

White Paper Report

Report ID: 100332

Application Number: HT5003010

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Institution: University of North Carolina, Charlotte

Reporting Period: 9/1/2010-8/31/2012

Report Due: 11/30/2012

Date Submitted: 12/2/2012



- White Paper – NEH Summer Institute
- Grant # HT-50030
- Project Title: Computer Simulations in the Humanities
- University of North Carolina at Charlotte
 - Principal Investigator: Marvin Croy
 - Co-Principal Investigator: Mirsad Hadzikadic
 - Project Advisor: Paul Youngman
- University of Evansville, Co-Project Director: Anthony Beavers
- SUNY Stony Brook, Co-Project Director: Patrick Grim
- Submission date: December 2, 2012

Overview of Project Activities

The aim of this White Paper, beyond providing an account of a particular Summer Institute, is to note some unexpected challenges and opportunities and to describe how these were dealt with. We have recently concluded a two-year project in which a Summer Institute for Advanced Topics in the Digital Humanities was held at UNC Charlotte in 2011 and 2012. The Institute mentored humanists as they explored the development of agent based models as tools for pursuing existing or newly proposed research projects. In the second year of the Institute, participants provided presentations on their progress at three national conferences and during our final gathering discussed plans for continuing their efforts. After describing the activities of the Institute activities, various changes required in response to unexpected conditions are noted.

In its first year, our Summer Institute was held on the main campus of UNC Charlotte, June 1-17, 2011. Those involved included sixteen learner participants, nine mentors, four co-project directors, twelve keynote speakers, one graduate support student, and one administrative assistant. Educational activities centered on individual and small group mentoring. The entire group met for morning sessions and then divided up for small group meetings in the afternoon. All learners gained at least some hands-on proficiency with the NetLogo modeling tool, and they quickly acquired an understanding of the modeling enterprise. Near the end of the seventeen-day session, each learner gave a 30-minute final presentation to the entire group, demonstrating and explaining the model designed during the Institute.

Throughout the Institute, keynote addresses were provided in the evenings by both on-campus and off-campus experts. Keynote speakers included: Katy Börner (Indiana University), Johanna Drucker (UCLA), Tim Tangherlini (UCLA); Paul Humphreys (University of Virginia), Melanie Mitchell (Portland State University), and Matthias Scheutz (Indiana University). Our UNC Charlotte speakers included Boyd Davis (Linguistics), Eric Sauda and Chris Beorkrem (Arts and Architecture), Deborah Bosley (English), Paul Youngman (Language and Culture), and Liz Johnson (Public Policy).

Intermediary to the first and second year meetings of this Institute, several of the participant learners made presentations based on their on-going work at significant national conferences of established organizations. The first of these occurred in November 2011 at the Fall Symposium of the American Association for the Advancement of Artificial Intelligence. In February 2012, six participants provided presentations to a very different audience at the Central Division meeting of the American Philosophical Association. It should also be noted that during this intervening period, several participants engaged in SKYPE sessions to further the mentoring process and foster communication within the group.

The 2012 meeting of the Institute involved a different kind of experience for all participants, as this meeting was coordinated with a national conference held at the uptown campus of UNC Charlotte. Institute participants presented the current standing of their work at a conference sponsored by UNC Charlotte's Complex Systems Institute. In the closing days of the Year-1 Institute session, the theme and specific content to be explored via this conference ("Complexity and the Human Experience – Modeling in the Humanities and Social Sciences") was actually shaped in significant ways by our NEH participants. By coordinating the Institute's year-2 meeting with this conference, our participants were able to observe presentations concerning a broad array of projects involving modeling in the humanities and social sciences, and they were able to receive feedback on their own efforts based on a wide range of expertise. In addition, each participant learner reported to and received feedback from the entire Institute group in separate sessions concerning the progress and challenges of their projects. Ideas for continued interaction of the group and possible publication of its results were also discussed. One conclusion was that the next occurrence of the conference sponsored by UNC Charlotte's Complex Systems Institute would be an occasion for reuniting our group.

A number of adjustments to the plan laid out in the original grant proposal served to facilitate the helpfulness of this Institute. Without this willingness to keep an open mind where feasible, the Institute would have been less successful. Flexibility thus turned out to be a key factor particularly in bolstering the learning process. While there were limits to how much can be changed once the Institute began, there were cases in which being open to change was beneficial. For example, prior to convening the Institute, we set up a NING social networking site with the aim of priming the Institute discussions and activities. Some participants exploited this opportunity to gain feedback on their planned efforts and to establish working relationships with other participants. However, we had not announced this expectation of pre-Institute participation in the call-for-proposals, and contributions in this area were not evenly distributed among participants. Consequently, mentors were in better shape to support some learners rather than others. This was one factor in our decision, after only a couple of Institute sessions, to alter the time dedicated for certain activities. Basically, we reduced the time for formal presentations provided by our mentors and increased the time for small group interaction among mentors and participant learners. Also, we modified the content of some presentations by mentors based upon requests from participant learners or upon our rapidly increasing understanding of their needs.

Another instance where flexibility proved its worth concerned the makeup of our group of mentors. The call for proposals allowed potential participants to apply as either mentors or learners. Review of applications did not produce the number of mentors aimed for. In consultation with NEH, we modified our mentor group to include four undergraduate students to support the technical side of coding models. This change further supported the aim of having participant learner produce working models over the two-year period of the Institute.

Still another midstream change involved the types of models that participants were taught to construct. Our initial grant proposal referred to two types of models: agent-based and connectionist. Among applicants, there was not much interest expressed in connectionist models, and once the Institute convened, it became clear that agent-based modeling would satisfy the needs of the entire group. So, despite having a plan in place for teaching the basic orientation of connectionism, the sole focus of the modeling enterprise was upon agent-based models.

Some changes, particularly those involving the makeup of the mentoring group and the shift in venue for year-2 activities, involve shifts of resources among funding lines, and NEH proved to be supportive of these changes given adequate rationale and lead time.

Project Evaluation

Each of the summer Institute sessions were subjected to evaluation. Following the first session, we asked the sixteen participant learners to complete an on-line survey concerning the helpfulness of various aspects of the resources and activities that supported their learning experience. In addition, on the last day of the Institute, in a meeting attended by learners, mentors, and project administrators, we conducted an informal discussion of what might be changed for the following year's reunion. We held a similar kind of informal feedback session at the end of the year-2 session. A typical day in the year-1 summer institute consisted of a three-hour morning session in which mentors and/or project directors gave presentations on various aspects of agent-based modeling and complex systems. Following lunch, small groups of learners met with assigned mentors for approximately four hours. In the evening, all participants attended a two-hour public lecture delivered by one of our keynote speakers. On the last day of the Institute, each learner provided a presentation on what had been accomplished and where future efforts were headed. The year-1, on-line survey addressed several aspects of these activities and related factors in respect to their helpfulness in facilitating learning and progress in individual projects. Shown below are the results from one group of factors and their average rating as compiled from the 9 responses received (56% of the potential 16 respondents). Respondents rated the helpfulness of these factors on a 5 point scale, with 1 at the lowest end and 5 on the highest end.

<u>Factor</u>	<u>Average Rating</u>
Mentoring	4.7
Netlogo Training	4.6
Small group sessions	4.4
Final presentations	4.4
Working in groups	4.3
Morning presentations	4.1
Overall format/sequence	4.1

Length of the workday	3.6
Evening presentations	2.7

Only the last two ratings fell below a level of desired agreement in respect to their helpfulness, and this sentiment also was voiced during our informal session. Participant learners had a very long day each of the weekdays, and the wide-ranging topics covered by keynote speakers seemed to some like a distraction from the main modeling tasks they were charged with completing. Other ratings were encouraging and overall were indicative of the efforts put out by all involved, whatever their role and tasks.

In addition, other environmental factors were rated along the same scale in respect to helpfulness in facilitating the achievement of important Institute goals. These factors are their ratings are shown below. The last three were somewhat disappointing but not surprising for a period of campus activity that fell within a relatively inactive timeframe.

Factor	<u>Average</u> <u>Rating</u>
UNC Charlotte Campus	4.4
Presentation/Meeting Rooms	4.2
Living Accommodations	3.9
Area Surrounding Campus	3.8
Campus Food Service	2.6

Respondents were also asked to provide feedback on the following items.

2 Items (Strongly Disagree through Strongly Agree: rated 1 through 5)	Average
The Institute facilitated a sense of community among participants and mentors	4.8
The Institute provided a solid foundation for making progress on my project	4.7
2 Items (Yes/No)	
Did you leave with an understanding of how modeling may be applied to research within your discipline?	100% = 'Yes'
Was there sufficient time for project development?	67% = 'Yes'

Finally, respondents could enter free responses to the question "What changes would have improved your experience at our NEH summer Institute?" and also in response to

the question concerning of whether there was sufficient time for project development. The main concern expressed in respect to both of these issues was related to the evening presentations which some respondents believed diluted their model development efforts.

The final group meeting in the year-1 Institute provided an opportunity for all to give evaluative feedback on recent activities and planning for future endeavors. Two new ideas emerged. One concerned linking our Institute activities with an increased opportunity for dissemination and feedback. In particular, we discussed the June, 2012, conference hosted by UNC Charlotte's Complex Systems Institute. Another idea concerned moving the Institute venue to the uptown Charlotte campus. This also became an opportunity to be explored and, indeed, both of these ventures proved to be rewarding. The year-2 Institute meeting ended with a similar session, in which we heard evaluative comments from all Institute participants. Participants were overwhelmingly favorable towards the group dynamics facilitated by the Institute format. Particularly gratifying was a comment made by one of our participant learners who had recently attended another NEH Summer Institute in the area of Digital Humanities, one with a much larger number of participants. In comparison, our Institute was experienced as providing much more impetus. We are endeavoring to sustain this momentum and are organizing a 2013 conference panel made up of our participant learners.

Project Impact

As indicated above, many of our participants gave presentations at national conferences on at least one occasion during the life of the Institute. Learners gave progress reports on the accomplishments of their modeling projects and mentors plus project directors gave presentations on recent developments in modeling techniques and/or their applications.

List of conference presentations provided at national conferences by participant learners during the two-year Summer Institute.

Session at the Fall Symposium of the American Association for the Advancement of Artificial Intelligence, Nov 5, 2011.

(All presenter listed are learner participants of the NEH Summer Institute held at UNC, Charlotte)

Topic: Computer Simulations in the Humanities

Session Chair: Marvin Croy (UNC Charlotte)

Presenters:

Steven Crowley (Boise State University)
 "A Model for Philosophy"

Gillian Crozier (Laurentian University)
 "Singing to Neighbors: Modeling Acoustic Adaptation in Bird Songs"

Graham Sack (Columbia University)
 "Modeling Narrative Structures: An Agent Based Approach to Plot and Characterization"

Session for the Central Division Meeting of the American Philosophical Association, February 16, 9am-noon, 2012 (3-hour session)

(All presenters are learner participants of the NEH Summer Institute held at UNC, Charlotte)

Topic: Computer Simulations in the Humanities

Session Chair: Marvin Croy (UNC Charlotte)

Presenters:

Marshall Abrams (University of Alabama, Birmingham)
 "Simulating Coherence in Cultural Evolution"

Marcus Christen (University of Zürich)
 "Shiny Moral People – A Modeling Approach towards Understanding Moral Hypocrisy within a Society"

Marten Düring: Agent-based Modeling, Counterfactual Thinking and the Historical Method

Gillian Crozier (Laurentian University)
 "Update on Recent Developments: Singing to Neighbors: Modeling Acoustic Adaptation in Bird Songs"

Ruth Poproski (Carnegie Mellon University)
 "Simulation for Understanding the Gricean Dynamic in Language Use"

Graham Sack (Columbia University)
 "Update on Recent Developments: Narrative Structures: An Agent Based Approach to Plot and Characterization"

Scott Weingart (Indiana University)
 "Modeling the Flow of Information through the Republic of Letters."

Presentations given at the conference of the UNC Charlotte Complex Systems Institute, May 30 – June 1; This conference was conceived and designed during the year-1 session of the Institute.

Institute Participant Learners:

Stephen Crowley: *"Some Steps Toward the Simulation of Interdisciplinary Research"*

Marshall Abrams: *"Metaphor and Coherence: A Moderate Role for Cognitive Models in Agent-Based Simulation of Cultural Change"*

Markus Christen: *"Population and Temptation Density Determine the Effect of Social Strategies on Moral Hypocrisy in a Virtual Society"*

Gillian Crozier: *"Trills in Fields and Whistles in Forests: Modeling Cultural Selection in Bird Songs"*

Dana Downey: *"Social Network Interpretation among Arab Peer-Groups"*

Marten Düring: *"Agent-based Modeling, Counterfactual Thinking and the Historical Method"*

Rogier De Langhe: *"Modeling Scientific Revolutions"*

Stefano Giaimo: *"On the Evolution of Senescence in Finite Populations"*

Ruth Poproski: *"Words With Friends: Simulating the Gricean Dynamic in Conversation"*

Teresa Satterfield: *"East Coast 2062: A Predictive Model of Language Contact Outcomes in New York's 'City within a City' "*

Graham Sack: *"Simulating Plot: Towards a Generative Model of Narrative Structure"*

Jeremy Throne: *"The Communications Circuit: Problems and Possibilities for an Agent Based Approach to Book History"*

Scott Weingart: *"Modeling the Republic of Letters"*

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Presentations by Institute Mentors:

Aaron Bramson: *“Methods for Hypergraphs and k-Partite Graphs”*

Patrick Grim, Aaron Bramson, Daniel J. Singer, et. al.: *“The Role of Local and Global Perspectives in the Dynamics of Opinion Convergence and Polarization”*

Patrick Grim, Daniel J. Singer, et. al: *“Genes, Germs, and Memes: Function and Fitness Dynamics on Information Networks”*

Nicolas Payette: *“Science Is Evolving, and We Can Model It”*

Daniel Singer: *“Modeling Peer Disagreement”*

Products of the Institute continue to emerge, and these will be entered into the NEH database for this purpose as they occur.

Another conference presentation by project personnel that was an outcome of the Institute is one given by Paul Youngman (Institute Advisor) and Ted Carmichael (Institute Mentor):

“Black Devil and Iron Angel Revisited: N-Gramming the Railway in 19th Century German Fiction,” 40th Biennial International Symposium on German Literature and Culture. Washington University, St. Louis, MO, March 29 – April 1, 2012. This paper will be included in a volume entitled “Distant Readings/Descriptive Turns: Topologies of German Culture in the Long Nineteenth Century,” forthcoming 2013.

In addition, Mirsad Hadzikadic (Co-Principle Investigator), Paul Youngman, and Ted Carmichael have signed a book contract with Pan Stanford Press to produce an edited volume titled “Complexity and the Human Experience: Modeling Complexity in the Humanities and Social Sciences.” It is expected that this volume will contain several articles by Institute participants.

This Institute has also had local impact on the UNC Charlotte campus. A variety of initiatives are planned with the College of Liberal Arts and Sciences to provide support for research in the digital humanities. This includes a new seed grant program that will support the initiation of new investigative endeavors in this area, and the interdisciplinary collaboration that energized our Institute will be encouraged. This will include interdisciplinary sessions involving the humanities at conferences sponsored by the UNC Charlotte Complex Systems Institute.

Overall Achievement of Institute Goals

When we planned this Summer Institute, our strategy was to use a small-group, intensive mentoring approach to facilitate learning. We wanted our participants to leave with rudimentary, working models that directly addressed their research

endeavors. We also intended that their understanding of the modeling process and the particular models being designed would be capable of sustaining presentations to interested humanists at national conferences. Finally, we aimed for participants to be in position to maintain the momentum gained from the Summer Institute. To a large degree, as indicated by the activities described above, these aims have been met.

List of Institute Participant Learners:

Marshall Abrams	University of Alabama, Birmingham
Markus Christen,	Universität Zürich
Stephen Crowley	Boise State University
Gillian Crozier	Laurentian University
Rogier DeLanghe	Ghent University
Dana Downey	George Mason University
Marten Duering	Universität Essen
Stefano Giaimo	European Institute of Oncology
Peter Gildenhuis	Lafayette University
Ruth Poproski	Carnegie-Mellon University
Hilton Root	George Mason University
Graham Sack	Columbia University
Teresa Satterfield	University of Michigan
Harsh Satya	International, Institute of IT
Jeremy Throne	University of California, Santa Cruz
Scott Weingart	Indiana University

List of Institute Mentors:

Jason Alexander	London School of Economics
Aaron Bramson	Independent Scholar
Derek Burrows	Washington University, St. Louis
Ted Carmichael	UNC Charlotte
Chris Harrison	Evansville University
Nicolas Payette	Université du Québec
Jason Rines	UNC Charlotte
Daniel Singer	University of Michigan
Charles Turnitsa	Old Dominion University

APPENDIX I

Evaluative Questionnaire

Web Survey and Questionnaire Tool – SurveyShare.com

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This is a preview. [\[Close Preview\]](#) No responses will be recorded. The preview link may be freely shared.

NEH Summer Institute Evaluation (2011)

1) Please rate the helpfulness of the following, with (1) being least helpful and (5) being most helpful:

	1	2	3	4	5
Morning presentations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Small group sessions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Evening presentations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall format/sequence (Entire Group - Small Groups - Evening Speakers)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Length of the workday	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mentoring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Final presentations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Netlogo Training	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Working in groups	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2) Please rate the quality of the following, with (1) indicating lowest quality and (5) indicating highest quality :

	1	2	3	4	5
UNC Charlotte Campus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Surrounding Area	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Campus Food Service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Presentation/Meeting Rooms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Apartments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3) The Institute facilitated a sense of community among participants and mentors

- Strongly Disagree
 Disagree
 Undecided
 Agree
 Strongly Agree

4) The Institute provided a solid foundation for making progress on my project

- Strongly Disagree
 Disagree



This is a preview. [\[Close Preview\]](#) No responses will be recorded. The preview link may be freely shared.

NEH Summer Institute Evaluation (2011)

1) Please rate the helpfulness of the following, with (1) being least helpful and (5) being most helpful:

	1	2	3	4	5
Morning presentations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Small group sessions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Evening presentations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall format/sequence (Entire Group - Small Groups - Evening Speakers)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Length of the workday	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mentoring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Final presentations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Netlogo Training	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Working in groups	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2) Please rate the quality of the following, with (1) indicating lowest quality and (5) indicating highest quality :

	1	2	3	4	5
UNC Charlotte Campus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Surrounding Area	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Campus Food Service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Presentation/Meeting Rooms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Apartments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3) The Institute facilitated a sense of community among participants and mentors

- Strongly Disagree
 Disagree
 Undecided
 Agree
 Strongly Agree

4) The Institute provided a solid foundation for making progress on my project

- Strongly Disagree
 Disagree

- Undecided
- Agree
- Strongly Agree

5) Was there sufficient time for project development? (If not, why?)

- Yes
- No

6) Did you leave with an understanding of how modeling may be applied to research within your discipline?

- Yes
- No

7) How did you hear about the Institute?

8) What changes would have improved your experience at our NEH summer Institute?

APPENDIX II – FULL COMPLEX SYSTEMS INSTITUTE CONFERENCE SCHEDULE

Modeling Complexity in the Humanities and Social Sciences

May 30th - June 1st, 2012

The University of North Carolina at Charlotte

Wednesday, May 30th

8:00a-8:30a – Registration (Lobby) Breakfast (Atrium)

8:30a-9:00a – Conference Welcome and Introduction to the Complex Systems Institute at UNCC (Room 201)

Mirsad Hadzikadic (UNCC)

9:00a-10:00a – Keynote Address (Room 201)

Dylan Savage: Modeling Music Performance – a Confluence of Complexity and Simplicity

– Introduction by *Mirsad Hadzikadic*

10:00a-10:15a – Coffee Break (Atrium Area)

10:15a-11:45a – Some Good Examples (Room 201)

Moderator: Ted Carmichael

Patrick Grim, Aaron Bramson, Daniel J. Singer, Steven Fisher, Carissa Flocken and William Berger: The Role of Local and Global Perspectives in the Dynamics of Opinion Convergence and Polarization

Aaron Bramson: Methods for Hypergraphs and k-Partite Graphs

Rory Smead: Modeling Evolving Games

11:45a-1:15p – Lunch (on your own)

1:15p-2:45p – Literature and Letters (Room 1104)

Moderator: Paul Youngman

Graham Sack: Simulating Plot: Towards a Generative Model of Narrative Structure

Scott Weingart: Modeling the Republic of Letters

Jeremy Throne: The Communications Circuit: Problems and Possibilities for an Agent Based Approach to Book History

2:45p-3:00p – Coffee Break

3:00p-4:45p – Research and Teaching (Room 1104)

Moderator: Marvin Cray

Stephen Crowley: Some Steps Toward the Simulation of Interdisciplinary Research

Carlo Fabricatore and Ximena Lopez: Fostering Student Learning Using a Complexified Educational Strategy: A Case Study in Higher Education

Thaer Jayyousi and Robert Reynolds: Bringing to Life an Ancient Urban Center at Monte Alban, Mexico: Exploiting the Synergy Between the Micro, Meso, and Macro Levels in a Complex System

Thursday, May 31st

8:00a-8:45a – Registration (Lobby) Breakfast (Atrium)

9:00a-10:00a – Keynote Address (Room 201)

Josh Corman (Akamai Technologies): Rise of the Chaotic Actor: Adapting to the Age of Anonymous

– Introduction by Patrick Grim

10:00a-10:15a – Coffee Break (Atrium)

10:15a-11:45a – Network Analysis and Public Policy (Room 201)

Moderator: Ted Carmichael

Liz Johnson and Michael Givel: Scientific Paradigms In US Policy Theory: Is It Time for Complexity Science?

Jerome Sibayan: A Network Analysis of China's Central Committee: A Dynamical Theory of Policy Networks

Patrick Grim, Daniel J. Singer, Christopher Reade, and Steven Fisher: Genes, Germs, and Memes: Function and Fitness Dynamics on Information Networks

11:45a-1:15p – Lunch (on your own)

1:15p-2:45p – Reasoning and Cognition (Room 201)

Moderator: Marvin Croy

Daniel Singer: Modeling Peer Disagreement

Marshall Abrams: Metaphor and Coherence: A Moderate Role for Cognitive Models in Agent-Based Simulation of Cultural Change

Markus Christen: Population and Temptation Density Determine the Effect of Social Strategies on Moral Hypocrisy in a Virtual Society

2:45p-3:00p – Coffee Break

3:00p-4:00p – Philosophy and/of Science (Room 201)

Moderator: Mirsad Hadzikadic

Rogier De Langhe: Modeling Scientific Revolutions

Nicolas Payette: Science Is Evolving, and We Can Model It

Friday, June 1st**8:00a-8:30a – Registration (Lobby) Breakfast (Atrium)****8:30a-9:00a – NEH Workshop Introduction and Inauguration (Room 1104)***Marvin Croy (UNCC)***9:00a-10:30a – Language (Room 1104)***Moderator: Tony Beavers**Ruth Poproski: Words With Friends: Simulating the Gricean Dynamic in Conversation**Teresa Satterfield: East Coast 2062: A Predictive Model of Language Contact Outcomes in New York's 'City within a City'**Gillian Crozier: Trills in Fields and Whistles in Forests: Modeling Cultural Selection in Bird Songs***10:30a-10:45a – Coffee Break****10:45a-12:00p – History and Culture (Room 1104)***Moderator: Paul Youngman**Marten Düring: Agent-based Modeling, Counterfactual Thinking and the Historical Method**Cameron Gibelyou: Complexity in Big History***12:00p-1:30p – Lunch (on your own)****1:30p-3:00p – Society and Sociality (Room 1104)***Moderator: Ted Carmichael**Dana Downey: Social Network Interpretation among Arab Peer-Groups**Stefano Glaimo: On the Evolution of Senescence in Finite Populations**Martin Zwick: Complexity Theory & Political Change: Talcott Parsons Occupies Wall Street***3:00p-3:30p – Coffee Break****3:30p-5:00p – Health and Welfare (Room 1104)***Moderator: Patrick Grim**Amanda Andrei: Adaptation of Foodways and Indicators of Malnutrition: Philippines as a Case Study**Johannes Eichstaedt: Computational Psychology and the World Well-Being Project: Tracking the Psychological States of Entire Populations through Social Media.**Russell Gonnering: Complexity of Content in a Large Commercial Electronic Medical Record System***5:00p-6:30p – Conference Reception (Atrium)**