

Using the VNA Ideation Game at Global Game Jam

Annakaisa Kultima

University of Tampere

Kanslerinrinne 1

FIN-33014

+358 50 443 7258

annakaisa.kultima@uta.fi

Kati Alha

University of Tampere

Kanslerinrinne 1

FIN-33014

+358 40 190 4070

kati.alha@uta.fi

ABSTRACT

In this article we present the findings of a game idea experiment run at the Global Game Jam (GGJ) 2010 and 2011 events in Tampere, Finland. We were examining how well the game-based ideation method Verbs, Nouns, and Adjectives (VNA) and similar approaches fit the constrained game design processes. GGJ 2010 and 2011 both had a theme for which ideas were produced. Our previous studies indicate that the VNA ideation method is well-suited to blue-sky ideation, but it is harder to use the ideas in ongoing design processes. In this study we compared four different approaches and the ideas resulted by using these methods. This study shows that the theme-tuned VNA variant performed best both in theme-related and interesting ideas, indicating that the method for coming up with new ideas matters.

Keywords

Game idea, creativity, method, idea generation, game-based idea generation

INTRODUCTION

Game ideas are produced with various approaches and techniques within the game industry practices. The natural ways are evolved by different experience and educational backgrounds. Game designers and other game professionals come up with ideas in various ways, not only by mistake or by trivially combining existing patterns, even though these two extremes attract the most attention. Designers do not only trust the occurrence of ideas but engage in purposeful acts to produce more interesting ideas or ideas with a certain theme or topic (Kultima 2010).

Experiences with more rigid, formal methods vary (Kultima 2010). There are some reports that using brainstorming techniques with game innovation processes can feel a waste of time (Shodhan et al. 2005). It is difficult to analyze the different experiences without actually knowing what was done, as 'brainstorming' is often regarded as a trivial

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method, usually denoting any kind of group ideation activities. However, it is acknowledged that brainstorming does not always yield innovative ideas and the way that the session is set up is critical (Rossiter 1994). The use of brainstorming techniques can be difficult for practical reasons as well. Good sessions need preparation and education of the participants. Game professionals report that if only one person does not know how to act in the situation, it can destroy the experience of the session (Kultima 2010). On the other hand, exploring the different formal methods can be a cumbersome process if the only way to acquire the understanding of the techniques is through brainstorming literature (e.g. Michalko 2006).

For the GameSpace (Paavilainen et al. 2009) and Games and Innovation (GaIn) (Kultima & Alha 2011a) research projects, we have examined the use of game idea generation games for brainstorming new game ideas. We designed a couple of game-based brainstorming techniques to facilitate the ideation processes of game professionals. Our varying experiences have led us to examine the effects of such tools in more detail. We already know that the stimuli of the methods matter, and that game-based methods are a potentially efficient part of game design processes for their fast pace and a low threshold for adoption (Paavilainen et al. 2009; Kultima 2010; Kultima & Alha 2011b). One approach in particular that we designed gained more popularity than the others: a card game called Verbs, Nouns, and Adjectives (VNA) (Kultima et al. 2008a; Kultima et al. 2008b). VNA is a simple yet relevant tool for designers to use to supplement their creative processes and to help them work under time-pressure. However, the VNA game is reported to help producing ideas that do not always fit with the original design problem. As the tool is already somewhat domain specific, we were interested to design an experiment that explores how well the deck itself would actually be suited to restricted game ideation, and how it could be modified in order to help focusing on the constraints of the design, on this occasion mainly to the theme of the design.

THE EXPERIMENT

We chose the Global Game Jam¹ (GGJ) event as the setting for the experiment because it provided a game development process fast forwarded, where ideas are nurtured into full games within one weekend. The event also has a set theme every year, giving participants a starting point for their design processes. As game development processes are usually constrained with a set theme, mechanic, or technology (Kultima & Alha 2011b), we saw GGJ a good fit to our purposes. We were interested to see how well the VNA method was suited to ideation sessions with a set topic. The themes of GGJ 2010 and 2011 were open enough to have possibilities to utilize such a high-level tool as VNA.

During the GaIn project, we organized the Finnish Game Jam at Tampere (FGJ Tampere) both 2010 and 2011 as a part of the GGJ. We facilitated the ideation sessions at the beginning of the events both years by providing game-based tools for some of the participants. The rest of the participants worked as a control group for the methods. We gathered the ideas they produced and analyzed them according to their content.

The first-year experiences with VNA indicated that a game-based tool designed at a general level might not be optimal for theme-constrained ideation. The theme “Deception” was released only two days before the event for the local organizers and we had no time to prepare a variant VNA for the theme. For the second year we were able to work closely with the GGJ’s constraint team to know the theme far enough in advance to design a VNA variant for the second year topic “Extinction,” and thus the methods used

between the events varied. In the first year, half of the participants were using VNA decks, half used the “Au Natural” method. In the second year, we divided the participants into three groups, where one group used VNA, one the “Extinction” VNA variant, and the rest a more free approach that we called “Keita’s Way,” which worked as a control group for the second year.

The context: Global Game Jam

Game Jams are game development events, where the purpose is to create new, innovative games in a very short time, for example during a single weekend. GGJ is a worldwide event, held for the first time in 2009. It takes place all around the world during the same weekend. It is open for students, professionals, and amateurs alike. Each year the event has a single theme for all sites, with which all of the resulting games must abide. In addition, there may be separate constraints and achievements. The achievements or diversifiers are voluntary and have included things like “Both Hands Tied Behind My Back: The game is meant to be played without the use of a player’s hands” or “One Hit Wonder: The game can only be played once (e.g. per computer, per IP address, etc.)” The achievements give no score but help the games to stand out from the mass. They also give extra challenge for experienced jammers.²

In 2010 and 2011 we ran sites in Finland under the label “Finnish Game Jam” (FGJ), Tampere being one of the sites. The global theme was “Deception,” and in addition there were different constraints for each time zone. For instance, the time zone for Finland had three constraints—fire, wire and lyre—from which each group had to choose one to be somehow included in the game. In 2011 the theme was “Extinction,” and this time there were no additional topical constraints. In both years there was a set of optional achievements.

The game jams have a very limited timeframe for developing the game; thus, there is not much time for the ideation itself. Our ideation experiment was run only on the Tampere site of the 2010 and 2011 GGJ events. There were 28 participants in Tampere in 2010 and 46 participants in 2011. One fourth of the participants were working in the game industry, rest of the participants were students and hobbyists. Majority of the jammers were male, but for instance in 2011 each team had at least one female member and in 2010 every seventh participant was female.

Verbs, Nouns and Adjectives (VNA)

VNA is a simple brainstorming technique developed as part of the GameSpace project (Paavilainen et al. 2009) at the University of Tampere. It has three decks of cards: verbs, nouns, and adjectives (see Figure 1). Each of the cards has one word printed on it; this word functions as a stimulus and an inspiration for shared ideas. The words have been collected from both digital and non-digital casual games, as the original purpose was to produce casual game ideas.

The game is usually played in small groups, where the first player picks a random verb card from the verb deck and uses the word to ideate the basic idea for the game. The next player then picks a random noun card and adds to the game idea described before. Finally, the third player (or the first if there are only two players) draws an adjective card and closes the game idea. The idea is documented and the procedure is repeated by a different initiator.

The words in the cards should be used for free mental association, meaning that the game idea is not based solely on the combination of the three words. The rounds are kept fast and responsive, and are less analytical or critical. VNA rapidly produces high-level game ideas and as it offers random and surprising stimuli, it results in ideas that the users might not have otherwise come up with (Paavilainen et al. 2009; Kultima et al. 2008a; Kultima et al. 2008b). VNA was used both in 2010 and 2011.



Figure 1. An example set of the words from the VNA deck.

“Extinction” VNA variant

For the second GGJ we designed a variant of VNA to fit to that year’s theme, “Extinction.” The game consisted of the same game mechanic used in VNA, where the decks of cards are laid on the table and each participant takes one card at a time ideating on the shared idea, which means the second and third participants always add to the idea that was initialized by using the one from the deck. The second deck was identical to the “Verbs” deck of VNA. The first and last decks were different: The first deck was based on the theme “Extinction” including words, sentences, and quotes or other concepts relating to the extinction in one way or another. These were, for example: “Death”, “Only a handful of individuals survive”, “Extermination”, “Capacity to breed and recover”, “Poor health or old age”, “Loss”, “Birth”, “Creation”, “Beginning”, “Half of presently existing species may become extinct by 2100.”, “Don’t forget this club nearly went out of extinction last year.”, “Freedom is never more than one generation away from extinction.” And “The problems of this world are only truly solved in two ways: by extinction or duplication.” The tailored deck was formed by searching to break down the concept “extinction” into several possible connotations. This was achieved by using Google, Wikipedia and other Internet sites related to the word “Extinction”. Despite the additional time to prepare the experiment in 2011, due to simultaneously organizing the event itself, there was no time for actual testing of the tailored deck.

The third deck was a deck with figures that we call *non-symbols* (see Figure 2), since they look like they could be symbols, but are open for interpretation. This latter deck was produced in connection with another ideation game where we found the non-symbols promising enough to use them in this experiment. The reason we wanted to provide three decks was that it seemed to work well in the VNA process, providing fast rounds with different stimuli affecting the ideation process. Our previous experiences with game-specific ideation games (Paavilainen et al. 2009) led us to avoid using only the specified stimuli, since that could lead to mechanical additions to the ideas based on the given stimulus.

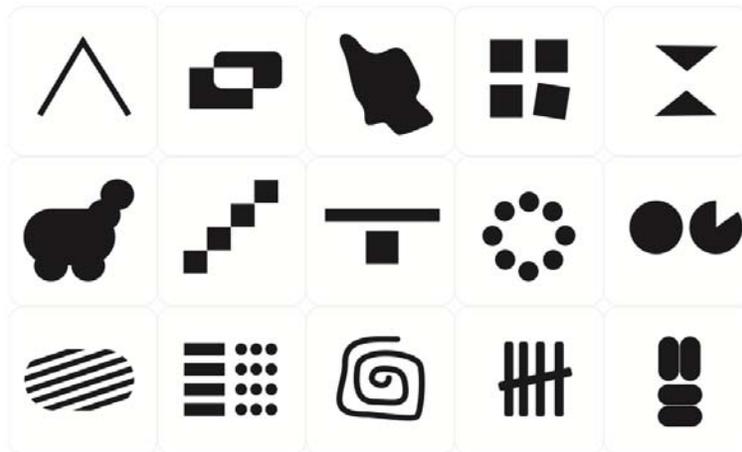


Figure 2. Example cards from the non-symbol deck.

“Keita’s Way”

One of the three “methods” used in the FGJ 2011 was called “Keita’s Way.” This was an approach inspired by the thoughts of Keita Takahashi's keynote for GGJ 2011. In his videokeynote³ titled “How to Find Good Ideas,” Takahashi advised the participants to: 1) Think, 2) Think until the explosion in your brain, 3) Talk to friends, 4) Play with the Theremin, 5) Focus on it, 6) Relax, 7) Clean a room up, 8) Shout, 9) Sleep soundly, 10) Look at from various angles, 11) Make a funny face, and 12) Go out. (Takahashi et al. 2011) His keynote was presented for all the participants of GGJ 2011 and was supposed to be an inspirational and personal greeting for the whole event, not necessary a tool or method for actually coming up with ideas.

However, we decided to include his thoughts in the experiment and molded the control group instructions to refer to the keynote. As Takahashi’s keynote was somewhat cryptic and artistic, we modified the instructions a little bit and included the following note (see Figure 3) to the 2011 control group instructions.

KEITAS WAY (the keynote)
or
you can try these:

- find interesting objects, put them on the table and take turns by using them as an inspiration to the ideas
- use random pages of wikipedia, flickr or google/google img to spark ideas
- exquisite corpse: fold paper in three and each person writes one piece without reading the others: first a game mechanic, second a game character, third the environment, then the paper is read out loud. Repeat!

Figure 3. The “instructions” of “Keita’s Way” from the material package of the 2011 FGJ.

We have no formal observational data of what the participants given these instructions were actually doing, but we saw some of them meditating or using the alternatives stated

on the slip, such as bringing different objects to their ideation session. The main thing connecting these approaches is that they are more specific than just trying to squeeze ideas from your head, but still less formal than using actual ideation tools such as the VNA and the “Extinction” VNA variant.

Control group – “Au Natural”

At FGJ 2010, half of the participants used VNA and the other half was left with whatever they thought was best for them. However, the amount of VNA decks was limited, so they did not have access to that method. What we observed was the teams or pairs talking together trying to figure out what kinds of ideas they would want to explore. The “Au Natural” approach, as we named it, was only utilized in 2010, whereas the “Keita’s Way” worked as an alternative to the game-based approaches in 2011.

IDEAS, PITCHING & GAMES

We asked all the participants to write their ideas down in the notebook that came with the rest of the materials. Participants were instructed to put their names on them and write one idea per page. We then placed the ideas into the database, marking the participants of that particular session, method used, and the order of the ideas. No one was forced to use the method provided or return the notebook if they wished not to.

Altogether, 188 ideas were recorded, ideated in groups by 42 people. Some groups had overlapping members since some of the first year participants of FGJ returned in 2011. The length of the descriptions varied a lot from a couple of words to approximately 200 characters.

An example of one of the shortest idea descriptions:

Panda – sneezing powers. [2011, Extinction theme, Method: Keita’s Way],

An example of a longer idea description:

You are a brave star captain attempting to save remains of your civilization. You have to be quiet of the situation to not alarm and cause panic. You are trying to pack your people in to freezers and trying no to topple them over while packing containers in piles. [2011, Extinction theme, Method: “Extinction” VNA variant]

In 2011 at FGJ Tampere, 16 pitches were presented, resulting in 11 games during the weekend. The connection between ideas and finalized games varied partly because the teams were formed after the pitches, partly because the teams needed to change the concepts during the development process to make the game work. In 2010, the number of submitted games was 8.

For instance in one of the 2011 games, “Rhythm of the Stars” (Figure 4), the members of the team belonged into different brainstorming groups in the beginning, and the connection between the ideas and the pitch is not clear, even though possible traces of the concept can be found in several of the initial ideas.

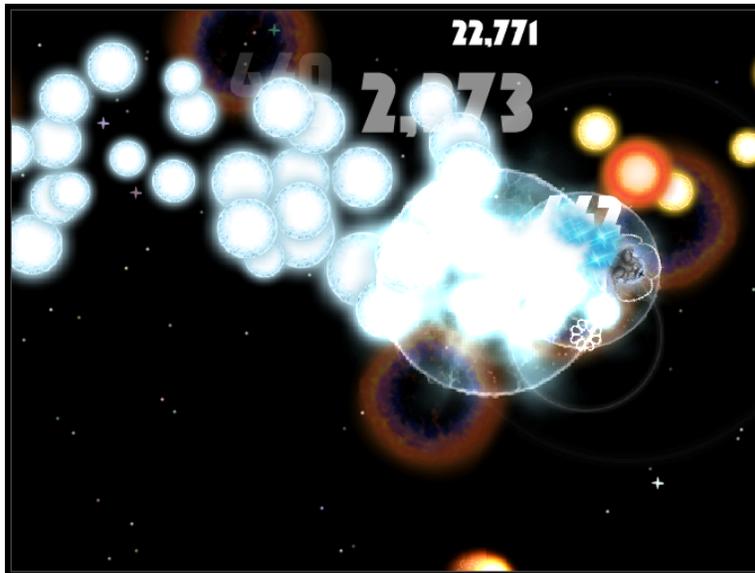


Figure 4. Rhythm of the Stars gameplay.

The initial ideas were hard to trace back to the concept, and it cannot be said with full certainty which of the ideas (if any) was the spark for the pitch:

An artificial cardiac pacemaker is to be kept in right rhythm; the heart is glimmering, if one succeeds in it. The game is based on points and multipliers. [Ideators: P1, P2, P3; Method: VNA].

The player controls the universe: Mass and energy. The goal is to keep the universe together as long as possible. [Ideators: P4, P5 & P6; Method: "Extinction" VNA Variant].

Main character is a cell on a grid. Pulses of waves. Player uses a camera to imitate the pulse waves. [Ideators: P7, P8, P9; Method: VNA]

However, the connection between the pitch and the final game description was clear:

The pitch:

"The quest of the particle. The universe is dying – Life itself is on the verge of extinction. You are the mysterious particle-entity dispensing your energy for dying stars. Rhythm-based: Stars are arranged in a rhythmic pattern which you have to hit on time. Sacrifice yourself for the good of the universe and all known life – or let everything face away? Retroish? (music, visuals). Upbeat, heroic "save the galaxy" music.

The description of the final game:

Rhythm of the Stars is a rhythm-based game where you save stars by flying in space and activating your area of effect power. Click to the beat when the diminishing circles hit the edges of your ship. Hit big groups of stars with your star savior power for big score. [Team members: P1, P2, P4, P8].

From all of the finalized games in 2011, 8 games out of 11 can be connected to one or several recorded ideas. 3 games we could not trace to any particular idea. However, the connections between the ideas and games are naturally not straightforward and some connections may also be coincidental or trivial. Only three games can be clearly traced to one idea or the combination of two ideas, and only one of the ideas has stayed almost the same from the ideation to implementation. 7 out of 11 games can be traced to a pitch or the combination of two pitches (see Figure 5).

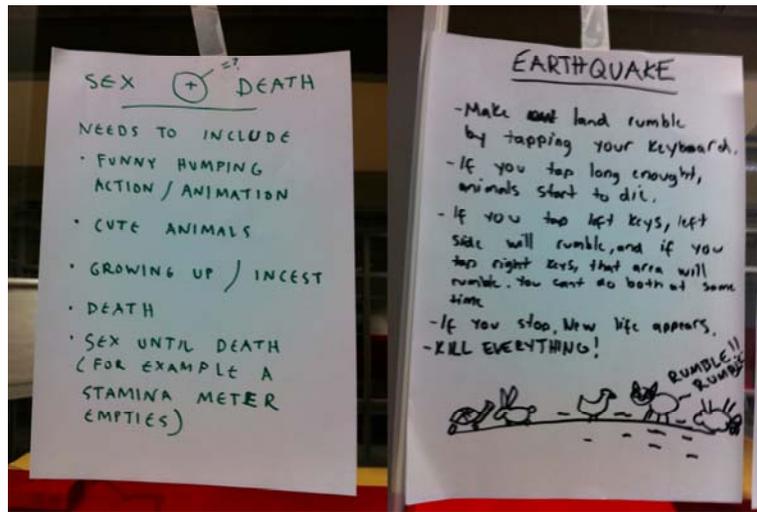


Figure 5. “Sexquake” was formed as a combination of two pitches.

COMPARING THE IDEAS AND METHODS

We ran an evaluation round within the group of researchers of the project consisting of seven game researchers. Based on our previous studies, we have found that ideas are usually seen as a starting point for development (Kultima 2010) and that ideas are usually used after they are recorded as an inspiration or partially (Karvinen 2011). For this reason we wanted to rate the ideas differently. Each researcher marked independently from each other whether they agreed that certain statements were true of the ideas. We wanted to know if the ideas were interesting: “There is something interesting in this idea” or related to the theme: “I can see the connection between this idea and the theme.” To supplement the analysis of the excitement factor of the ideas, the researchers also had to mark the top 3 personal favorites from both years, giving some ideas the possibility of rising above others. Some of the markings were so short that the idea could not possibly be evident to the readers, so we included the “incomprehensible” category to make the ranking easier and more transparent.

150 out of the 188 ideas were marked as interesting by at least 1 researcher; 10 ideas by 5 or more researchers. 32 ideas were marked in the personal top 3, and 43 ideas were stated as incomprehensible by more than 5 of the researchers. Only 2 ideas were interesting to 6 out of 7 researchers, and there were no agreed favorites; the highest ranking was 3 votes from different researchers, and only one idea achieved the 3 votes. In total, there was no clear consensus about the ideas. This is not surprising due to the fact that games are experiential products. Consensus was easier to achieve in ranking ideas based on how well they fit with the theme. For example, 125 ideas had a connection with the given

theme according to at least one researcher and 26 ideas were labeled as theme-related by all of the researchers.

The data was not symmetrical, as we got more ideas with VNA than with the rest of the approaches, since only VNA was used in both of the events. VNA produced 100 ideas, the “Extinction” VNA variant 24 ideas, “Keita’s Way” 32 ideas, and “Au Natural” 28 ideas. For 4 ideas, the origin was lost during the recording phase. As already experienced in previous studies (Kultima et al. 2008a; Kultima et al. 2008b), VNA seemed to be more efficient in producing the higher amount of ideas in a given time period.

This experiment was not entirely controlled as it was conducted in the context of the Global Game Jam. We were not observing the differences in interpretations of the methods, how many of all of the ideas were really recorded, and how many ideas were recorded that were not produced by these provided methods. Participants were given a notebook to record their ideas, but were not provided with instructions of in what format the ideas were supposed to be written. We also know that some of the ideas were not recorded and returned to us as participation in the research experiment was voluntary. However, the results of the comparison raise interesting speculations and hypotheses for further experiments. Future studies are needed to confirm the initial findings of this study.

Differences between the methods

In general, the “Extinction” VNA variant outperformed the other methods. All the ideas produced by the “Extinction” VNA variant were regarded as interesting by at least one of the researchers. However, as unanimous agreement increased, the differences among the methods decreased (see Figure 6). Quite obviously, the superiority was more visible when comparing the theme relatedness of the ideas (see Figure 7). The tool that was fitted for the theme produced relatively more theme-related ideas than any other method. When we checked the ideas marked as favorites, “Extinction” VNA outperformed on getting most votes, but the highest-ranking favorites were produced by VNA (see Figure 8). However, the higher amount of ideas generated with VNA can also cause this and this study can only help forming a hypothesis to be tested with further experiments.

All in all, “Keita’s Way” performed the worst on all areas except in how well the ideas related to the theme. From this aspect VNA performed, as expected, even worse than the vague instructions given in “Keita’s Way.” The comparison between VNA and “Au Natural” was surprisingly almost identical on the performance of interesting ideas. In total VNA produced the ideas faster, but they seemed to yield as interesting results as without a specific method. Yet again, VNA produced relatively more favorites. Even though this study seems to confirm the experience of VNA as a blue-sky ideation method that may not be suited to constrained situations, it still seems to work as a tool to spark strong game ideas.

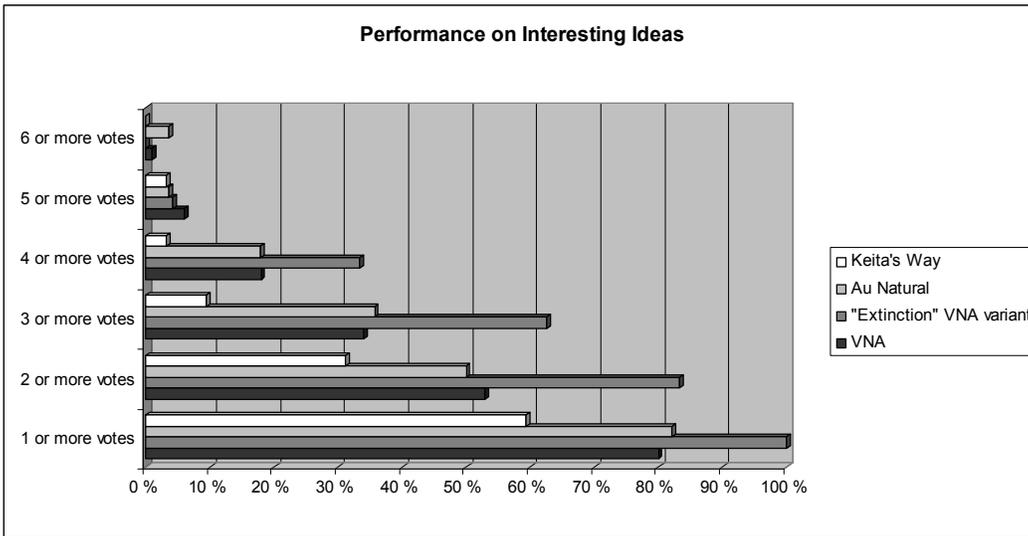


Figure 6. The differences in performance of different methods according to how interesting the produced ideas were. Votes are related to the total amount of ideas (100%) produced by a particular method. Each idea could get a maximum of 7 votes.

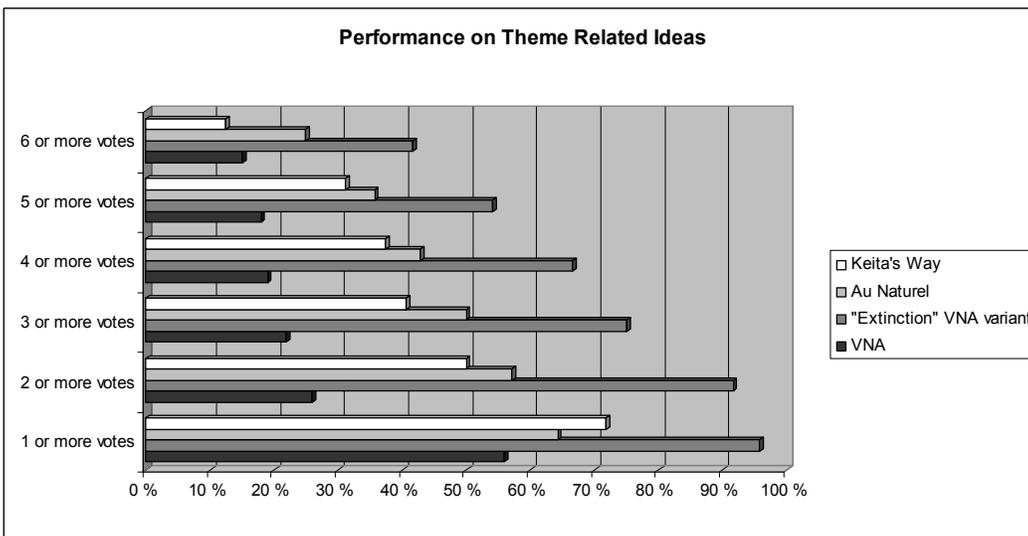


Figure 7. The differences in performance of different methods according to the connection between the idea and given theme. Votes are related to the total amount of ideas (100%) produced by a particular method. Each idea could get a maximum of 7 votes.

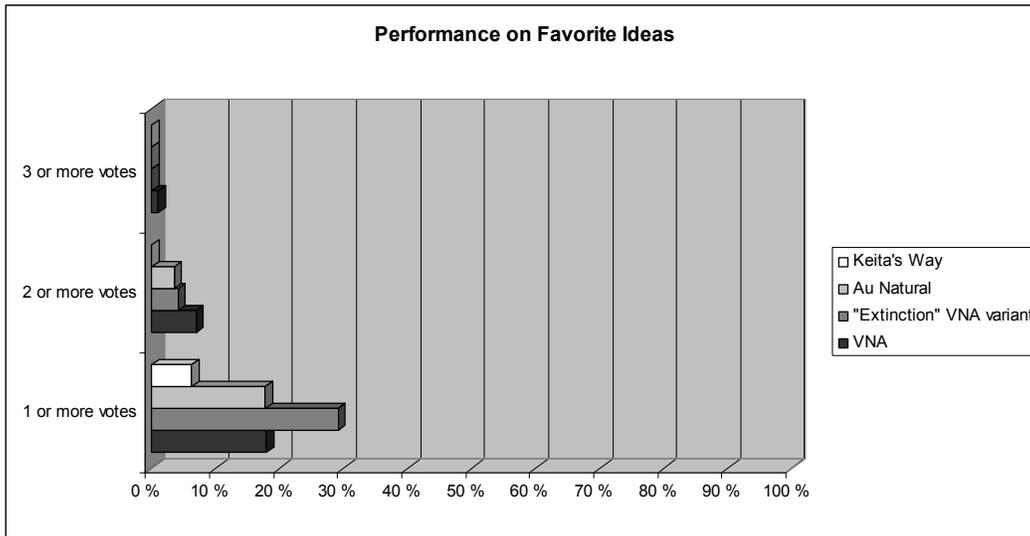


Figure 8. The differences in performance of different methods according to how many of the ideas were marked as personal favorites. Votes are related to the total amount of ideas (100%) produced by a particular method. Each idea could get a maximum of 7 votes, but each voter marked only the top 3 (no emphasis).

The effect of creative individuals

We did not aim for comparing creative individuals within this study. However, this factor cannot be completely overlooked. It might be that some of the users of the methods were simply better in producing interesting ideas. Thus the results could possibly vary with different combination of the people and the methods. The groups of the first and second year were not identical, as group compositions varied, and the groups were partly randomized beforehand. The effect of a single person could not be thoroughly examined, as the ideation was a group process. However some people seemed to be related with stronger ideas.

We ran a small analysis on the occurrence of interesting and favorite ideas and their creators. As previously stated, one cannot designate one single person to one idea, but we could see a pattern of some individuals being attached relatively more “good ideas” compared to the total number of the ideas that they produced.

We found eight individuals who scored higher than average on both categories. The methods varied among the high-achievers, but the poorest score was achieved by 7 individuals, from which 5 were the members of the groups using only the Keita’s Way approach. If the affect of a single person would be stronger, there should be more variation within this connection. Even though the sample is small, it seems implausible that all the 5 out of 8 users of Keita’s Way happened to be generally less creative individuals.

The sessions

We were also interested to see how the idea sessions proceeded and whether there would be differences in the flow of interesting ideas. We were interested to see whether the common belief that the first ideas are poor would show within our data. As this study was not set for comparing the order of the ideas, the data was not completely fit for analyzing this factor. The results can thus only be treated as indicative. There were a total of 20 idea sessions. All sessions had a minimum of 4 ideas recorded, but some sessions had as many as 15 ideas.

We found that there seems to be a lot of variation during a session: The interesting ideas may occur at any time. The very first idea seems to be less frequently great (see Figure 9, 10 and 11), depending on the method. All the other approaches seem to yield relatively poor ideas in the beginning of the session, where the “Extinction” VNA variant again performed slightly better than the rest of the approaches starting immediately with relatively interesting ideas (see Figure 12).

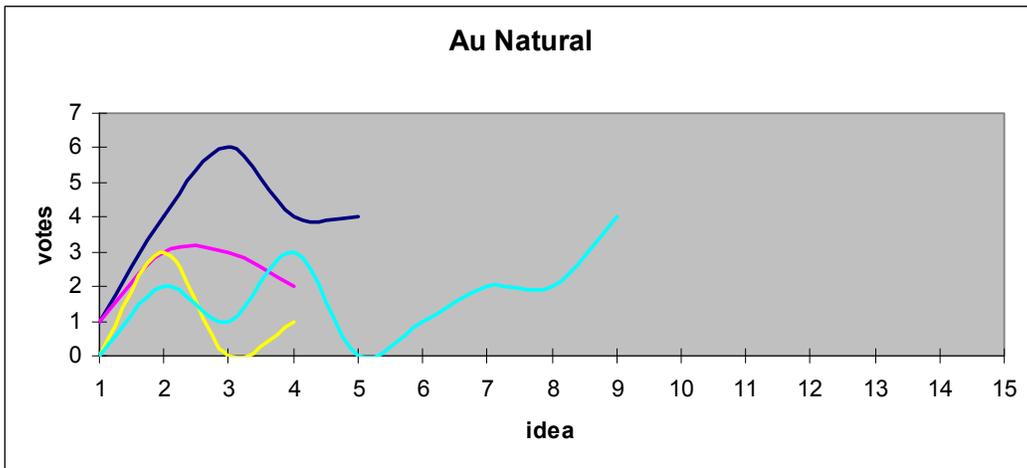


Figure 9. The flow of the interesting ideas within the Au Natural sessions.

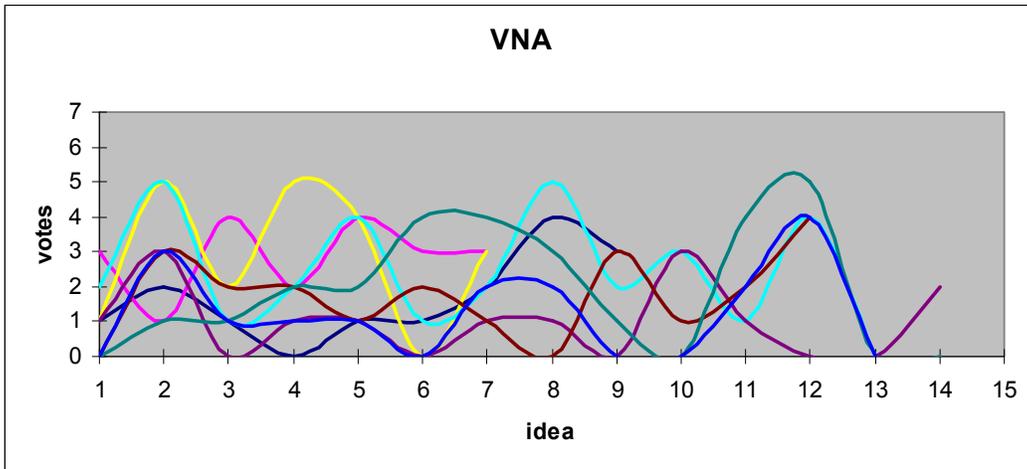


Figure 10. The flow of the interesting ideas within the VNA sessions.

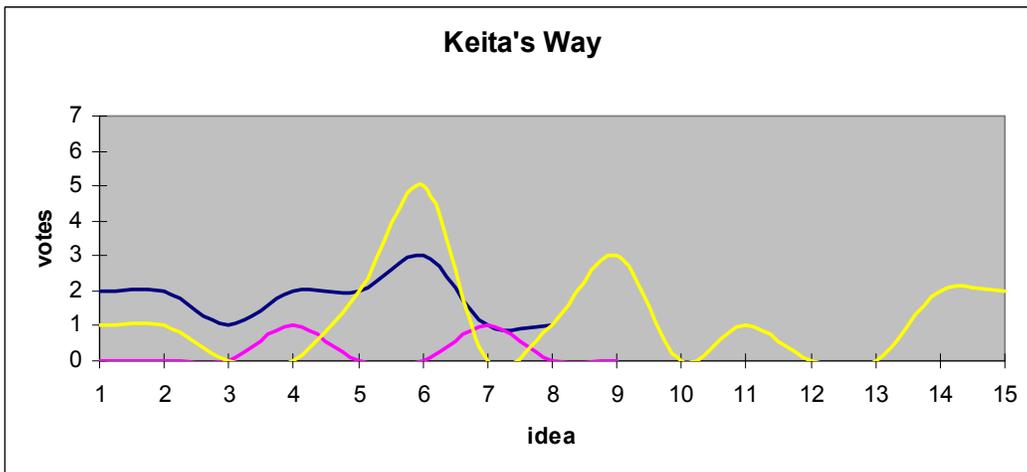


Figure 11. The flow of the interesting ideas within the VNA sessions.

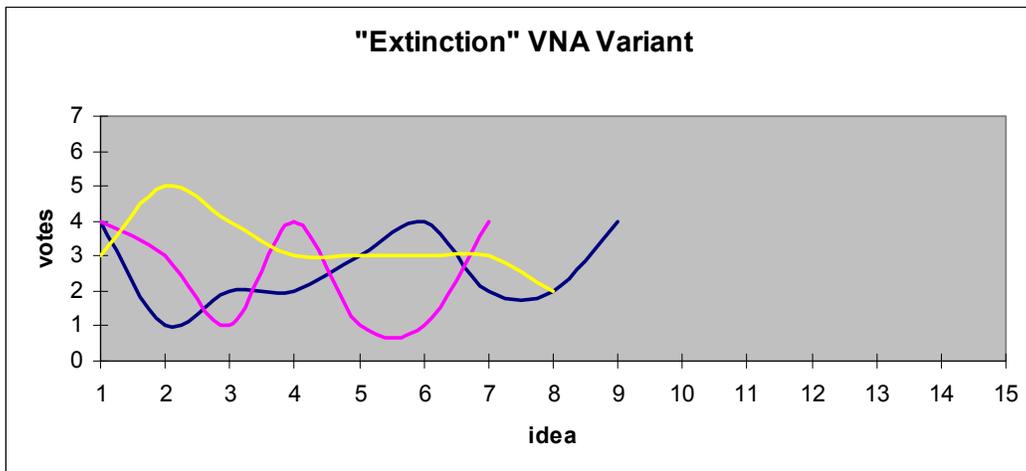


Figure 12. The flow of the interesting ideas within the VNA sessions.

This data supports our field observations within the two projects, GameSpace and GaIn, that it is possible to improve the performance on first ideas by using a suitable method. However, there were only three sessions for the “Extinction” VNA variant and larger body of data would be needed to fully support this claim.

Interestingly, as in general the first idea seems to be somewhat poorer than the rest of the ideas, the second idea of the session gained more votes. Additionally 7 out of 32 favorite ideas were actually the second idea of the session. Even though the very first idea might be less than great, the second one may be the best idea within the whole session. Provided with a suitable method, one seems to be able to not only increase the number of ideas within the given time, but also the possibility to run into the stronger ideas immediately.

DISCUSSION

The highlight of this experiment is the “Extinction” VNA variant, which seemed to work well with a theme and time-constrained game design process in the context of GGJ. The deck of the “Extinction” VNA variant included only one third of the theme-related stimuli, leaving two thirds as domain-specific stimuli and general stimuli. The combination seemed to work well and could be further elaborated as a more extensive tool for constrained game design processes.

It is also important to note that the themes “Deception” and “Extinction” are not narrow topics and benefited from these rather open-ended methods. In practice it might be difficult to refine the method for more restricted ideation processes or settings other than theme-constrained sessions. As the constraints within the game development processes vary and because there are complex combinations of different constraints, there is an additional challenge for designing tools for such purposes.

It is still evident that the methods matter. Some approaches are more efficient within a given time period, some provide more feasible ideas, and some give more space for excellence than others. However, it seems that vague methods could be working against the creative process. Even though the process of coming up with new ideas is in the

context of different influences, it seems practical to force the creative process with the help of specifically-designed approaches for certain processes, or just organically “going for it”. However, the context of GGJ is highly time-constrained and some “softer” methods, such as what Keita Takahashi was proposing, may enhance the overall atmosphere of the creative process, even though they do not help when the time pressure is on. The combination of different level methods and varying the methods from time to time is probably the most efficient way to increase the quality of the ideas. Also it is notable that the relation of an idea and the finished product is not one to one, even though one always needs something inspiring to start from.

This study has indicated interesting directions for the future studies. With a larger body of data the role of the individuals as well as the flow of a session could be studied further. Even though the pattern does not apply to all of the sessions within this study, it is interesting how the flow of interesting ideas seem to form such a rollercoaster in many of the sessions.

CONCLUSION

Based on our findings, an interesting hypothesis can be formed. Where the theme-specific “Extinction” VNA variant method was providing the balanced combination of both interesting and theme-related ideas, the industry-specific VNA may have more potential towards strong ideas. Interestingly the vague approach inspired by Keita Takahashi did not succeed in generating interesting ideas and performed only on average rate on theme-related ideas. Even the natural way of doing the ideas—probably just trying to force it under a time limit—produced better results. As expected, the VNA method performed worse on theme-related ideas, further supporting the role of the suitable stimuli.

This leads to the conclusion that an ideation tool that is tailored for the given purpose and structured for fast-pace activity can enhance the ideation session in three different ways: interesting ideas start flowing immediately making the process faster, higher than average amount of the ideas are interesting, and a bigger portion of the ideas are suitable for the purpose. This is not to say that natural ways would not yield to great ideas, such approaches are just less reliable. Acknowledging the limitations of the data, this hypothesis should be tested with a more commensurable and larger body of data.

If this hypothesis could be further elaborated, it might have strong implications for the education of game designers and game professionals on their ideation processes. This study also shows great potential for designing tools that help the everyday practice of constrained game design processes.

ENDNOTES

1 <http://www.globalgamejam.org>

2 <http://globalgamejam.org/jam>

3 <http://www.youtube.com/watch?v=MbiVtYPtIqk>

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