A SCIENTIFIC DISCUSSION TEST ON SOME SOCIAL HARMONY PROBLEMS

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ABSTRACT

In the summer of 2006 Gu had chance to teach a MBA course attached to Graduate School, CAS on the subject of knowledge management. In this course we require graduate students to use the advanced technology and methods in promoting people to obtain new knowledge individually and collectively by discussion, as a part of course we ran a scientific discussion test within a MBA course to see how they may work. We select some important and hot topics in social harmony problems in China for the discussion content and run discussion test within the graduate students with the help of some facilitators. Because recently in China the government pays much attention on the social harmony problems, the project team in the Interdisciplinary center for Natural and Social sciences attached in Chinese Academy of Sciences (CAS) run a special project on the subject of studying social harmony and social stability from 2004. We have joined this project team.

Although the formal test discussion only took half a day, but the total test process including the preparation, analysis and summary lasted 18 days (July 27-June 14, 2006). This test got support from the other members in project. The purpose of running this test is to teach MBA graduate students how the advanced discussion methods and tools may help people to learn the knowledge related to the social harmony and stability existed already and developed by students themselves by running an efficient and effective discussion meeting. The whole test was divided into six subtests by six groups (corruption, housing, medicine reform, unemployment, emergent events and peasant workers) and guided by seven facilitators from project team. Before the formal discussion test the facilitators made scientific design for each subtest in the meeting process. After meeting they made various analyses for the discussion results. We also ask all students to prepare his own talk on the related topic on base his own knowledge or collected from web and other information sources before participating in discussion. During the discussion we emphasized the concept of *Ba* proposed by Nonaka, this is both the hard and soft environment for the discussion meeting, for example we provided the good accommodated discussion rooms for their discussion, during the discussion we required the spirit of freedom, equality, independency, coordination and respect to each with other. We also emphasized the interdisciplinary study, so from one side we required the participants with different knowledge background in the same group and from other side we hope them discuss from different aspects. Finally we intended to use the advanced discussion tools and methods with the help of computers, we had used such as GAE (Group Argumentation Environment) developed by Tang and Liu, Institute of Systems Science, Chinese Academy of Sciences, PathMaker by SkyMark Corporation, UciNet by Analytic Technologies, GIS (Geographical Information System), psychological

survey and game theory etc. We stand for the combination of human and computer, but emphasizing the human. Most of graduate students had satisfied this discussion test and learnt a lot from this test. This paper is just a part of summary for running the whole scientific discussion test.

Keywords: social harmony, GAE, discussion, psychology, expert mining

I. Introduction

Recently in China the government pays much attention on the social harmony problems, the project team for study on social sustainability attached in Chinese Academy of Sciences (CAS) run a special project on the subject of studying social harmony and social stability from 2004. We have joined this project team. In the summer of 2006 Gu had chance to teach a MBA course attached to the school of management in Graduate University of CAS on the subject of knowledge management. As a part of the course we ran a scientific discussion test. This test got support from the large team leader, professor Niu WY and other members in project.
The purpose of running this test is to teach MBA graduate students how the advanced discussion methods and tools may help people to learn the knowledge related to the social harmony and stability, existed already and developed by students themselves by running an efficient and effective meeting. The whole test was divided into six subtests by six groups and guided by seven facilitators from project team. Before the formal test the facilitators made scientific design for each subtest in the meeting process. After meeting they made various analyses for the discussion results. During the discussion we emphasized the spirit of freedom, equality, independency and coordination and respect to each with other. We also emphasized the interdisciplinary study, so from one side we required the participants with different knowledge background and from other side we hope them discuss from different aspects. Finally we intended to use the advanced discussion tools and methods with the help of computers. We stand for the combination of human and computer, but emphasizing the human. This paper is just a part of summary produced by running the whole scientific discussion test.

II. Process for discussion test

The whole process may be divided into four phases: preparatory meeting $\mathbf{M_0}$ **(**$\mathbf{M_{01}}$**,** $\mathbf{M_{02}}$**)**, discussion test $\mathbf{M_1}$, analysis **A (**$\mathbf{A_1}$**,** $\mathbf{A_2}$**)** and summary **S (**$\mathbf{M_2}$**,** $\mathbf{M_3}$**,** $\mathbf{M_4}$**)**

2.1. Preparatory meeting $\mathbf{M_0}$ ($\mathbf{M_{01}}$ (project team), June 27- 29, 2006; $\mathbf{M_{02}}$ (MBA course), June 30, 2006)

In this phase we may divide it into two phases $\mathbf{M_{01}}$ **(project team),** June 27-29,2006 and $\mathbf{M_{02}}$ **(MBA course),** June 30,2006.
In $\mathbf{M_{01}}$**(project team)** the participants were 7 members from project team,They decided to select the main themes for discussion from a set of problems related to the social harmony, finally they selected six themes as the topics for discussion: 1) corruption, 2)housing, 3)medicine reform, 4)unemployment, 5)emergent events and 6)peasant workers. Then they assigned for each team member as one of the facilitators for every topics (see Table 1). We asked each member to prepare the available information for the discussion which take time for 20 minutes, pre-design the possible

scenario for discussion process, propose useful methods and tools for helping the discussion.

Table 1. Topics and facilitators

Topic	*Facilitator*
Social corruption	**Fang ZM (Center of Ecology ,CAS)**
Housing problem	**Liu YJ (Institute of Policy and Management, CAS)and Song WJ (Dalian University of Technology)**
Medicine reform	**Zheng R (Institute of Psychology, CAS)**
Unemployment	**Wang XL (Institute of Psychology, CAS)**
Emergent events	**Wang HS (Institute of Geography, CAS)**
Peasant workers	**Wang YL (Institute of Policy and Management, CAS)**

In **M_{02} (MBA course)** The participants were professor Gu and graduate students. Gu gave an description about the test, organized all graduate students into six groups correspondent to the six different topics and asked all graduate students before participating in discussion test to prepare the necessary documents for their own speeches independently which take time for 10-15 minutes. The documents with 4-6 keywords should be inputted in computer. After the theme speeches by every participant then moved to the free discussion, but limited to 5 minutes for each speaker. After all discussion test we require all participants to write a survey to express their feeling, lesson and suggestions for improving the test furthermore.
We designed an agenda for the whole process for discussion in Figure 1.

2.2. Discussion test M1 (July 1, 2006) The whole discussion test M1 took around three and half hours. Each facilitator led one group.

Around 5-7 students were organized into one group. Each group occupied one room separately. At first facilitators gave a short introduction on the main content for their discussion, the short introduction about the useful tools and methods which they wish use during the discussion. For examples in group 1 and group 5 they introduced the GIS (Geographical Information System), group 3 and group 4-psychology, group 6-game theory, group 2-PathMaker (PathMaker is a software for organizing the meeting and projects), UciNet (UciNet is a kind of powerful software for social network analysis) and GAE (Group Argumentation Environment, a platform for analyzing group argumentation). Then discussions within graduated students started under the help from facilitators. During the test we required all participants to fill a psychological questionnaire for investigating their basic personal information and attitudes to happiest events and most painful events in their life.

2.3. Analysis period by project team A1 (July 2-3, 2006)

After discussion test the facilitators had run the analysis furthermore the data and information collected during the test. For example based on the results from PathMaker, GAE and UciNet in the group 2 they depicted some pictures and calculated some quantities to express the situations about the discussion and some useful indices. Based on the psychological questionnaire in the group 3 and 4 they had got some psychological analysis results. Based on the results in group 6 from playing

the two-person game they found the good policies, which are acceptable for both the peasant workers and their boss.

2.4. Primitive summary meeting by project team M2(July 4, 2006)

We convened the meeting of facilitators for doing primitive summary. In this meeting they reported the analysis results in each groups. Then we waited for the final assessment on this test from the graduate students.

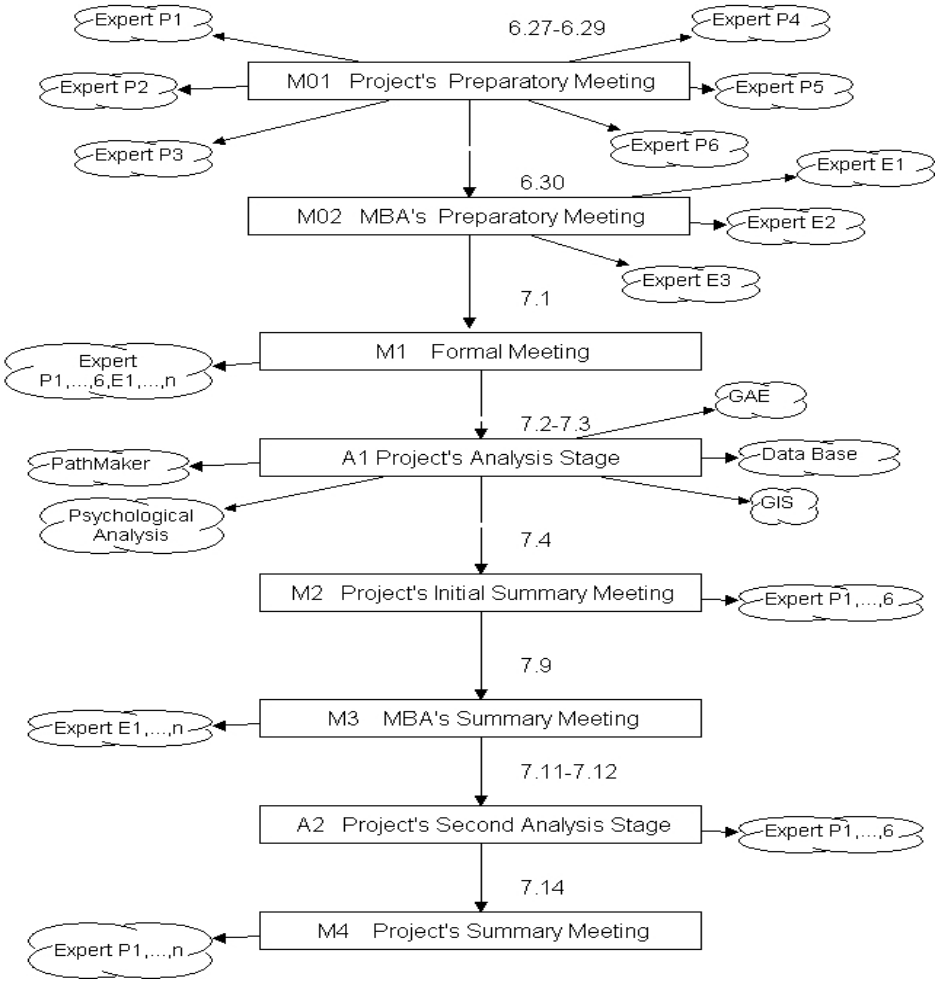


Figure 1. Agenda for the whole process

2.5. Summary for MBA course M3 (July 9, 2006)

In July 9 Gu gave a talk for all graduate students to introduce the whole test and analysis results and retrospect all methods and tools available during the test.

2.6. Analysis period by project team A2 (July 11-12, 2006)

We finalized all analysis and made summary for the advantage and disadvantages in this discussion test based on the summary reports written by graduate students.

2.7. Summary meeting by project team M4 (July 13, 2006)

In July 13 we convened the summary meeting for all team members and gave a

wholly assessment for this discussion test.

III. Partial analysis results from some groups

We don't want to introduce the all six subtest discussions, only mention some parts of them.

3.1 Analysis results by group 2 (Housing)

Facilitators Dr. Liu YJ and Song WJ supervised the subtest of group 2 for discussing the housing problem. They designed following agenda for their group:

8:30-8:45 short introduction by facilitator_
8:45-9:30 face-to-face freedom discussion with PathMaker_
9:30-9:40 rest_
9:40-10:00 introduction to GAE_
10:00-11:00 discussing with GAE on the computer_
11:00-11:20 sort out the discussion results by GAE_
11:20-11:30 short summary_
11:30- lunch_

1) face-to-face freedom discussion

The house problem now in China is crucial, especially now the house price become higher and higher in recent years. At first facilitators designed the two scenarios for the housing problems:

S1-trend for the continuous rise of the house price;
S2-trend for keeping house price the same or dropping.

In order to facilitating the discussion they also prepared some relevance information downloaded from web for two trends in advance. For example they showed the more official data for house prices in Beijing published by the Beijing Statistics Agency and also the unofficial social survey about the possible trends for the house prices in Shanghai run in web by Sina Net (www.sina.com.cn). The participants for this social survey were 16793 persons in Web (see Fig. 2). Then they invited all participants in this group 2 to have free face-to-face discussion and one facilitator had recorded all speeches on computer and used the PathMaker [1,2] to make record and some analysis on all speeches, the left column recorded all utterances, the right column represented the subjects classified by affinity diagramming (see Fig.3). Then they depicted the cause and effect graph to see the more detail analysis for the high house price (see Figure 4 and 5)

Figure 2. Web survey by Sina Net (A: rise in price. B: drop in price, C: same price)

Figure 3.Record of all speeches and the affinity

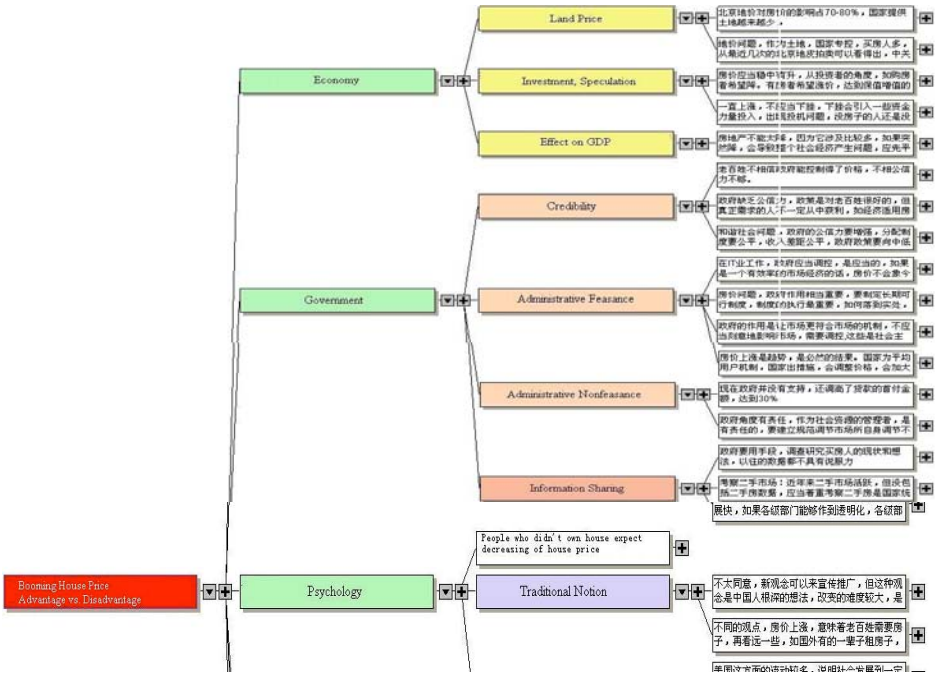


Figure 4. The cause-effect graph for growth of house prices (upper part)

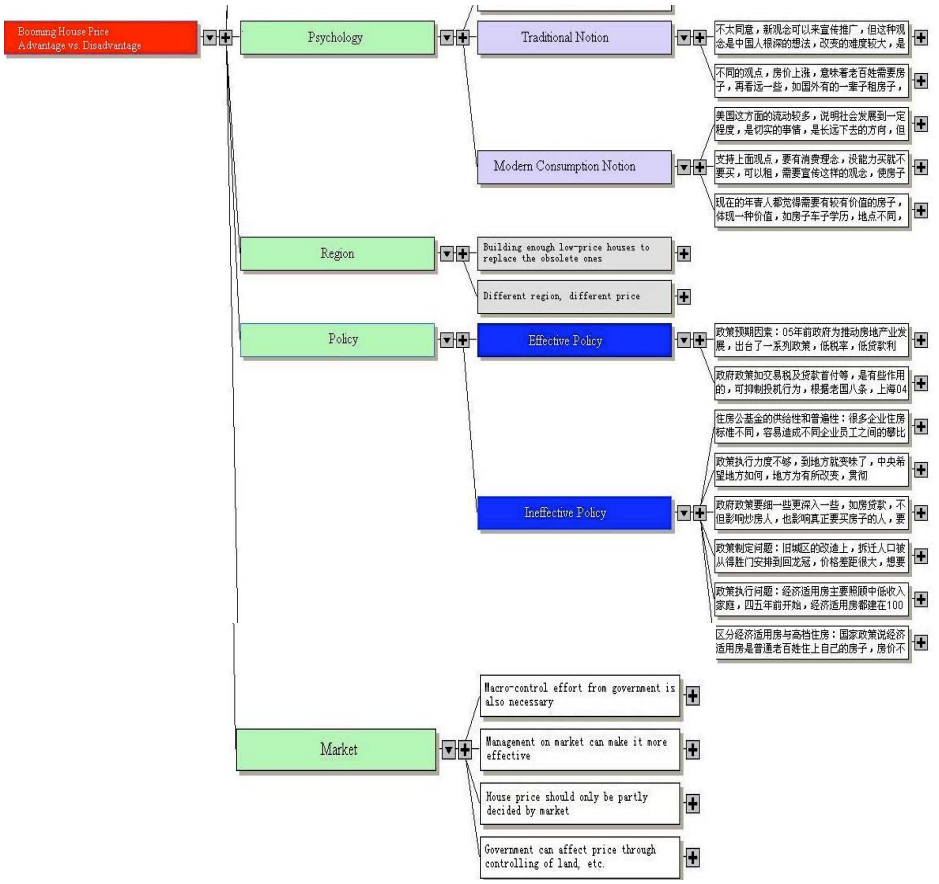


Figure 5. The cause-effect graph for the rise of house prices (lower part)

2) Discussion with GAE

The GAE (Group Argumentation Environment) is platform for facilitating and analyzing the participant' opinions developed by Prof. Tang and Dr. Liu [3-7]. Using this platform participants may easily see on computer their own and others opinions by graphs during the all discussion process. It means GAE may run visualized analysis for all utterances by participants during the discussion process, may facilitate all participants doing brainstorming, finding new ideas and reaching some consensus. GAE has three viewers: Common viewer, personal viewer and information viewer. Using GAE may do retrospective analysis, to see opinions in any time periods and in any small groups by selection. (see Fig.6-12)

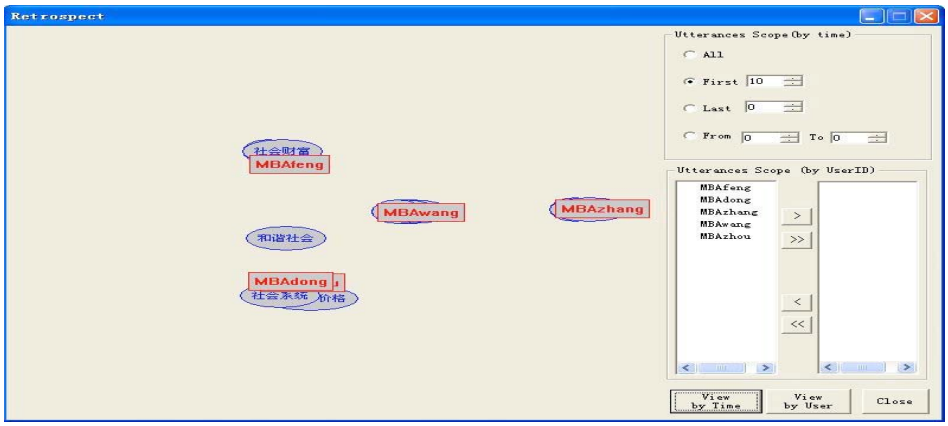


Figure 6. First 10 utterances for full group consisted from 5 participants

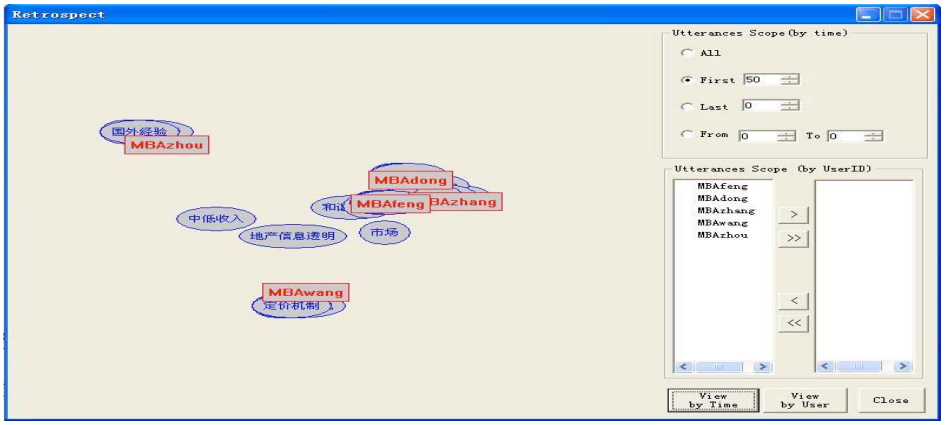


Figure 7. First 50 utterances for full group consisted from 5 participants

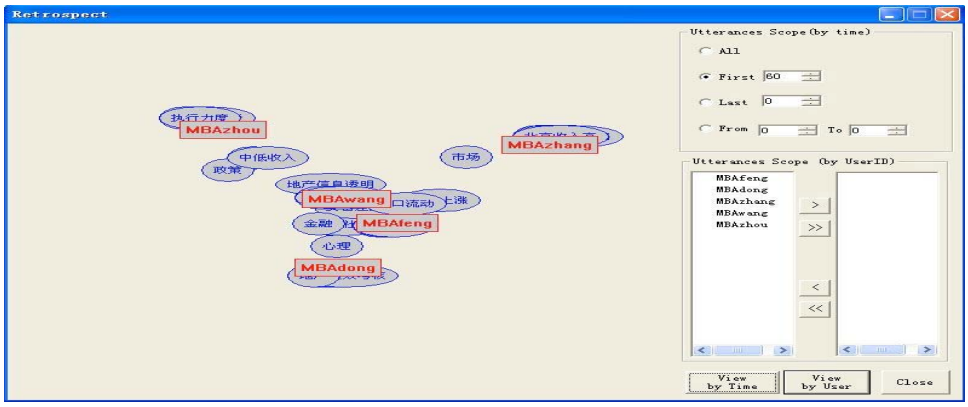


Figure 8. First 60 utterances for full group consisted from 5 participants

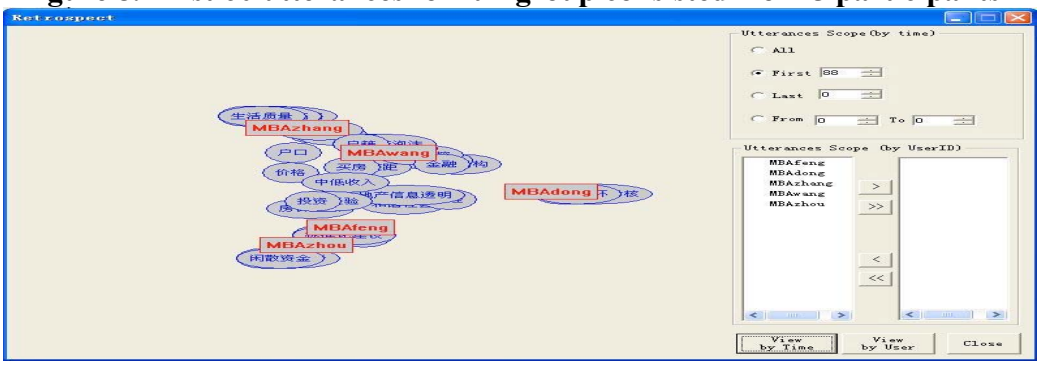


Figure 9. First 86 utterances for full group consisted from 5 participants

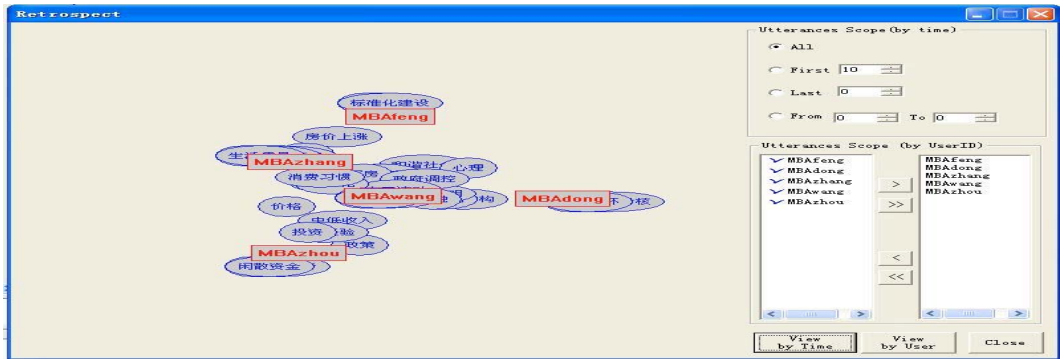


Figure 10. For all participants

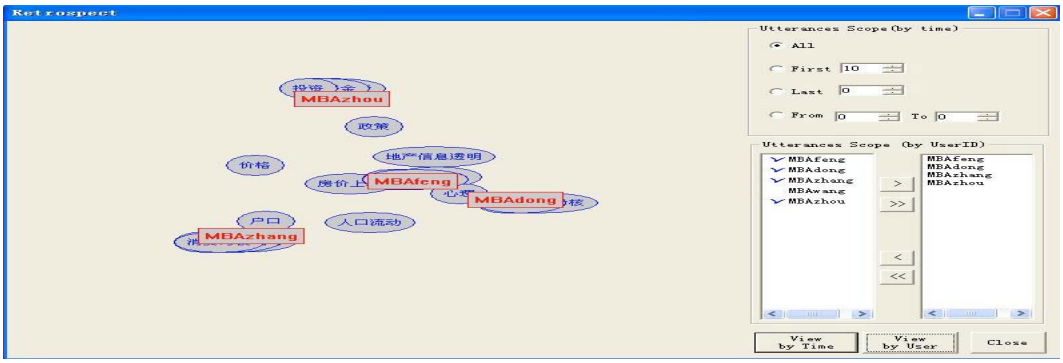


Figure 11. For small group consisted from 4 participants

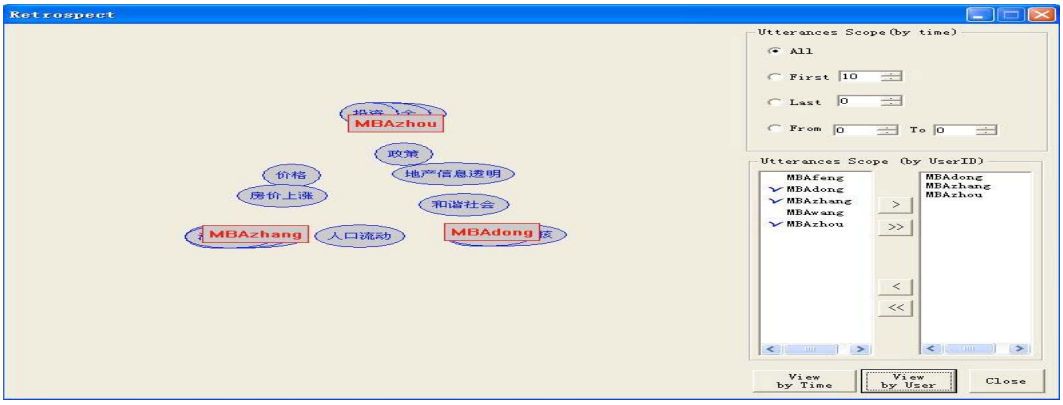


Figure 12. For small group consisted from 3 participants

After discussion the degree of agreement and degree of discrepancy within all participants may be calculated (see Fig. 13,14). The further operation by calculating eigenvector in the agreement matrix and discrepancy matrix may help us to find the degree of participations from different participants (see Table 2)

And using UciNet [8] the relationship within the different keywords may be exhibited (see Fig.15), UciNet may depict the whole pictures, which describe the nodes and their relationships between them, here nodes are the keywords. Finally using KJ Editor in GAE all utterances may be classified automatically into several classes. Certainly with the help from expert judgment they may also be modified and improved (see Fig. 16).

Figure 13. Degree of agreement within all participants

Figure 14. Degree of discrepancy within all participants

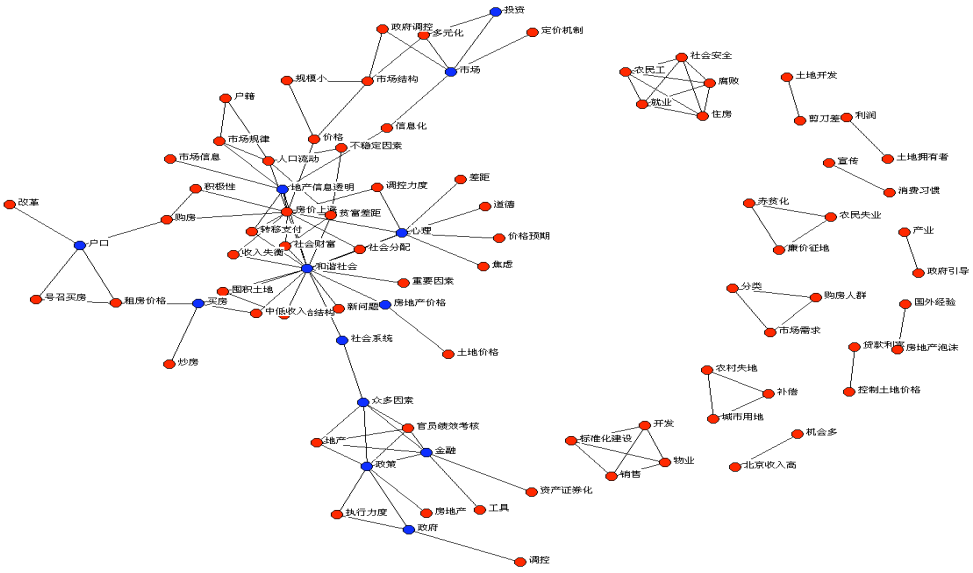
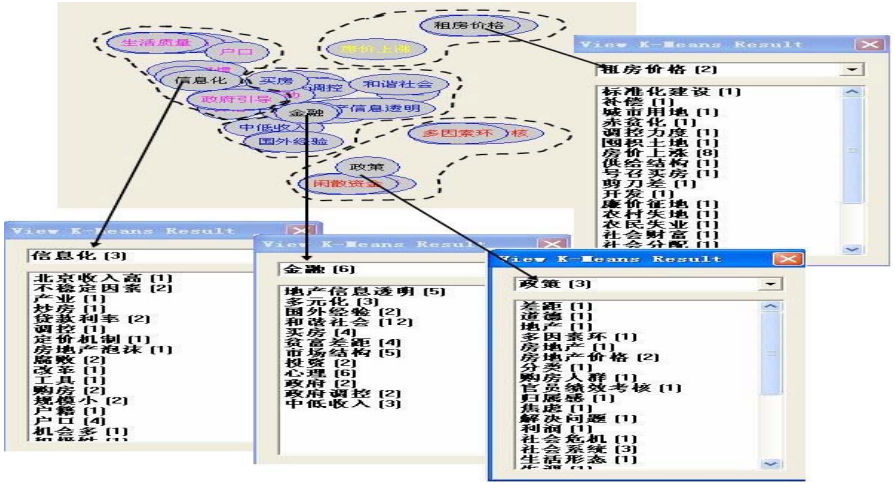


Figure 15. Network of keywords



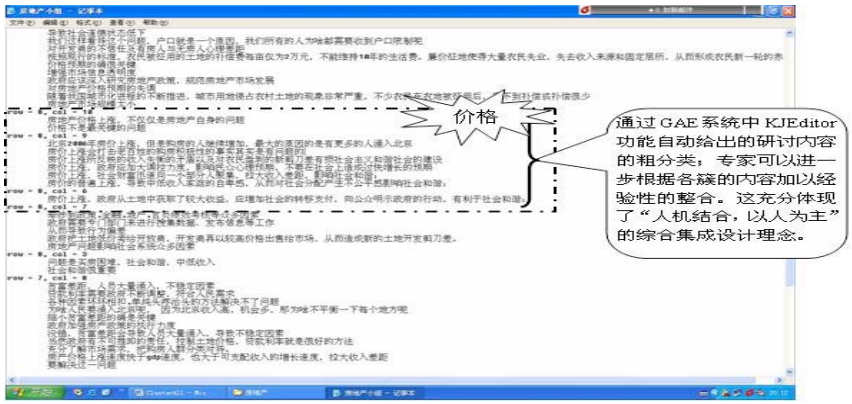


Figure 16. The viewer with selected classes with correspondent class keywords

Table 2. The assessment for the degree of participation on all participants

The eigenvector of maximum eigenvalue of agreement matrix	(0.7921_0.3502_0.3404_0.2770_0.2395)
Rank of the top five participants	**MBAwang > MBAfeng > MBAdong > MBAzhou > MBAzhang**
Meaning of the indicator	**Expert with higher rank may hold more common concerns during the brainstorming session**
The eigenvector of maximum eigenvalue of discrepancy matrix	(0.4809_0.4735_0.4521_0.4146_0.4101)
Rank of the top five participants	**MBAwang > MBAfeng > MBAdong > MBAzhou > MBAzhang**
Meaning of the indicator	**Expert with higher rank may be of more diverse perspectives during the brainstorming session**

3.2. Analysis results by group 3 and 4 (Psychological analysis)

Facilitators Zheng R. in group 3 and Wang XL in group 4 come from Institute of Psychology, CAS. In group 3 and 4 they had run the discussions on the medicine reform and unemployment correspondently by psychological method, e.g. organizing the debate within the students with the point views from two opposite sides.
Using this test they also had run a psychological questionnaire for all students who

had attended this discussion test. The total number of students was 37 peoples. A lot of questions asked by the questionnaire related the basic information about the students themselves (Table 3-6). and some questions related to their attitudes to the happiness and unhappiness around them (Table 7-12), familiarity and controllability on different items (Fig.17), descriptive statistics (Table 13,14) and happiness feeling on own life (Table 15). The all analysis was made by Shi K, Zeng R. and Wang XL in the institute of psychology, CAS in 2006, from 2007 Professor Shi K moved to the graduate university, CAS.

Table 3. Constitution of samples (sexuality)

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		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	ÄD	22	59.5	61.1	61.1
	Å®	14	37.8	38.9	100.0
	Total	36	97.3	100.0	
Missing	System	1	2.7		
Total		37	100.0		

Table 4. Ages

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		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20£-30	16	43.2	44.4	44.4
	30£-40	20	54.1	55.6	100.0
	Total	36	97.3	100.0	
Missing	System	1	2.7		
Total		37	100.0		

Table 5. Jobs

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		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	??Ó?ÆóÊÂÒµµ¥Î»¸É?¿	3	8.1	10.0	10.0
	?¨Òµ??ÊõÈËÔ±	8	21.6	26.7	36.7
	È??Ê¡¢?¯Ìå¡¢Ë?Ó ªÆó Òµ?ÜÀíÈËÔ±	13	35.1	43.3	80.0
	?É·YÖÆÆóÒµ?ÜÀíÈËÊ	5	13.5	16.7	96.7
	Ö°ÒµÍ¶?ÊÕß	1	2.7	3.3	100.0
	Total	30	81.1	100.0	
Missing	System	7	18.9		
Total		37	100.0		

Table 6. Incomes

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		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	500ÒÔÏÂ	1	2.7	2.9	2.9
	1000£-2000	1	2.7	2.9	5.9
	2000£-5000	18	48.6	52.9	58.8
	5000£-8000	7	18.9	20.6	79.4
	8000ÒÔÉÏ	7	18.9	20.6	100.0
	Total	34	91.9	100.0	
Missing	System	3	8.1		
Total		37	100.0		

Table 7. List of top unhappy events (Housing (19), Crime (19), Social mood (16))

房子（19）	房价、房价高（3）、房价太高、房价上涨（8）房地产较热、住房不平均 、三高问题（房价、医疗、）、房价高涨 住房、住房问题
治安犯罪（19）	黑恶势力，黑社会犯罪、社会不稳定 、不安全感、犯罪 暴力事件 、暴力、犯罪、司法黑幕、抢劫杀人 治安问题 、社会治安、黑恶实力、治安状况恶化 社会治安事件、没有安全感、社会稳定 节假日旅游景点管理，享受程度下降 政治不稳定
社会风气（16）	人情冷漠（3）、缺乏信仰、归属感、人与人之间的关系、人心浮躁、没有信仰（目标）、社会整体素质 、朋友欺骗、看到不正常的竞争现象（如腐败）、特权、社会不公、社会正义感、道德感逐步缺失、社会风气、公平自由

Table 8. List of top unhappy events (continued 1)(Education (15), medical insurance (15), corruption (14), gap between rich and poor persons (13))

教育问题（15）	教育费用高、孩子户口问题、子女上学难问题、教育机会的不均等、教育不公、对子女未来的不确定（教育、保障） 教育城市差别问题、应试教育、教育方式、中国子女接受教育不够国际化、教育问题、 以后子女的教育问题、子女上学（2）、孩子上学
医疗保险（15）	医疗保障、医保、医疗、生命不能得到有效医疗保险 、社会保障 、社会保障不足、不明 、社会保障体系不健全、社会保障制度 、保障问题、医疗保险 、医疗保障 养老、对老人的赡养能力不足、养老（对未来的不稳定感到困惑）、养老保险
腐败（14）	腐败（6）、官僚腐败（2）、官员腐败、政府是失职、贪污腐败、政府腐败 、腐败问题（政策） 、腐败问题
贫富差距（13）	贫富差距（4）、贫富差距扩大、贫富分化、贫富差距、 行业收入差距大、收入差距、 地区发展的平衡 、区域性差异（由于户口所带来的不公平）看到的社会不平等、社会不公平

Table 9. List of top unhappy events (continued 2)(Health (13), Employment (12), Personal (12), Natural Environment (10), Transportation (7), Economics (7), Weak colony (7), Safe production (7))

卫生（13）	疾病（4）、卫生安全、公共卫生事件、非典、禽流感、SARS 食品卫生、食品质量降低、食品和药物的质量问题、饮食卫生（街上餐饮店的卫生状况）
就业（12）	就业（4）、就业问题（2） 失业率、失业、找工作难、工作不稳定、劳动权利保障 年轻人发展机会少
个人（12）	健康问题、家庭问题、两地分居、学习、收入低 压力、家庭压力、能力不足、个人发展、爱人的背叛、亲人反目、家人去世
自然环境（10）	自然环境、大城市污染，生活健康治疗较低、环境问题（特别是食物和空气污染）、污染、环境污染、环境问题、自然灾害灾难事件、国家资源不足
交通（7）	交通（2）、城市交通、交通问题、车祸、交通问题（出门费用太高、堵塞）、交通拥堵
经济问题（7）	物价上涨（实际价格上涨）、经济落后、税赋过重、通货膨胀、经济发展稳定性、更多外企进入中国 银行、医疗服务排队
弱势群体（6）	弱势群体（2）、农民问题（2）、社会等级森严、在大城市生存
安全生产（6）	矿井事故、煤矿难、豆腐渣工程、民航空难、医疗事故、安全事故

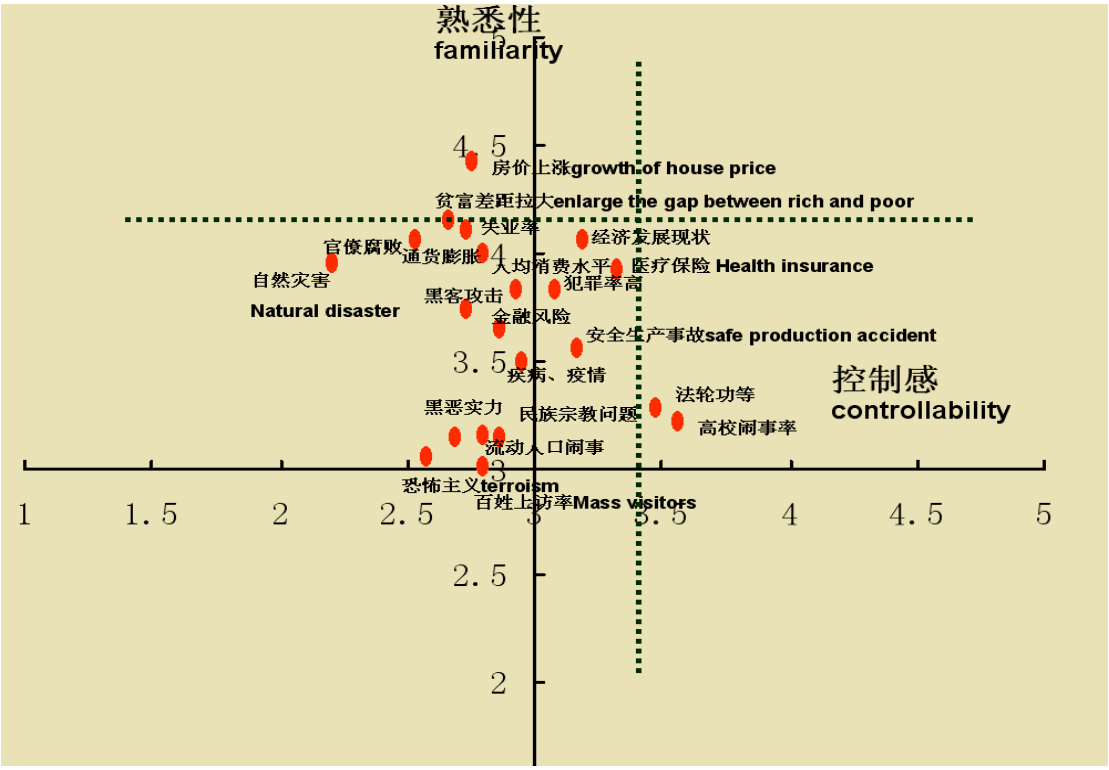

Figure 17. Familiarity and controllability on different items in survey.

Table 10. Group statistics

Group Statistics

	VAR00041	N	Mean	Std. Deviation	Std. Error Mean
·¸?ïÂÊ¸ß	.00	35	3.6000	.65079	.11000
	1.00	252	3.3651	.97051	.06114
?ÔÈ»ÔÖº|	.00	34	3.7353	.70962	.12170
	1.00	252	3.4365	1.05993	.06677
?-?Ã·¢Õ?ÏÖ?´	.00	36	3.8889	.70823	.11804
	1.00	252	3.4246	.96877	.06103
¸ßD£ÄÖÊÂÂÊ	.00	35	3.0286	.85700	.14486
	1.00	252	2.9802	1.16198	.07320
?ÙÁÅ¸¯°Ü	.00	35	3.8571	.73336	.12396
	1.00	252	3.7024	1.06498	.06709
¿Ö?ÀÖ÷ÒåÈÕÒæ»îÔ	.00	36	2.9444	.95452	.15909
	1.00	252	2.9722	1.22199	.07698
Ê§ÒµÂÊ	.00	36	3.9444	.71492	.11915
	1.00	252	3.4960	1.13087	.07124
º Ú¶ñÊÆÁ|	.00	36	3.0000	.98561	.16427
	1.00	252	2.9127	1.11862	.07047
ÈË?ùÏû·ÑË®Æ?	.00	35	3.6571	.59125	.09994
	1.00	252	3.2421	1.04526	.06585
°?È«Éú?úÊÂ?Ê	.00	36	3.4167	.93732	.15622
	1.00	252	3.3889	1.08574	.06840
·¨ÂÖ?|µÈD°?Ì?éÖ¯	.00	36	3.1111	1.00791	.16798
	1.00	252	2.9802	1.17900	.07427
º Ú¿Í?¥»÷	.00	36	3.6111	.87105	.14518
	1.00	252	2.7103	1.24627	.07851
???¡¡¢ÒßÇéÏÖ?´	.00	36	3.3333	.58554	.09759
	1.00	252	3.2540	1.07812	.06791
Ãñ?å?Ú?ÌÎÊÌâ	.00	36	3.0278	.90982	.15164
	1.00	252	2.9008	1.09056	.06870
?∂ÈÚ·çÏÕ	.00	36	3.5278	.90982	.15164
	1.00	252	2.7976	1.15472	.07274
°ÙDÕÉÏ·ÃÂÊ	.00	36	2.8611	.96074	.16012
	1.00	252	3.0476	1.15946	.07304
Í¨»õÅòÕÍÂÊ	.00	36	3.8611	.76168	.12695
	1.00	252	2.9802	1.14122	.07189
Æ¶¸»?î?àÀ-´ó	.00	36	4.0556	.67377	.11230
	1.00	252	3.8175	1.07043	.06743
Á÷¶¯ÈË¿ÚÄÖÊÂ	.00	35	3.0000	1.08465	.18334
	1.00	252	2.9444	1.10634	.06969
Ò?ÁÆ±£ÏÕ	.00	36	3.7222	.77868	.12978
	1.00	252	3.3135	1.10816	.06981

Table 11. Descriptive statistics for risk (Happiness, pressure, equality, satisfactory on life, response capability, future development and satisfactory on government)

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
DÒ¸£	37	2.00	5.00	3.9459	.46821
Ñ?Á|	37	2.00	5.00	3.5676	.80071
?«Æ?	37	1.00	5.00	2.4324	1.19118
Éú»îÂúÒâ	37	3.00	5.00	3.6757	.52989
Ó|¶ÔÄÜÁ|	37	1.00	4.00	3.1892	.70071
Î´À´·¢Õ?	37	1.00	5.00	3.8649	.71345
Õ?¸®ÂúÒâ	37	1.00	5.00	3.2432	.92512
Valid N (listwise)	37				

Table 12.Happiness feeling on personal life (relatives(26), enterprise (22), study (7), health (5),Housing(2), others(2))

Personal life (64)	**relatives(26)**	**(3) (4) (4)**
	enterprise(22)	**(6) (2)**
	study (7)	**(2)**
	health(5)	**(4)**
	housing (2)	
	others (2)	

3.3 Game analysis by group 6 (Peasant worker and boss)

In group 6 they had run the discussion on general topic for peasant workers at first. Then they chose the sensitive problem now in China that the boss in many enterprises did not want to pay the peasant workers in time who had worked for boss, so they argued and fought each with other. For each side they had their own strategies to solve the problems. From boss they have strategies: 1) help from authority, 2) court respond, 3) continue behind in payment, 4) suppress by force, 5) avoid a creditor; peasant workers: 1) go to administration authority, 2) go to law against, 3) waiting for reply, 4) make reprisals, 5) ask boss directly. The facilitator tried to use the game theory to solve this problem, the players for peasant worker and boss were taken by different students, because of different attitudes to the outcomes of taking various strategies the different outcomes of games were gotten. In each blank of the outcomes matrix for games the scores situated in left represents the outcome by boss, right –by peasant workers. They had run altogether 11 games, here we just gave some examples of games (see Table 13-15). In average the outcomes (4,4) and (4,5) correspondent to pairs of strategies for boss and peasant workers (1,2) and (2,2) are the equilibriums for both sides (see Table 13).

Table 13.Summary result for 7 participants (lines-Boss: 1.help from authority attack, 2.court respond, 3.continue behind in payment, 4.suppress by force, 5.avoid a creditor; columns-peasant workers: 1.go to administration authority, 2.go to law against, 3.waiting for reply, 4.make reprisals, 5.ask boss directly)

	???									
	????		????		??????		?????????		??????	
????	4	3	4	4	2	2	3	2	1	3
????	1	3	4	5	0	2	2	2	0	3
????	3	5	2	5	5	1	3	2	4	4
????	1	4	1	5	0	1	3	3	2	2
????	3	4	3	5	3	0	4	2	5	2

Table 14. Zhao JW

		???									
		????		????		??????		?????????		??????	
???	????	5	4	2	4	0	2	5	0	0	3
	????	0	0	5	5	0	0	5	0	0	0
	????	3	4	2	5	4	3	2	2	3	4
	????	0	5	1	5	0	0	3	3	2	0
	????	3	4	2	5	3	0	5	3	5	4

Table 15. Zhao JW versus Liu N

		???									
		????		????		??????		?????????		??????	
???	????	3	4	4	4	0	2	0	0	0	3
	????	2	0	5	5	0	0	0	0	0	0
	????	4	4	4	5	5	3	5	2	5	4
	????	4	5	2	5	0	0	4	3	4	0
	????	5	4	3	5	4	0	5	3	5	4

IV. **CONCLUSION**

1. This test is to try to use both the expert knowledge and student knowledge to discuss the social harmony problems.
2. To see how the advanced meeting techniques, such as PathMaker, UciNet, GAE, GIS, psychology and game theory gave rise to interest for participation and analysis of the discussion.
3. Try to combine the data mining, text mining, web mining, model mining, psychology mining and expert mining jointly in solving the social complex system problems [9-13].

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References

[1]Noweco(2006), PathMaker: Software for effective management projects, http://www.noweco.com/

[2] Pathmaker (2006) http://www.skymark.com/index.asp

[3] Liu YJ. , Tang XJ (2003). A Visualized Augmented Tool for Knowledge Association in Idea Generation, In: Knowledge and Systems Sciences: Toward Meta-Synthetic Support for Decision Making (proceedings of the 4th International Symposium on Knowledge and Systems Sciences -KSS'2003), Gu J. F., et al. (eds), Hong Kong: Global-Link Publishers, pp19-24.

[4] Liu Y. J., Tang X. J, (2005) Computerized Collaborative Support for Enhancing Human's Creativity for Networked Community, in Internet and Network Economics: Proceedings of the First International Workshop (WINE 2005, X. Deng and Y. Ye eds.), Hong Kong, China, December 15-17, 2005, Lecture Notes in Computer Science, Vol. 3828, Springer-Verlag, 545 - 553.

[5] Tang X.J., Gu J.F. (2004), Meta-synthesis Systems Approach to Knowledge Science, in proceedings of the 1st International Symposium on Knowledge Management for Strategic Creation of Technology, Japan Advanced Institute of

Science and Technology, pp86-93,

[6] Tang X. J., Liu Y. J. and Zhang W. (2005) Computerized Support for Idea Generation During Knowledge Creating Process, in Knowledge-Based Intelligent Information and Engineering Systems: Proceedings of the 9th International Conference (KES 2005), Melbourne, Australia, September 14-16, 2005, (Part IV, R. Khosla, R. J. Howlett, L. C. Jain eds.), Lecture Notes in Artificial Intelligence, Vol. 3684, Springer-Verlag, pp437-443

[7] Tang X. J., Liu Y. J., (2006) Computerized Support for Qualitative Meta-synthesis as Perspective Development for Complex Problem Solving, Creativity and Innovation in Decision Making and Decision Support (proceedings of IFIP WG 8.3 International Conference on Creativity and Innovation in Decision Making and Decision Support, F. Adam, et al. eds.). London: Decision Support Press, June 27-July 1, Vol.1, pp432-448.

[8] UCINET, Analytic Technologies, http://www.analytictech.com/

[9] Gu J.F., Tang X. J. (2003), A Test on Meta-Synthesis System Approach to Forecasting the GDP Growth Rate in China, in the proceedings of 47th Annual Conference of the International Society for the Systems Sciences (Wiley, J. & Allen, J. K. eds.), R093.

[10] Gu, J.F. Tang X. J., (2005) Meta-synthesis Approach to Complex System Modeling, European Journal of Operational Research, 166(3): pp597-614.

[11] Gu, J.F. Tang X. J and Niu W.Y. (2005), Metasynthesis system approach for solving social complex Problems, IFSR2005, Kobe, November

[12] Gu J.F., (2006) Expert mining for discussing the social complex problems, MCS2006, Beijing, September

[13] Gu J.F., Andrzej P. Wierzbicki A.P.,(2007) Debating and Creativity Support, in chapter 6 of book"Creative Environments:Issues of Creativity Support for the Knowledge Civilization Age", Wierzbicki A.P. and Nakamori Y. editors, Springer Verlag, Berlin-Heidelberg