The Integrated Information-Seeking Practices of Dungeon Masters

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Abstract

Dungeons & Dragons is an extraordinarily information-rich hobby; the Dungeon Master must engage in a radically complex and immersive information-seeking process that integrates the technical, artistic, emotional, and interpersonal. This paper will explore how Dungeon Masters seek and use information in the campaign and session development process through the analysis of collected interview and graphical data. Sonnenwald's Information Horizon model, particularly the underlying five-proposition structure described in "Information Horizons" (2005, p. 192-195), operates as a theoretical framework for the discussion of this subject. The flexible, contextual, cooperative, and highly personalized nature of Dungeon Master information behavior will be emphasized, and ultimately, a new Dungeon Master Style/Resource Spectrum model will be proposed as an alternative, or supplement, to the Information Horizon Map.

INTRODUCTION

Dungeons & Dragons is an extraordinarily information-rich hobby; the Dungeon Master must engage in a radically complex and immersive information-seeking process that integrates the technical, artistic, emotional, and interpersonal. It is surprising, then, that discourse on this subject remains largely absent from the Information Science literature. While this omission presents challenges regarding the sourcing of applicable academic material on this topic, it also creates a significant opportunity for unique scholarship in this area.

Dungeons & Dragons is a cooperative storytelling game in which players take on the roles of unique and complex characters. One individual is the Dungeon Master; he or she develops the overarching narrative and presents the setting, non-player characters, and various challenges, puzzles, and combat situations to the other players. The campaign is normally conducted over a series of in-person sessions, wherein characters progress gradually through a larger story, while engaging in a series of smaller encounters along the way. All player actions and abilities, as well as much of what occurs in the Dungeon Master's constructed world, are contingent on probability, and randomness is facilitated by dice rolls.

This paper will consider collected interview and graphical data from practicing Dungeon Masters, using Sonnenwald's (2005) Information Horizon model as a theoretical framework, with the goal of initiating a discourse on this topic in the Information Sciences.

LITERATURE REVIEW

Academic scholarship on Dungeons & Dragons is limited, in general, and virtually nonexistent in the Information Sciences. However, select material from other disciplines may be relevant to a study of the information behaviors of Dungeon Masters. For example, Michelle Andromeda Brown Nephew's "Playing with power: The authorial consequences of roleplaying games" (2003) addresses the way in which roleplaying games "complicate previous distinctions between author and audience" (p. iii), which may be pertinent to the discussion of collaborative information-seeking, as it is described below. Although Dungeons & Dragons is practically absent from the literature of Information Science, existent scholarship may provide the theoretical groundwork on which the discourse on Dungeon Master information-seeking behaviors can be initiated. The notion of orality, particularly as it relates to flexible or "fluid texts" (Melia, 2009, p. 4058), is especially relevant to what Informant 1 refers to as the "loosely flowing" narrative structure of Dungeons & Dragons. Bates's discussion of "evolving search" (1989, p. 410) is similarly applicable to the constantly developing and changing query of the Dungeon Master, as is Khulthau's acknowledgement of emotion and affect in the search process (1988), highlighted particularly by Informants 1 and 2 below. However, I would suggest that Sonnenwald's Information Horizon model (2005), and her five proposition theoretical framework in particular (p. 192-195), are the most effective means by which the highly collaborative and context-driven information behaviors of Dungeon Masters may be discussed.

RESEARCH METHODS

Data collection was conducted using Sonnenwald, Wildemuth, and Harmon's (2001) Information Horizon research method as a model. Semi-structured interviews were enacted with three experienced Dungeon Masters, followed by accompanying graphical elicitations, informed by the general research question: How do Dungeon Masters seek and use information in the Dungeons & Dragons campaign-development process? The interview involved context-developing, detail-building, and information behavior-specific questioning, and was conducted in a relatively flexible manner, wherein the informant was encouraged to expand upon their responses through the use of various verbal probes (see Appendix 1). At the conclusion of the interview, the informant was instructed to construct an "Information Horizon Map," on which they were directed to graphically represent their position in relation to the information resources described during the interview using pen and paper (see Appendix 3). The interview process was audio-recorded and subsequently transcribed, wherein all identifying information was removed to preserve informant privacy. Upon completion of the data collection process, interview transcripts, graphical elicitations, and field notes were synthesized and analyzed, using Sonnenwald's conception of the Information Horizon as a governing theoretical framework.

As noted above, all informants are accomplished Dungeon Masters. The research population was limited to Dungeon Masters, as opposed to all players of Dungeons & Dragons, by virtue of their relatively information-rich role as the narrative and structural leaders of the game: regular players engage in a relatively limited amount of information-seeking behavior outside of the game session, as compared to Dungeon Masters. The research population was not narrowed further for reasons of proximity and access. Informant 1 is a thirty-year-old male and has been a practicing Dungeon Master for fourteen years, Informant 2 is a twenty-six-year-old male and has been a Dungeon Master for nine years, and Informant 3 is a twenty-six-year-old male who has been Dungeon Mastering for seven years.

FINDINGS

I would argue that's Sonnenwald's information horizon model is most concisely and informatively expressed by Savolainen and Kari (2004): the information horizon is "a subjective map of source preferences where various sources and channels are given various positions such as central or peripheral. This kind of positioning helps people make

sense of their everyday information world and differentiate important sources from unimportant ones" (p. 416). In her 2005 entry on the information horizon in *Theories of Information Behavior*, Sonnenwald highlights the five propositions that underpin her model: information behavior is shaped by context, information behavior is informed by individual perceptions of contextual change, individuals operate within a flexible, socially-determined information horizon, information seeking is collaborative, and multiple information solutions may be extracted from densely-packed information horizons (p. 192-195). I would suggest that the findings of this study are particularly illuminating when considered in terms of Sonnenwald's propositions, and, as such, they will be applied as an organizational framework.

Information Behavior as Contextually Informed

Sonnenwald (2005) suggests that "human information behavior is shaped by and shapes individuals, social networks, situations, and contexts" (p.192). All informants stated that the way in which they Dungeon Master, and their corresponding information behaviors, are largely changeable and context-specific, being reliant on factors like player feedback, access to new technical resources, exposure to creative inspiration, and the cultivation of new skills. For example, Informant 1 stated, "the way I DM changes pretty constantly…I'm trying to gather feedback from what [players] liked, what they didn't like, and I make improvements constantly." Although all three informants indicated that flexibility was an important characteristic of a Dungeon Master, descriptions of in- and out-of-game informational practices indicate that the degree of potential flexibility that an individual Dungeon Master will engage in is finite and personal, as reflected in significantly divergent use and valuation of different information resources (table 1). Cited resources include sites of creative inspiration, such as literature and music, mechanical or technical resources, like rulebooks and spreadsheets, as well as emotional and interpersonal resources (figure 1).

Information Behavior as Informed by Individual Perceptions of Change

In her second proposition, Sonnenwald (2005) asserts that "individuals or systems within a particular situation and context may perceive, reflect, and/or evaluate change in others, self, and/or their environment. Information behavior is constructed amidst a flow of such reflections and/or evaluations" (p. 192). This proposition is perhaps best illustrated by the Dungeon Master-as-player information-gathering process. All informants indicated that they were Dungeons & Dragons players before becoming Dungeon Masters, and that observation of another Dungeon Master in practice is a virtual necessity in developing the skill to take on that role oneself: Informant 3 stated that, "it would be odd

Dungeon Master Information Resource Use: Primary, Secondary, and Tertiary Resources

Information Resources	INFORMANT 1	INFORMANT 2	INFORMANT 3
"Canonical" Resources			
Core Rulebooks	Primary	Primary	Primary
Additional Rulebooks	Tertiary	Tertiary	Uncited
Dice	Primary	Uncited	Uncited
Interpersonal Resources			
Players (in-game)	Primary	Primary	Primary
Players (out-of-game)	Uncited	Tertiary	Tertiary
Other DMs (in-game)	Secondary	Secondary	Secondary
Other DMs (out-of game)	Uncited	Secondary	Tertiary
Non-D&D-specific interactions	Tertiary	Secondary	Uncited
Creative Resources			
Literature	Secondary	Secondary	Tertiary
Film	Secondary	Secondary	Uncited
Video games	Uncited	Secondary	Secondary
Fine Art	Uncited	Secondary	Uncited
Music	Secondary	Secondary	Uncited
Online Resources			
Forums	Uncited	Secondary	Secondary
D&D Databases	Secondary	Secondary	Uncited
Self-Constructed Resources			
Point-form Notes	Primary	Primary	Uncited
Maps	Secondary	Secondary	Primary
Spreadsheets	Uncited	Uncited	Primary
Character Sheets	Primary	Uncited	Uncited
Story Idea Lists	Secondary	Uncited	Uncited
Uncategorized Resources			
Emotional Experiences	Tertiary	Secondary	Uncited

"Primary" refers to a vitally important information resource. No game can be constructed without it.

"Secondary" refers to a frequently used information resource, but one that is not absolutely necessary to the construction of every game.

"Tertiary" refers to an occasionally used information resource.

**"Uncited"** refers to an information resource that was unmentioned by the informant.

Table 1. Dungeon Master Resource Use

to be a DM without having been a player, because it feels like you're lacking some of the understanding of what's going on," and Informant 2 suggested that "it would be really hard to [develop sufficient skill] from just the paper of the [rule]books, reading it like a textbook." All informants also continue to act as players in other Dungeon Master's campaigns, and view it as an important information-gathering opportunity. Informant 2 states that, "you pull influences from the times that you were a player," and Informant 1 describes his position as a player as "more reflective" than that of other players who are not also Dungeon Masters. Information gathered includes effective and ineffective narrative strategies regarding pacing,

repetition, creation of suspense, and accommodation of player creativity.

Individuals as Operating Within a Flexible, Socially Determined Information Horizon

Sonnenwald (2005) argues that the Information Horizons in which all information-seekers act "are determined socially and individually and may be different for different contexts even for the same individual" (p. 193). As discussed above, Dungeon Master information-seeking practices are flexible and context-dependant. Their information horizon is also shaped by practical, external constraints. For example, economic circumstances may impact a Dungeon Master's
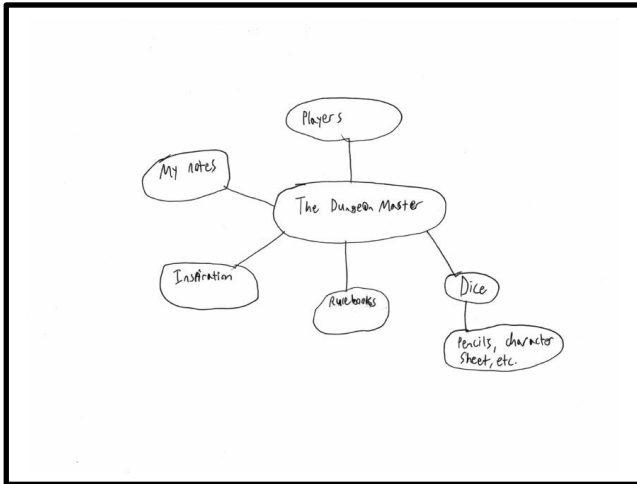
Informant 1
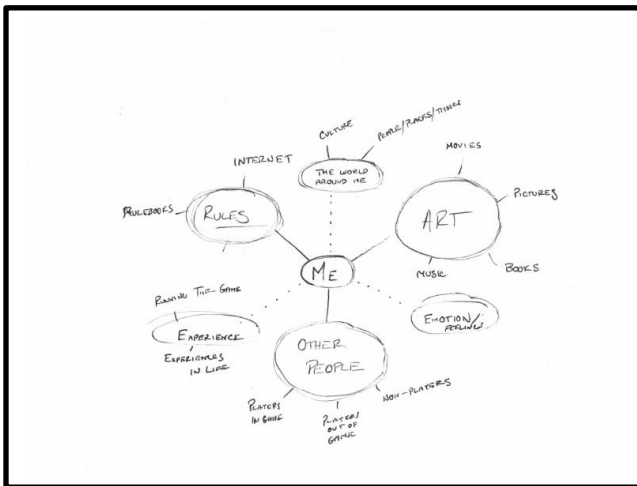
Informant 2
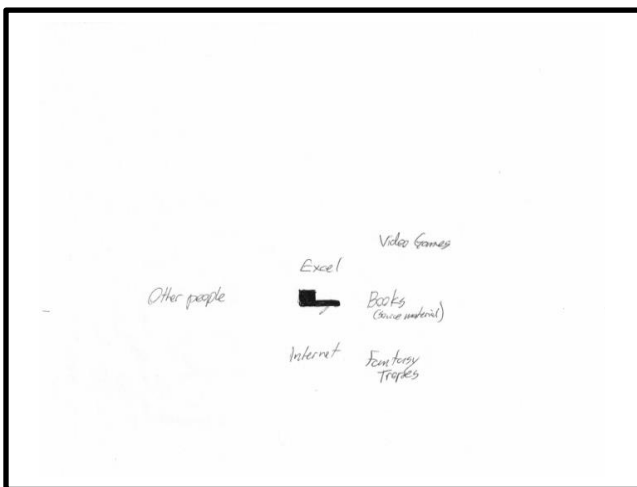
Informant 3

Figure 1. Information Horizon Maps

information horizon. Informant 1 notes the prohibitive price of many supplementary rulebooks that contain desired content, but suggests that, as an alternative, he may "just replace it with something else from a book I do have, or I will come up with my own version of it on the fly." Informants 1 and 2 also note the impact of time constraints on game development. This includes both the out-of-game preparation, which is informed by the "deadline" (Informant 1) of the game session, and in-game narration, which is frequently impacted by unforeseen player actions and the need to maintain "pace of play" (Informant 2). In both cases, informants suggest that one's players represent a Dungeon Master's most valuable source of information, as will be discussed below.

Information-Seeking as Collaborative

Sonnenwald's (2005) fourth proposition states that, "human information-seeking behavior may, ideally, be viewed as a collaboration among an individual and information resources" (p. 194). All Informants cite players as an absolutely vital information resource (table 1), and all emphasize the necessity of constant collaboration between Dungeon Master and players for the creation of a successful campaign, particularly Informant 2, who used a form of the word "collaborate" twelve times during his interview. Informant 1 highlighted the importance of gathering player feedback in-game, stating that the way in which they construct and role-play their characters informs the development of future sessions, while Informant 3 noted the importance of out-of-game discussion with players and other Dungeon Masters as a key problem-solving strategy. Informant 2 sates of players that, "they're as much of a resource as the books and the inspirations from the movies and such." However, all three informants also cite the narrative power and control of the Dungeon Master as a key reason that they initially took on that role.

Information Horizons as Densely Populated

Sonnenwald describes Information Horizons as "densely populated spaces," wherein it becomes challenging to extract possible informational solutions. As noted by Informant 2, the core rules of Dungeons & Dragons amount to "over a thousand pages of information for a board game." In addition to the mechanical aspects of the game, nearly infinite opportunities for creative inspiration exist, which may be integrated into the game system. As a result of the vast world of information associated with the game, in conjunction with the considerable flexibility and variability of Dungeon Mastering style, each informant has developed their own unique information-management systems. For example, Informant 3 relies heavily on intricate spreadsheets, whereas the other two informants do not use spreadsheets at all. Similarly, Informant 1 maintains

an ongoing list of story ideas on his phone, while neither of the other informants maintain such a list.

DISCUSSION

Informant 3 suggests that two primary ways of playing Dungeons & Dragons are with "a very strong story focus, with a lot of focus on what characters are trying to do, their goals, how they interact with [non-player characters]" or "to have a very combat-focused [campaign], where it's more about how they're going to overcome the monsters and all of that." As discussed above, the interviewed Dungeon Masters display a high degree of style flexibility, according to variables like player preferences, player character construction, and the narrative or mechanical goals of the campaign. I would argue that, based on the interview data, individual Dungeon Masters occupy a particular range on a Dungeon Mastering style spectrum, with a highly narrative style at the one extreme, and a highly mechanical, combat- or puzzle-focused, style at the other (figure 2). Information resource use is informed by the placement of an individual Dungeon Master's style range on the spectrum. For example, Informant 3 relies heavily on spreadsheets in-game, as they provide the most efficient access to the myriad statistics and data required to run his mechanically-focused campaigns. Informants 1 and 2 generally run campaigns with a greater emphasis on narrative, and, as such, are much more reliant on creative inspiration resources, such as literature, film, fine art, and music. They both describe the creative inspiration search as highly integrated into their day-to-day lives, whereas the mechanical information search is primarily situational. The informational resource placed closest to the narrative extreme on the Dungeon Master style spectrum is emotional experiences. Informant 2 states that he often assesses lived emotional experiences for narrative material: "For me, when I'm out eating something, I will think about how that makes me feel and, again, I want to translate that feeling into the game." The spectrum model allows for parallels to be drawn between in-game practices and information resource use more easily, and also multiple Dungeon Masters may be compared, which may render this model a more effective means of expressing Dungeon Master information behavior than the Information Horizon Map.
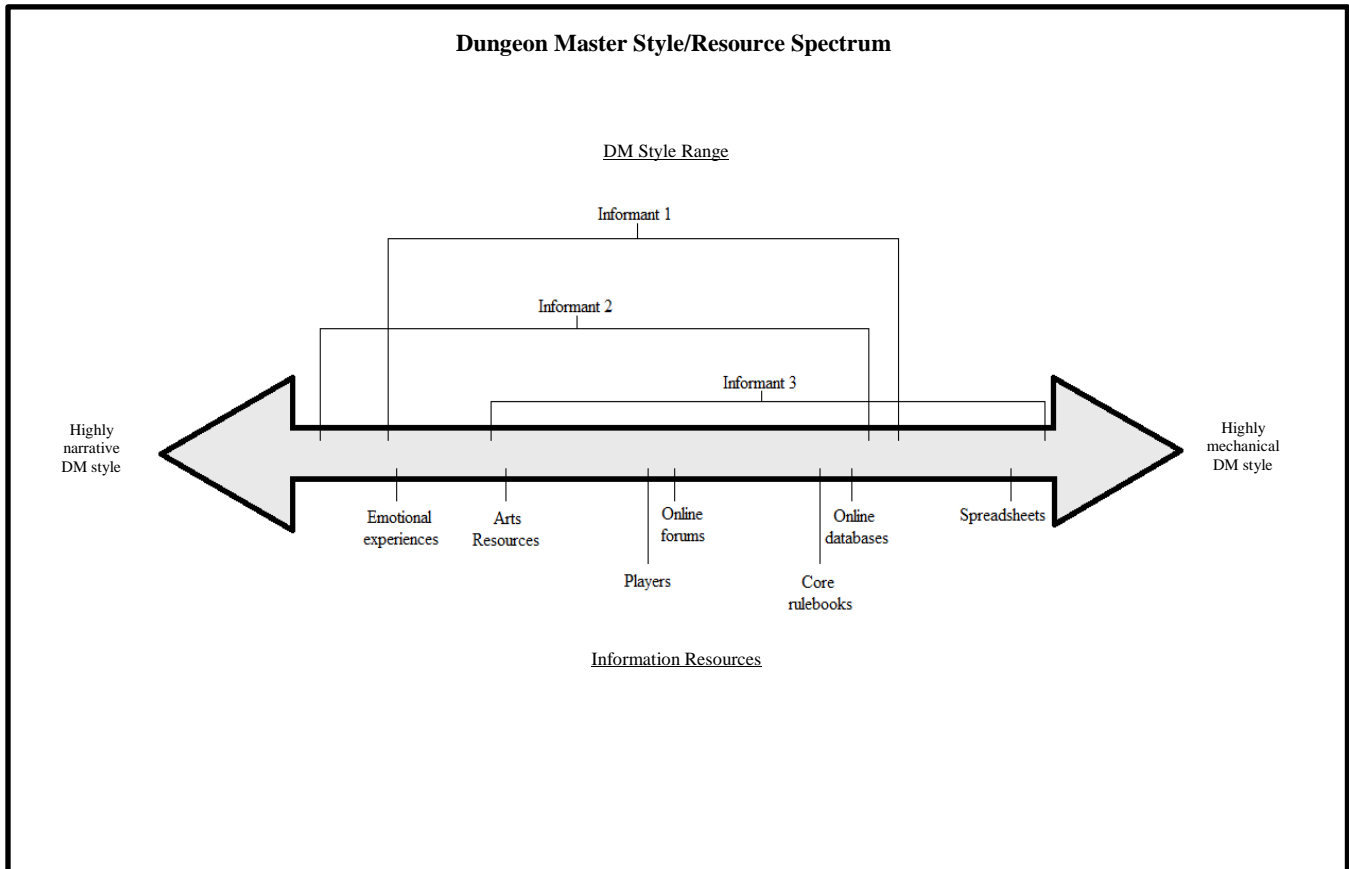

Figure 2. Dungeon Master Style/Resource Spectrum

METHODOLOGICAL REFLECTIONS

Overall, I believe that the Information Horizon Interview methodology was successful in this instance, as it elicited detailed, informative, and notably varied reflections on Dungeon Master information behavior from informants. Although only three informants were interviewed, the quantity and variety of viable information obtained far exceeded the parameters of this paper and much was excluded.

The graphical elicitation portion of the interview, however, may not have fulfilled its full potential as an information-gathering activity. Informants 1 and 3 expressed significant reticence at the prospect of constructing the map, and no informants included drawings of any kind beyond connective lines and the circling of words. Upon reflection, and re-examination of transcripts, it is evident that the word "draw" could be reiterated in the map construction instructions, as a possible means of eliciting a map that is not primarily textual. Although no informant revealed additional information resources, or uses thereof, in this portion of the interview, the relationship between resources was elucidated, particularly in the case of Informant 2, who created a tiered model (figure 1).

CONCLUSION

In considering information behavior data gathered from Dungeon Masters according to Sonnenwald's five Information Horizon propositions, it is evident that the way in which they seek and use information, while highly flexible, contextual, and cooperative, is also informed by an established personal Dungeon Mastering style. As a result, information resource use, in this case, may be better represented as occupying a position on a spectrum relative to the style range of the Dungeon Master (figure 2), rather than by the Information Horizon Map. Over the course of many years of experience, each interviewed Dungeon Master has developed a totally unique way of constructing and managing a campaign, and established corresponding information search and use practices that best fit his style. Occupying this position requires simultaneous control and adaptability, as Informant 1 noted when questioned about the campaign going in an unanticipated and unplanned-for direction, "that is basically what D&D is."

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AUTHOR'S BIO

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APPENDIX 1: Interview Guide

Primary Questions

Grand Tour Question:

What does a DM do?

Mini Tour Questions:

Can you tell me about when you started DMing? What made you start?

Can you tell me about the campaign you came up with most recently? – can you take me through it from when the first ideas of it came to you to the point when you had your first session?

Has the way you DM changed over time, and if so what do you think has caused this change?

Red Thread Questions:

Can you tell me a bit about the core resources that you use in planning a campaign? Are there resources that you use every single time?

Can you tell me about some sources of creative inspiration that you've found? Where do you get ideas from?

Have you ever felt stuck when creating a campaign? Can you tell me about it? – What did you do to try to unstick yourself?

Were you a player before you were a DM? Does your experience as a player inform the way you DM in any way?

Can you think of a time when you needed some information that you didn't have in planning a campaign? What did you do to try and get that information?

Can you think of a time when it was particularly difficult to find the information that you needed?

What type of information is easiest to obtain? What makes it easiest to get?

Does the campaign ever go in a different direction than you anticipated/planned for? How do you adjust between sessions? Does your session preparation change?

When you're preparing a campaign or session, what kind of stuff do you plot out in advance? Do you make anything to help you plan?

Potential Follow-ups

Can you think of an example of when this happened?

How did you use the information you got?

Were you happy with the outcome?

Would you do it this way again?

Who or what did you go to for help?

What type of information were you looking for?

APPENDIX 2: Interview Quotes

Interview 1

Lauren: Cool. So then has the way you DM changed over time?

Informant 1: Yeah. So the way that I DM has changes pretty constantly. Now this might be different for DMs who only DM for one group of friends, but because I DM for as many people as I can find, including strangers or at special events, I'm always trying to improve myself as a DM. I'm trying to gather feedback from for what they liked, what they didn't like, and I make improvements constantly. Almost always there's something that I'm working on at any given time. So, for example, right now I'm working on naming NPCs, or non-player characters, on the fly. So somebody will be like, "I want to ask someone for directions," so like okay, you go to a nearby farmer and he tells you how to get there. And then they want to engage him in conversation: they're like, "what's your name?" and right now I'm not very good at coming up with the name on the fly and I want to get better at that. So I'm trying to make sure that I can do that better.

L: How do you train yourself to do that?

I: So, first off, I just need to be aware of it. I need to have it in my mind. But the second thing I'm doing with that problem specifically is I'm having a list of names. I try to create a list of names that I hear throughout my life just during the day, sometimes at work, if I hear an interesting last name or something, then I'll try to incorporate that into it. So that's how I work on that problem. But there's previous ones like making my combats more cinematic and being more descriptive that I've worked at and am now successful at, because I'm always trying to improve. DMing for me is very much a passion, and I take a lot of pride in it, and so I always want to be as good as I can be at it.

Interview 2

Lauren: Cool, and, I mean, you've touched on this a little bit, but do you think that your experience as a player informs the way you DM? Does it continue to be that way, like, you'll have an experience, say recently, as a player that will make you think about something in a different way when you're DMing?

Informant 2: I think so, for sure. I think that like an author reads many different books and pulls influences from them, as a DM, you pull influences from the times that you were a player, and you know, maybe things that your dungeon master did really well, or other players did very well. And when you're playing alongside them you can see situations occurring that you think, "wow, that's really cool. That's a great idea. I should try that in my campaign. I should try to bring that into my story."

L: Does it go the other way around? Like if you experience something as a player that you find, say, frustrating or it

doesn't work that well, does that inform the way you DM too?

I: Definitely. If I, as a player, see something that another person that's arbitrating the game does, and I don't like how that turns out, or I find that maybe the whole table of players didn't enjoy it as much, I've learned from somebody else's mistake to grow on that. I look at it and I say, "Okay, here's something that I didn't think worked very well…" I shouldn't even call it a mistake because with collaborative storytelling it's hard to have a right and a wrong…

L: Mhm

I: But there's things that maybe I didn't enjoy and I would think, "Okay, why didn't I enjoy this?" So I try to reflect on why I didn't enjoy it, and then I use that knowledge when controlling the game as well.

Interview 3

Lauren: So are there any kind of additional things that you produce? You mentioned making maps and plotting things out in excel, so can you tell me a bit more about that?
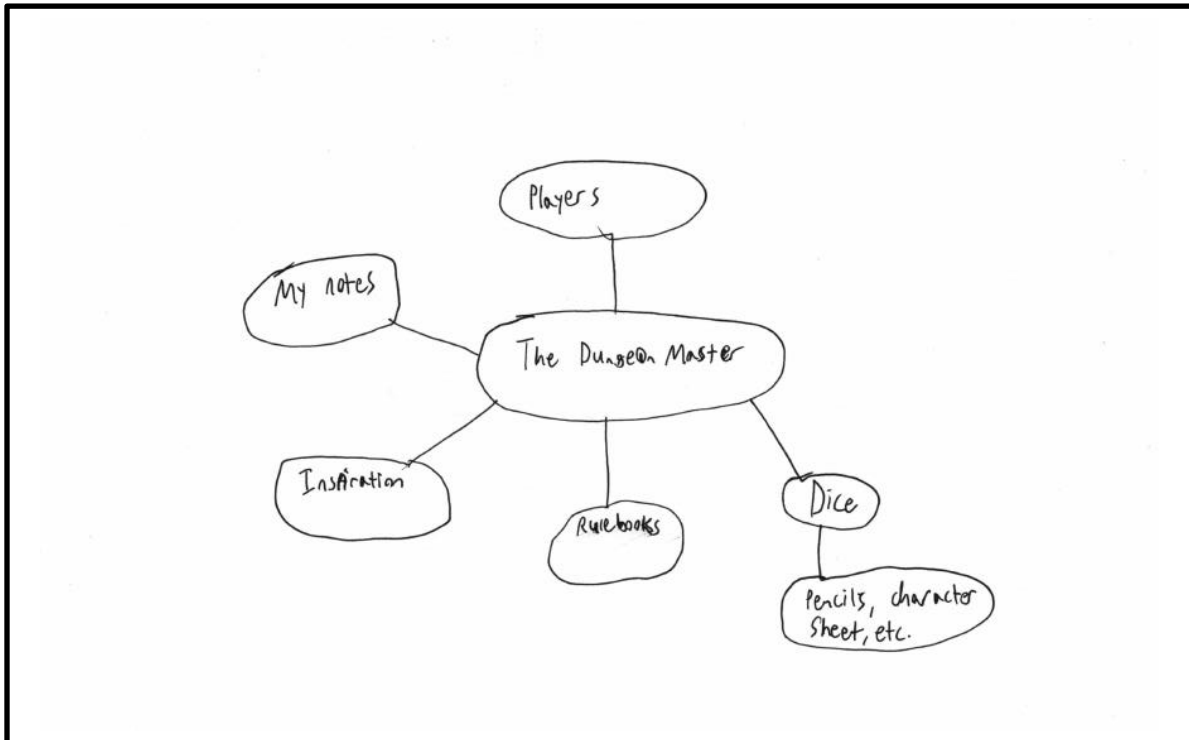
Informant 3: So the campaign I'm currently running is separated by level: every level they have a dungeon to go and do and when they finish that they'll level up.
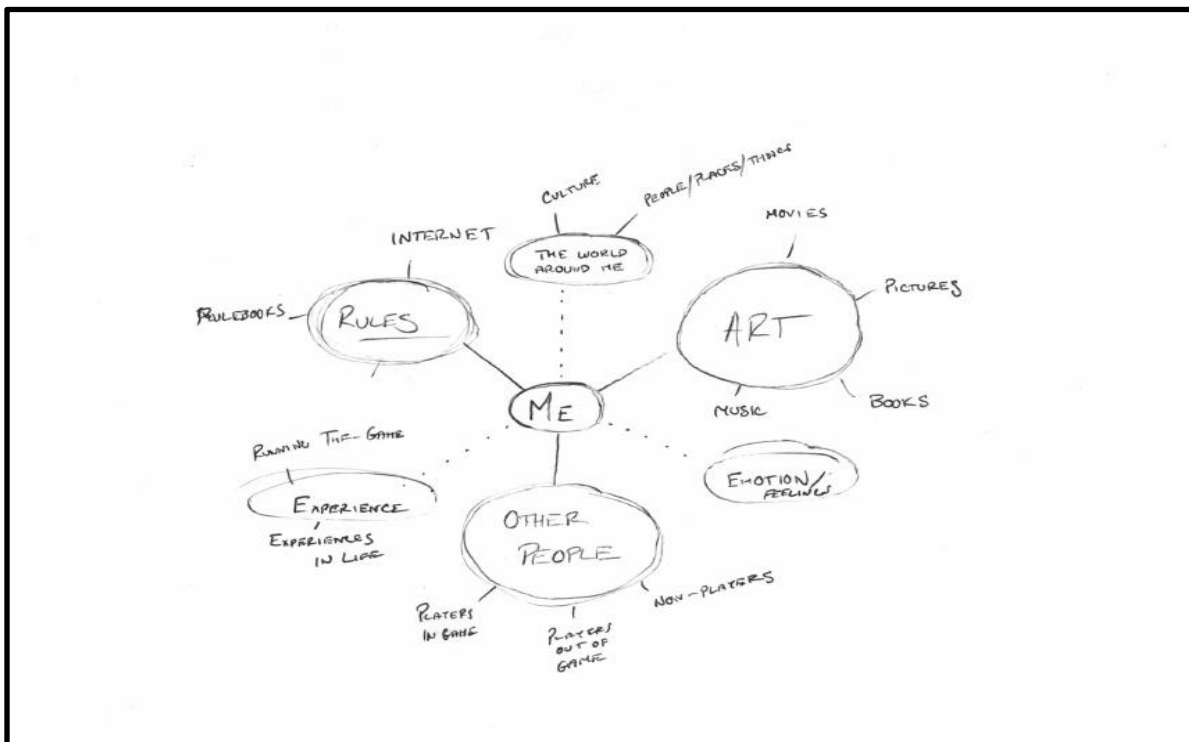
L: Okay

I: So each one of those is a page, and then I have all the monsters that they're going to fight, I've grouped them into the encounters they'll have, I have the loot they're going to get. So I've organized it so that I can see in a glance what this dungeon involves. And then I can also, while building it, work in that sheet to kind of figure, "Okay these monsters go together, they're roughly this hard to fight, that's a good encounter." And then whatever loot they're going to get, keep a record of that to make sure I'm giving them enough and not too, too much. So I can have all of that in one sheet.
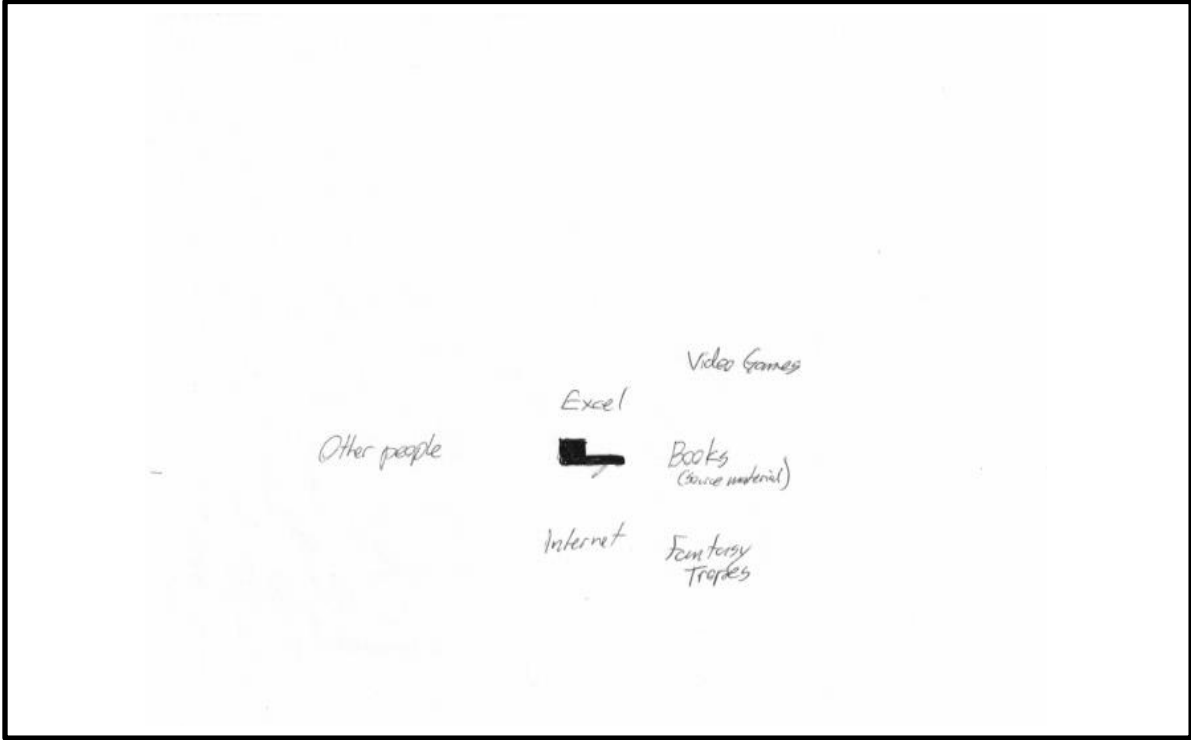
APPENDIX 3: Information Horizon Maps

Informant 1

Informant 2

Video Games

Excel

Other people

Books
(source material)

Internet   Fantasy
Tropes

Informant 3