural information and gossip between social metapopulations. MILROY and MILROY (1985) showed that individuals that act as a weak link between two otherwise isolated social groups could facilitate the transmission of language and words between social groups. The transient nature of the weak link increases the chance of a new social group being exposed to a new word or concept. As such a weak link within a dramatic piece will be essential in the transmission of information from scene to scene or chapter to chapter.

However, the presence of a weak link within a population can be difficult to quantify, the use of cluster coefficients (BARABASI et al. 2002) is one method of identifying such links. Cluster coefficients provide a measurement of the proportion of social links that an individual shares with the other members of a social group (i.e., their cliquishness). Individuals with high cluster coefficients (≈ 1) are part of a strongly bonded social group where members share a majority of the same contacts. Individuals with weaker cluster coefficients (< 0.5) are those that have no association with one particular clique and form weak associations with many different individuals. These weak links are suggested as being essential in forming a small world network that is resistant to attack (i.e., fracturing) by allowing information to pass from one sub-group to the next (ALBERT, JEONG and BARABASI 2000; GRANOVETTER 1973).

A character within a play by Shakespeare can also be perceived as providing a method of continuing the plot from scene to scene by acting as a weak link. A char-

acter that provides the necessary connections between scenes could achieve this and act as a "keystone" holding together disparate plot elements and characters, therefore enhancing the communication of information vital to the plot. The term keystone is derived from studies of ecosystems where one particular species might prove key in maintaining the current structure of a habitat (PAINE 1969). For example, the grizzly bear *(Ursus arctos horribilis),* and grey wolf *(Canis lupus)* of Yellowstone National Park have large home ranges and as a result interact with a vast amount of different and otherwise separate habitats and species along the way. Should their presence be removed from the system (as the wolves were in the 1930's) then the connections between these subsystems that the keystone provides are lost leading to a change in the nature of the habitat (KLEIN et al. 2002). Therefore the ripple effect of losing a keystone is larger than that caused by the removal of a more localised species. Similarly a keystone character in a play will provide the cohesive links between scenes and characters that structure the plot elements therefore proving essential within the story telling medium.

The success of an audience's interaction with a dramatic performance ultimately depends on the accurate mimesis of natural human social groups within the diegetic world. Since the plays of William Shakespeare have had international, commercial and critical success for several centuries these, above all others, should provide a particular revealing example of how these principles might operate. A superior understanding and incorporation of natural human social structures into the plays would thus enhance the audience's comprehension of a more plausible and credible story.

In this paper the small world effect and the presence of weak links are examined with regard to 10 Shakespearean plays: *Hamlet, King Lear, A Midsummer Night's Dream, Othello, Richard III, Romeo and Juliet, The Tempest, Titus Andronicus, Troilus and Cressida, Twelfth Night*. The weak link nature of characters is examined in terms of their degree of social clustering, connectivity and appearances. The presence of social grouping similar to those present within human populations will be examined further in terms of the scene as a social unit. The scene can be identified as a particularly important social unit within a play as this represents a partitioning that is deliberate on the part of the playwright and therefore intended to be perceived as distinct from other observed groupings within the play. So within the simulation theory of story telling these social units should also be of a size that is within the cognitive abilities of the audience. The identified scene cliques are therefore compared with naturally occurring human networks (support cliques and monthly networks) and similarities discussed. It is shown that both the number of scenes that a character appears in and the number of social links a character possesses (connectivity) is inversely correlated with their respective cluster coefficients.

METHODS

The Small World Network

The interactions of characters from 10 plays by William Shakespeare were analysed using established small world methodology (BARABASI et al. 2002; DUNNE, WILLIAMS and MARTINEZ 2002; WATTS and STROGATZ 1998; WILLIAMS et al. 2002). For each play the interactions between characters were entered into a binary matrix. These interactions were identified using the stage instructions present within the texts. If two characters are perceived as being in social contact with each other then a "1" is entered into the matrix. Characters that had either no dialogue nor progressed the plot were excluded from the analysis, for example the attendants, *Tressel* and *Berkely* in *Richard III* are mentioned once in Act 1 Scene 2 but do not appear to actually form part of the onstage group.

The 3 measurements that were calculated were the connectivity, mean path distance and clustering coefficient. The connectivity (C) represents the proportion of all possible linkages between characters that are realised (i.e., actually occur). At the character level this can be described as $C = L / S - 1$, where S is the number of characters within the play and L is the number of links a character possesses. For the play as a whole the connectivity is defined as $C_{play} = L / S(S - 1)$. So for the character *Troilus* in *Troilus and Cressida,* S = 29 and L = 21, so the character has a connectivity of 0.75.

The mean path distance (D) represents the mean number of links needed to connect two characters by the shortest route. So for each character $D_i = \Sigma d_{ij} / S - 1$, where D equals the shortest number of intermediate steps needed to connect the two characters *i* and *j*. The shortest path between any two characters can either be identified using a sociogram (see *Figure 1*) or by using the binary matrix.

The cluster coefficient (T) is the likelihood that two nodes that interact with a mutual acquaintance will themselves interact with one another. So for each character $T = 2R / L(L - 1)$, where R represents the number of relationships that exist between the acquaintances known by a character. So for example the character *Troilus* has links with 21 other characters, the cluster coefficient will therefore be the proportion of interactions realised between these characters. In this example out of the 210 possible relationships between the characters known by *Troilus,* only 114 of them actually occur, the proportion of this occurrence is the cluster coefficient, which in this example works out as 0.54.

In order to establish possible weak links the minimum number of characters needed to link all other characters together were identified. So in *Troilus and Cressida* the minimum number of characters that are needed to link the network together is 3, this is illustrated by the black dots in the sociogram *(Figure 1).* Sometimes various

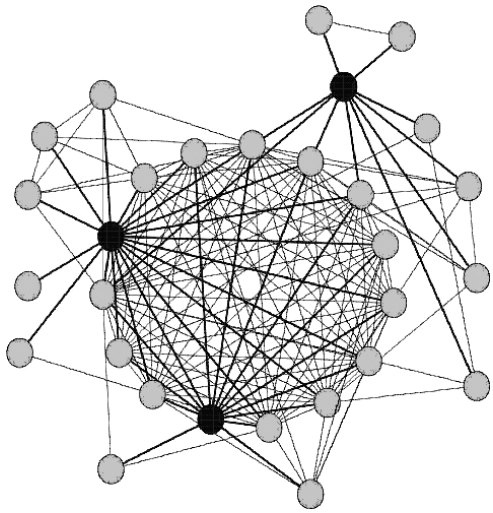

Figure 1. Sociogram of interactions between the characters in *Troilus and Cressida*. The circles represent individual characters; the black circles represent the 3 characters *(Pandarus, Theristes* and *Hector)* that are keystone in connecting all other characters together (one alternative grouping of *Pandarus, Menelaus* and *Hector* is also possible)

combinations of characters were possible, however, this does not affect the minimum number of characters that are required to link the network. Other measurements that were taken from the plays include the number of scenes in which a character appears, this provides a rough estimate of the frequency of appearance.

Scene Size and Group Size

In addition to examining the small world properties the number of characters that appear in each scene were identified and the average size recorded for each play, this was termed as the scene clique. This was then compared with data from previous studies on sizes of support cliques and monthly networks (DUNBAR and SPOORS 1995; STILLER and DUNBAR submitted) to ascertain whether the scene is a useful measure of social grouping within the play. The support clique is defined as the number of people that an individual would turn to for advice or a personal problem (i.e., intimate friendships). The monthly network is defined as the number of people that an individual have contacted within the past month on a social basis.

RESULTS

Small World Network

The plays all exhibit the properties of small world networks, each character is linked by only a few intermediate nodes, D < 2, and exhibit greater clustering than would be expected by chance *(Table 1)*. As the number of characters (S) in a play increases there is a decrease in the overall connectance of the plays while the size of the scene cliques remain the same. This suggests that when more characters are required within a play, rather than just add new characters to a scene Shakespeare has instead created extra scenes and new social groups. This fragmentation also leads to the maintenance of a high degree of clustering (T). If there were random connections between characters within each play the connectivity and the cluster coefficient would remain approximately the same, however, the values for the cluster coefficients appear to be significantly higher than the connectivity. This suggests that the plays follow the principles of a small world network with the preferential attachment of new nodes to a few highly connected nodes. This maintains the short path distance between characters despite the fragmentation of the plays into sub-groups (for a more detailed comparison of the results for each play see: STILLER, NETTLE and DUNBAR 2003).

Table 1. Average Connectivity (C: the proportion of possible links realised), Distance (D: degrees of separation), and Cluster coefficient (T: the probability that two links of any node are themselves linked) for characters in ten Shakespearean plays

Play	C	D	T
Hamlet	0.25	1.80	0.82
King Lear	0.39	1.76	0.76
A Midsummer Night's Dream	0.51	1.57	0.87
Othello	0.50	1.55	0.72
Richard III	0.21	1.98	0.70
Romeo & Juliet	0.34	1.80	0.80
Tempest	0.72	1.38	0.93
Titus Andronicus	0.55	1.45	0.84
Troilus & Cressida	0.29	1.69	0.87
Twelfth Night	0.69	1.23	0.79

Each individual character is linked to any other character within a path distance (D) of less than 3. *Figure 2* illustrates the relationship between the connectivity of the characters and their respective path distance. The fat tail of the graph illustrates that below a particular level of connectivity (approximately 0.2) additional nodes are attached to the periphery of the network and therefore possess a greater mean path distance between characters.

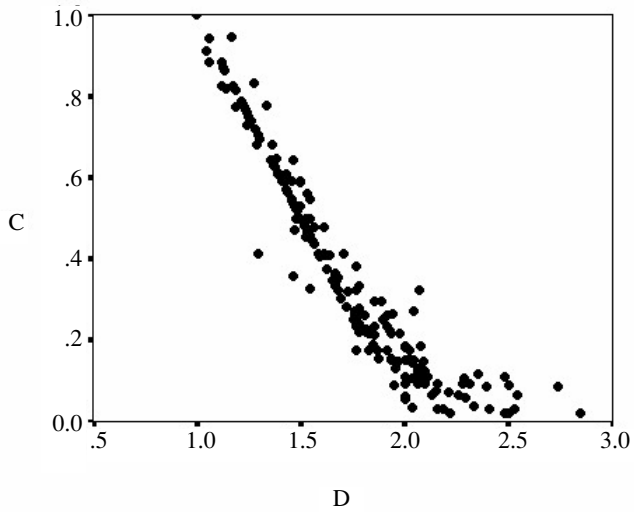

Figure 2. The relationship between connectivity, C, and path distance, D, for the characters in 10 Shakespeare plays

As illustrated in *Table 1,* the average cluster coefficient for the 10 plays is very high (Mean = 0.81, range = 0.23, *sd.* = 0.07, $N = 10$). One possible reason for a high cluster coefficient would be the small size of the networks studied (cast list of 18–47 speaking characters). The results indicate that there is not a significant association between the size of the overall network (cast list) and the cluster coefficient ($df = 9$, $r = -0.497$, $p = 0.144$). The overall network size is therefore not the critical factor in explaining the observed levels of clustering. This provides further evidence for the existence of highly clustered sub-groups.

As the data are not normally distributed, nonparametric tests were used to analyse the data at the character level. There is a highly significant correlation between the number of scenes that a character appears in and the corresponding cluster coefficient (*Figure 3:* $df = 278$, $r_s = -0.564$, $p < 0.001$). Those characters appearing in only a few scenes have a higher degree of clustering than those that appear in several scenes. These single scene characters are therefore part of a strongly linked sub-network within each play. This is confirmed by a highly significant difference of approximately 10% between the cluster coefficient of characters that appear in only one scene when compared with those that appear in more than one, means of 0.85 and 0.765, respectively (Mann Whitney test, $U = 4259$, $N_1 = 91$, $N_2 = 187$, $P < 0.001$). The scene therefore appears to provide a distinct social unit within each play. If the number of characters present in each scene, reflect those present within society, this could provide a unit that is easily comprehensible to the audience and in accord with the simulation theory of mind.

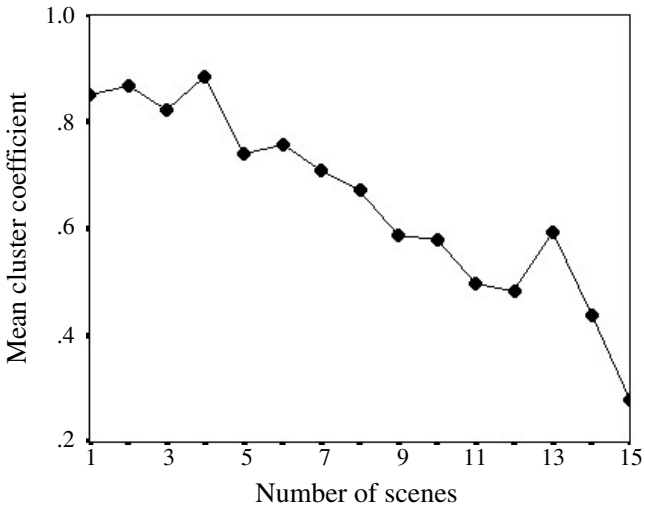

Figure 3. The relationship between mean cluster coefficient per character and number of scenes a character appears in

Scene Size and Group Size

A crucial aspect of the analysis is to relate the structure of the social groups in Shakespeare's plays with such observations taken from a real life population. If such a comparison yields a relative similarity between the diegetic social structures of the dramas and real life relations, then this would lend support to the hypothesis that the comprehension of a dramatic piece is aided by accurate mimesis of normal, everyday social interactions. The scene cliques (the number of characters per scene) for the 10 plays were compared with data obtained from observed support cliques and monthly networks (STILLER and DUNBAR submitted). The results show that there is no significant difference between the median observed support clique sizes and that of the data from the 10 plays (Mann Whitney Test: $U = 5521.5$, $N_1 = 180$, $N_2 = 65$, $P = 0.5$). Thus, the number of individuals contained in real life support cliques could be comparable with the number of characters present within a scene for each of the 10 Shakespeare plays. When the scene clique is compared with that of the monthly group, those people that an individual has had social contact with in the past month, there is a highly significant difference between the two groups (Mann Whitney Test: $U = 1403.5$, $N_1 = 180$, $N_2 = 65$, $P < 0.001$). Despite the small sample sizes obtained from human social groups, the group sizes observed within each scene could be argued to reflect more accurately that of the support clique rather than the monthly network (see *Table 2*).

Table 2. Comparison of observed scene clique (number of characters per scene) with data from natural populations

	N	Mean	sd.	Range
Shakespeare	145	5.92	3.67	24
Observed support clique *(Stiller & Dunbar submitted)*	65	5.92	4.6	20
Observed monthly network *(Stiller & Dunbar submitted)*	65	20.5	11.27	52
Support clique *(Dunbar & Spoors 1995)*	101	4.72	2.95	14
Monthly Network *(Dunbar & Spoors 1995)*	101	11	5.64	30

Table 3. Minimum number of characters required to link all other characters together (K), for each of the ten plays

Play	K	Key characters (examples)
Hamlet	4	Claudius, Hamlet, Horatio, Polonius
King Lear	3	Edmund, Gloucester, Kent
A Midsummer Night's Dream	2	Lysander, Titania
Othello	2	Cassio, Duke
Richard III	6	Buckingham, Derby, Elizabeth, Ratcliffe, Richard III, Richmond
Romeo and Juliet	4	Romeo, Benvolio, Friar Lawrence, Nurse
The Tempest	1	Ferdinand
Titus Andronicus	2	Chiron, Lucius
Troilus and Cressida	3	Pandarus, Theristes, Hector
Twelfth Night	2	Olivia, Viola

It is apparent that the scenes provide a reservoir of highly clustered networks, with characters in a scene more closely linked to each other than those characters outside of the immediate scene. *Figure 4* illustrates the way in which weak links within the first act of *Troilus and Cressida* link the sub-groups within each scene together. A few core or keystone characters are therefore hypothesised as producing the necessary weak links between scenes. Each play requires a different minimum number of keystone characters to achieve this; the results for the 10 plays are shown in *Table 3*. As illustrated in *Figure 5,* there is a highly significant relationship between the numbers of keystone characters required per play and the number of speaking characters

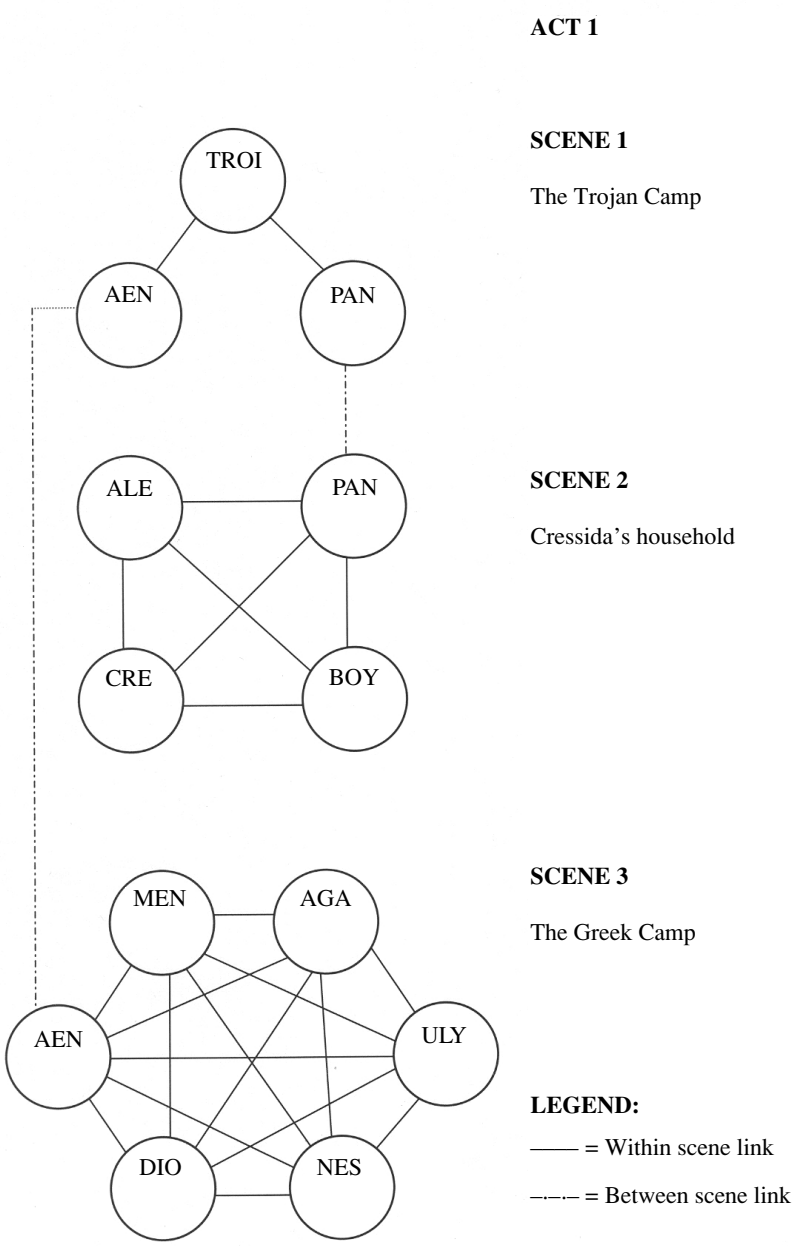

Figure 4. The social network for Act 1 of *Troilus and Cressida*.
Each circle represents a character and lines represent strong links between characters and weak links between scenes

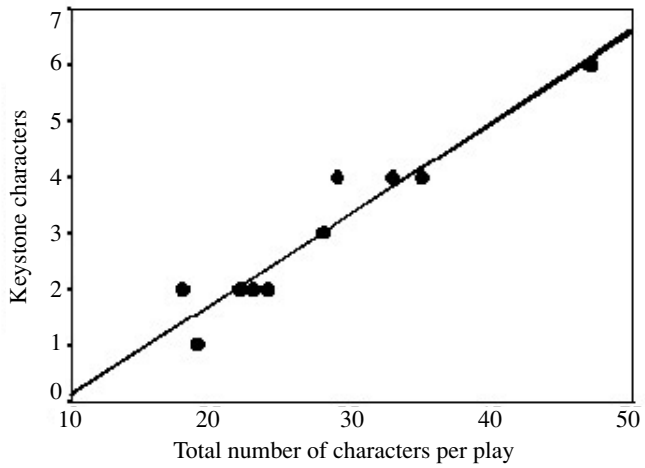

Figure 5. The linear relationship between number of characters per play and the minimum number of keystone characters (K) needed to connect all other characters within each play: K = –1.529 + 0.163X

($r^2 = 0.920$, $F = 92.61$, $p < 0.001$, $df = 9$). However, for some plays there are more than one set of possible keystone characters for example in *Troilus and Cressida,* the keystone characters *Pandarus, Theristes* and *Hector* are identified (see *Table 3*), however, *Menelaus* can be substituted for *Theristes*. The varying combinations do not affect the minimum number of required links (K) but do increase the number of possible keystone characters and it raises the question of whether only those characters that cannot be re-substituted can truly be considered "keystone".

In summary the results show high clustering for characters that appear in only one scene and have low connectivity. These scenes form a clique that reflects the observed support cliques within a natural human population. These cliques are linked together by weak links/ keystone characters.

DISCUSSION

Small World and Scene Cliques

The prevalence of small world networks within the natural world and human society could suggest that such networks provide an optimum method for linking together sub-groups or individuals. Therefore in terms of drama those plays that adhere to this common type of network are likely to prove highly accessible to an audience and adept at transmitting cultural information. However, the use of these descriptive calculations can provide new insights into how we actively perceive and relate to

each aspect of dramatic construction. All of the plays analysed in this study exhibit small world properties with only a maximum of just two further individuals required to connect any two apparently disparate characters, and that the characters do indeed cluster into cliques.

The groups represented within the plays reflect those present within real everyday human social networks (DUNBAR and SPOORS 1995; KUDO and DUNBAR 2001; STILLER and DUNBAR submitted). The presence of strongly networked scenes containing predominantly characters that do not reappear in other scenes creates a highly clustered sub-network or clique. However, the scene as a social unit might not be the sole product of the number of individuals that can be cognitively processed at one time. The limitations of performance space also have to be considered. Despite this, it is the highly connected scene cliques that result in the high cluster coefficients obtained for the ten plays. This would suggest that at the scene level the on-stage relationships are particularly intense. If the cluster coefficient for characters that appear in only one scene had been lower (i.e., character appearances are brief and transient within each scene) then the audience might have less reason to engage with each section of plot as the portrayed relationships would be less intense.

Within these scene cliques one particular aspect of a plot is acted out. However, this creates a problem for the playwright because it leaves the various cliques within a play isolated from each other. In order to transfer the information between the cliques and not reduce the intensity of the character interaction at the scene level a mechanism is required that will allow the plot to develop naturally. This is performed by weak links between the scenes *(Figure 4)*. These weak links take the form of highly connected keystone characters that reoccur from scene to scene. *Figure 4* illustrates the opening act for *Troilus and Cressida* and illustrates how the first three scenes are connected by two weak links that appear in the first scene. The use of a weak link to conduct information creates a series of small world connections between the scenes and reduces the need for information to be reiterated scene after scene. This enables the plot to progress and the audience to identify the central character / story line without being swamped by redundant information.

If the network as a whole were strongly clustered it would be expected that the character with the highest connectivity would have the highest clustering coefficient. In such a situation the whole play would act as one scene, with no need for highly connected individuals to connect cliques. However, if the network is fractured (i.e., split into scenes) with intermediate links, then the characters with the highest connectivity would be expected to have the lowest cluster coefficient as their social promiscuity would link them to a variety of different unconnected cliques. This kind of network is very robust and possibly easier to comprehend as the audience can link individual social groupings and sub-plots together to make their own interpretation. The plays of Shakespeare appear to be neither completely fractured nor completely

continuous in structure but represent an economic balance between skilful complexity and naturalistic social groups.

The types of networks observed in the plays are very tolerant to random attack (i.e., the compromise of the network's integrity through the removal of a random node) in that if the few key link characters are still present the flow of information between scenes can be preserved. Therefore the loss of several characters will not affect the flow of the plot and the audience perceptions of events. For example in staging *Troilus and Cressida* it is common practise to lose characters such as *Deiphobus, Helenus* (ALEXANDER 1992; BARTON 1969; HANDS 2003). However, in each of these productions the necessary keystone characters remain present allowing for the maintenance of the plot and flow of information from scene to scene. With a larger network size, more weak links are required to maintain the tolerance of the system to attack. A large network size thus requires a greater number of keystone characters in order to transfer information between its expansive network of nodes.

By having naturalistic clique sizes and social networks it is not necessary for the audience to be explicitly informed about the social relationships between each individual character, instead it can be deducted implicitly in much the same way as in everyday social life. The group sizes depicted are all within the cognitive limitations of everyday human interactions (STILLER and DUNBAR submitted). This means that the information presented can be processed instantaneously without putting strain on working memory. If the group sizes depicted were larger than those observed in the scene cliques their number of interactions that would have to be traced could prove to be overwhelming and interfere with the drama.

Weak Links, Scene Cliques and Plot

The relationships implied by weak links and the scene cliques enables us (the audience) to judge certain aspects of a character's personality without having to hear the information spoken aloud. Characters with a high cluster coefficient will tend to be restricted to the same group of people; these characters will come across as having strong links with a select few. An example of this is evident in *Troilus and Cressida,* the character *Menelaus* only appears within the context of the Greek camp, and likewise *Priam* in the Trojan camp, and this increases the sense of separation between the Greek and Trojan camps. However, a character with high connectivity and a low cluster coefficient is in a better position to defect within a social situation. A defecting weak link will have increased access to a larger range of social cliques that are otherwise unconnected and deprived of the policing gossip that the defecting character itself might maliciously provide. This kind of defection is most noticeable within *Othello* in the portrayal of *Iago*. *Iago* utilises his low degree of loyalty to one

particular scene clique in order to manipulate the perceptions of different social clusters throughout the play. Conversely *Cassio* and *Othello* whom also have high connectivity and low cluster coefficients are easy targets for *Iago's* gossip, as they can be perceived as untrustworthy by the other characters due to the way in which they are not part of one particular highly connected sub-group. The perception of the social interactions between characters can therefore be enhanced by their position within the social network within a play.

By presenting a mental schema that is readily accessible to the audience, the amount of information that has to be processed within working memory is greatly reduced. I suggest that a play that is well structured and relevant to its target audience will be assimilated with less effort and perhaps will be likely to receive a greater number of performances as a result. An interesting future study would be to see if art house film, with its complex sub-texts and plot structures, share the same small world properties as the long lasting plays of Shakespeare.

SUMMARY

The small world properties and the presence of weak links within the play make the story telling medium more efficient and possibly more accessible. A small world network with a short average path distance between characters makes the social linking and the relationships between different groups of characters easier to comprehend. The structure of the plays mimics social groups present within real life situations, enabling for the ease of comprehension of the diegetic landscape. From an evolutionary psychology perspective this might help in the understanding of why some dramatic pieces appear to be more persistent than others. Such complex structuring might help to explain how and why particular narrative structures have evolved within human society. Alternatively an analysis of the weak link nature of the individual characters can help in understanding in how the actual construct of a play actually influences our perceptions of a character. We hope that this paper will provide a basis for further research into how people perceive and comprehend drama based on its structural development, and how certain dramatic works such as Shakespeare have enduring appeal regardless of linguistic style.

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