Climate Game Meeting Notes, February the 20th, 2006 (10:00 – 12:00)

Present: Pier Vellinga, Merlijn Draaisma, Winoe Bhikharie, Anton Eliëns, Frans Berkhout, Alex Halsema, Haroen Lemmers, Charlotte Spliethof, Hugo Huurdemans and Marek van de Watering (please correct/add!)

Notes and transcription by Marek van de Watering.

Discussion of work done

In short, what everyone has been doing on project since last meeting.

Anton Eliens:

- Facilitating student projects (i.e. Interactive video by Hugo, Weather conditions in Half-Life 2 by two other students, etc., see website)
- Contacted "Beeld en Geluid Instituus" (Audiovisual center) in Hilversum for providing materials. This is not a problem, they can provide material on our notice, but a selection has to be made.
- Organizing a possibility for showing and discussing material created this far in the Visual Design class held on 7th of March (11:00-12:45, S353).
- Contact with possible commercial partners: best option, based on background (young, work for VPRO, interest in "serious/knowledge gaming"), credibility and feeling is ExMachina. Its focus would be more intermediary (management, organization, distribution), not on pure (and all) development/implementation. Other candidates are Ijsfontein, Mediarepublic and Little Chicken (console games).

As for the costst and timeline: it is too early for such companies to provide a cost overview. Anton Eliëns has the impression that after the $\mathbf{1}^{\text{st}}$ of May (final proposal deadline), implementation in cooperation with a partner will be typically 6 months. But keep in mind that we do not yet know what we want!

ExMachina are most interested (based on development costs) in a multi-user web based game, with possible quiz-elements.

The idea is for a Geo student (Haroen Lemmers) to transcribe a scenario/plan of action for the game, which Hugo will elaborate in Flash.

Merlijn Draaisma notes that there are rumors of possible change in the Akademische Jaarprijs jury/commission.

Charlotte Spliethof had a meeting with students 2 weeks ago, for generating initial ideas. These were in part the basis for the proposal by Haroen Lemmers. Based on this, Haroen has been working on plot and plan of action/scenario for the game, and initial visualization (will send this through email), which he will send to the other project members in digital format. The thoughts derived from this meeting were on starting points and end points for the game and possible interaction.

Main starting point for the game would be the choice of a group of countries (with accompanying introduction, for example a short movie) and a IPCC report. Based on this and decisions made, the player progresses bottom-up through a political

hierarchy (i.e. from local politician to "God mode"), in which the level of difficulty differs from country to country, and by the players participating. This would be in a turn-based, multiplayer mode of play.

One could also imagine the player drawing a card at the beginning of the game (as in the "Risk" boardgame) which states the goal.

Throughout the game, movies (possibly interactive) could illustrate points in time at which decisions have to be made, and provide a basis for education on the topics involved. In general: events would "randomly" pop up, asking the player to make certain decisions.

Game over points could be: land totaly immersed in water, destruction due to natural disasters, a predefined countdown, shortage in food, biodiversity or water. "Positive" game over points could be reaching consensus with other players, a certain level of points (calculated from a set ozf parameters, see next section)

Players, each representing different groups of countries, should be able to interact with eachother through chat sessions to share information, and to initialize negotiations and/or trade resources.

Haroen could contact terra-preta.nl for possibly low-cost Flash and project website development. Anton Eliëns notes on the importance of "online presence" of the project.

Hugo Huurdeman: new in group, Msc student Multimedia & Culture. Worked on Interactive Flash Videos project, and the proposal is to use this in the Climate Game (prototype), then being his Msc Project.

Marek van de Watering: new in group, Msc student Multimedia & Culture. Working on Msc Project and Thesis on design theory and organization (i.e identifying key points in design projects, how to translate requirements/ideas into visualizations). Merlijn Draaisma adds it might be good to add Multimedia research to the Climate Game project (scientific basis & multi-disciplinarity).

Frans Berkhout asked his son about the idea of a climate game, who was positive about it. Also, friends could test a prototype of the game.

Pier Vellinga:

- Document with research topics and publications on climate, from the VU. This
 could be used for inspiration and to identify themes and to contact related
 persons.
- Will look further into a 1.2 million Euro fund for knowledge sharing with games in high schools. Contact person is Margreet van der Berg. Watch out for "strings attached", but still good as partner for increasing scope and interest.

Target group for the game: 16 – 25 years old. First goal, apart from "winning", in practice would be to appeal to students (either high school or university) and to promote the VU.

Discussion on game structure

Focus of further discussion/proposals: structure of the game (and underlying model)!

Wrap-up of the game concept:

The player chooses a group of countries (the world divided into 5 groups of countries, with different starting characteristics). First, the player should manage his own area internally in a successful manner (i.e. mitigation – adaptation in "sandbox"). In a second step, the multiplayer aspect comes into play, which will allow different players (on one world-map) to interact with each other (negotiate, trade resources, form pacts, etc.). These steps are divided in rounds of 5 years, summing up to a total of 100 years (20 rounds). Each round, the player gets a IPCC report with which to review past choices and on which to base present/future decisions. Triggered (i.e. by treshholds in parameters) or random events (i.e. an industrial coup by another country/region) will add to the choices that have to be made. The "knowledge part" could be implemented as "quiz"-elements, possibly hosted as "press conferences" and the building of schools that allow for the testing of knowledge.

In short:

- *Turnbased, webbased, multiplayer* play, throughout a set of *scenario's* (5 or 6), in which a player first
- has to maintain him/herself in the *local* setting, then
- interact with other players within a *global* setting
- with random and triggered events asking for decisionmaking, and
- education by using *quiz*-elements for testing/shaping knowledge, and
- Difficulty based on chosen *climate sensitivity* (see below).

Proposals done for underlying factors/parameters:

- The underlying parameters being:
 - o Resources
 - Environment
 - Money, and
 - Social
- The underlying parameters being:
 - Money
 - Knowledge (with possible social impact)
 - o Power

These parameters, possibly with attached weighting values, could be summed up to a single score which determines if a player is successful or not (and step-wise decide on the next actions to be taken). Focusing on money/capital only and omitting knowledge/education, for example, could sum up to the player "losing". Basic relationships (scientifically founded) between these variables could be implemented. Note: when forming pacts with other regions, these parameters could interloc!

The *knowledge* aspect could be in:

- Overall ingame decision making (i.e. focus on R&D, agriculture, etc.)
- Quiz element (basic questions on certain issues)

Ideas on this are "press conferences" the player gives (in fact, a quiz), a possible "advisor function", and the building of schools which provide quizzes.

The IPCC report provided in every turn should be simplified (no large texts for onscreen reading), and give a prediction on future changes (but these might be wrong!).

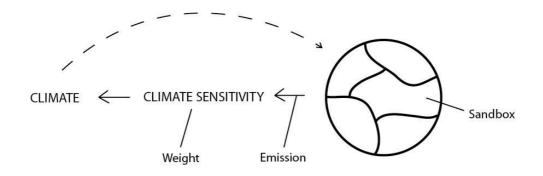
Other notes/proposals:

- On ingame *language*: decided on this to be English language, but for Dutch audience, keeping in mind the target group. If chosen for further development, a bilingual version could be made. In any case, we have to show that we are aware of this issue.
- On time of play: webbased, so games not being too lengthy.
- On access/availability: should be able to log-in to continue game (i.e. load/save). In multiplayer games, this would be done by replacing open player slots (before or during the game) with AI (Artificial Intelligent) bots/players.
- A online Hall of Fame, with best players/scores (motivational factor)
- Fossil energy and biomass as possible *treshholds*.
- Introduce (CO2?) concentration as a *global variable*, to make negotiations with and investments in other regions more interesting/necessary.
- Consider cheating/penalties/punishments
- Regarding negotiations: blind or not (know status of other players)? Allow for feedback? Keep in mind differences between big countries and smaller countries.

Frans Berkhout: scientific element should be considered:

- Importance of: mitigation adaptation (per turn, decisions projected on agriculture, water, biodiversity, sealevel, health)
- Climate sensitivity:
 - Make it (partly) random, or
 - Slider that allows player to choose: increased sensitivity is higher level of difficulty.

Basic global model:



Goals for prototype

Prototype of the game for final proposal, deadline on 01/05 (correct if wrong!).

Goals/characteristics:

- Focus on presentation, not on interaction
- Written gameplay as backup
- Partial showcase of functionlity: i.e. one scenario, one quiz, one random event, region choice, etc.
- Possibly as "trailer" video showing visuals and explaining/showing gameplay
- Mix of "trailer of" and "introduction to"
- Documentation, official proposal
- Website to host all product versions, documentation, etc. Ask number of people if willing to make such a website, and see who responds.

Notes:

- Partnercompany to implement game, we to provide:
 - o Data/material
 - o Ideas
 - Scenarios
- Our proposal should consist of:
 - o What we want
 - o Elaborate this in a detailed version
 - Make the underlying model explicit (i.e. as image/diagram)
 - Incorporate VU identity (proposed: "klimaatster")
 - o A name

Additionally, a brief overview of the "competition" should be made: how can we improve/differentiate!

Practicalities/organization

Need for 2-3 student advisors, preferably from this group:

- One Multimedia student for prototyping/implementation (2 days a week): Hugo Huurdemans
- One Geo student for storyline, scenario's, "knowledge" (2 days a week): Haroen Lemmers
- One student or external company (dependent on availability and resources): for creating a project website.

Els Hunfeld should be contacted for contract/paperwork.

Meetings/schedule:

- 26/02 13:00-14:00 (F532): meeting with smaller group (based on availability), on organization
- 07/03 11:00-12:45 (S353): presentation of material at Visual Design course, meant for open discussion with students.
- 15/03 15:30-17:00 (F532): meeting with whole team
- 26/03 16:30-17/18:00 (F532)
- 12/04 10:00-12:00 (F532)
- Rest of dates to be determined
- 01/05: deadline for final proposal, followed by presentation of this proposal.