Neurodiversity, Dungeons & Dragons:

A guide to transforming and enriching TTRPGs for Neurodivergent Adults

OR

The Neurodivergent Player's Handbook

By Caleb Valorozo-Jones

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Dedication

This project is about the power of stories. I've been privileged that my story has intertwined with so many others' to inspire and contribute to this project.

First and foremost, this is dedicated to the five people who participated in the project. This is their project as much as it is mine—if not more. Thank you for sharing your time and your stories with me.

To Shutopians: thank you for the games, a community that feels like home, and the horses wearing clothes.

To Kry and Elliott: thank you for the queer theory podcast and games hours. Your support and friendship kept me clearheaded and helped me persevere.

To my parents, family, and my Weird Times friends: thank you for all your support, open ears, proofreading, and reminders to take a break. Especially to my Pop-Pop, proofreader extraordinaire and persistent companion in all my projects since kindergarten.

To Gerard: thank you for encouraging me, fueling me, and listening to me infodump about my MRP for hours on end.

To my sibling: thank you for always learning the rules so I don't have to. My first friend, my first Dungeon Master, and the standard all others are held to.

To disabled and neurodivergent people and players: I learn from our global community everyday. Our stories and our lives are important. Thank you for your efforts to make the world a kinder and more inclusive place.

Acknowledgements

Preface

Historically, research about neurodiversity isn't done by the people it is about. This is a major reason why the Inclusive Design field exists, and why it is so important. As a neurodivergent person, I have experienced firsthand how the assumptions and biases of research can directly affect our everyday lives. You shouldn't need an advanced degree to understand yourself and the research about you. With this in mind, my priority for my Major Research Project was to create a document that the neurodiverse community could use, understand, and enjoy.

I've been playing Dungeons & Dragons (D&D) for about five years and have noticed many unintentional benefits of playing. I've since learned that many brilliant researchers and community organizations have had the same idea that inspired me when playing D&D and tabletop role-playing games (TTRPGs) with my clan of neurodivergent friends. This research project has three hypotheses:

→   Do affordances of Dungeons & Dragons create more inclusive social environments and interactions for Neurodiverse adults?

→   How does role-playing and engaging with one's neurodiversity affect confidence in relevant self-advocacy and collaborative social skills?

→   How can other domains of everyday life be improved by better understanding affordances and cultural models of Dungeons & Dragons?

People perceive the characteristics and properties of things and systems. We then interpret and predict possible ways to interact with objects and systems based on our perceptions. Affordances are all the perceptible qualities that inform us how we can use an object or system. Essentially, what are all the possible ways I can use this?

Academic texts are written for academics, who spend years developing skills to read and analyze articles and theses. I have instead opted to create a hybrid document that is both a guide for neurodivergent players and a thesis. This Bespoke document may not be recognizable to you as research because it doesn't have the typically labelled sections—Literature Review, Methodology, Results, Analysis, and Outcome—but all the content is there. Instead, I spread the content throughout in context of our Dungeons & Dragons group's experience and learning and, hopefully, the learning of the readers and potential players that read this.

There are some ways this document differs from a conventional academic paper. In-text citations are included in APA style, but they are in footnotes. This is to make the document easier to read for neurodivergent readers and TTRPG players, and make the format closer to a Dungeons & Dragons manual. Quotation marks aren't traditionally used in blockquotes, but I use them to emphasize the words and direct quotes of the neurodivergent players. Sections with multiple speakers

are formatted like a script to be easily readable. I've also formatted quotes in game play sections as a script, but using quotations to differentiate when players were talking as their character versus narrating their character's actions.

The first section is a how-to guide to run your own game with neurodiversity inclusion in mind, and how to design your own neurodiversity mechanics. It explains the research methodology (co-design and gameplay), and offers tips to run your own games. The middle section is a retelling of the story the players co-created over five 3-hour sessions. The final section is probably most recognizable as a combined Results, Analysis, and Outcomes section where I'll discuss players' experiences in the game and connect it to inclusive design theory, TTRPG theory, and other relevant theories and models. The existing research (the Literature Review) is lore for this project's story, so you will find this throughout to connect the players' experiences, much like how the D&D core books provide instructions to play alongside the lore and history of its fictional worlds.

I've written mostly using first-person language with the intention to write directly for my neurodivergent community. As such, I am not using academic language, and trying to write in plain/TTRPG community language as much as possible. Ultimately, I hope this document and this project can be a sort of love letter to the TTRPG and D&D communities, the neurodivergent community, and to the power of stories and forging our own new worlds. The first step to building a better world is imagining it.

So let our adventure begin...

The last traditional thing you'll find in this book.

Abstract

Traditional hierarchical research methodologies and resources are exclusive because family and external stakeholders are prioritized over neurodivergent people. Unfortunately, the continued lack of inclusive design principles result in a lack of understanding of both neurodivergent culture, and the needs of the neurodivergent community. This study actively includes neurodivergent people by using participatory research methodology, and inclusive design principles and pedagogy explored in Critical Disability Studies and Critical Autism Studies.

The continued pathologizing of neurodiverse conditions influences how medical systems treat neurodivergent people; Applied Behavioral Analysis (ABA) is the standard therapeutic treatment for autistic people. The focus of ABA and comparable treatments is to condition neurodivergent people to appear neurotypical, putting the onus on the neurodivergent community to change their behaviours instead of emphasizing acceptance and tolerance of neurodivergent people and behaviours. The statements and lived experiences of neurodivergent people who have experienced ABA showcases that it is not neurodivergent people that benefit from ABA and similar therapies, but neurotypical society that benefits from conditioning and changing the behaviours of neurodivergent folks (even if it may be at the expense of mental health and well-being).

Neurodivergent self-advocacy groups, and Critical Autism scholars have expressed the need for therapies which build and encourage self-advocacy. Neurodiversity research focuses on conformity, so the unique abilities and culture of neurodivergent people is under researched. Role-play is an effective learning tool often used in therapy to help people practice skills in a low-risk environment. Role-play also is a core activity in Tabletop Role-Playing Games (TTRGPs) like Dungeons & Dragons (D&D) which allow players to explore and practice different identities and behaviours in a structured environment with more explicit rules than every day social interactions. D&D replicates the social constructs of the real world, but does not have neurodivergence or disability as an explicit social construct in its lore.

I interviewed 5 self-identifying neurodivergent adults about their lived experience, held a co-design session, and observed 15 hours of their gameplay with custom designed neurodivergent mechanics with both strengths and weaknesses. We examined the gaps in structure and consent in the core D&D rules; the official rulebooks lack guidelines about boundary setting, consent, and facilitation for Dungeon Masters and players.

Characters' neurodivergent mechanics allowed players to more explicitly model their experience in the groups' co-created D&D world. This was possible because we used different TTRPG safety tools to establish boundaries which establish psychological safety that is not typically available to neurodivergent folks in everyday life. The experiences of players and their characters bled into one another. This caused players to experience positive shifts in self-esteem, and practice transferable self-autonomy skills for potential out-of-game, real life self-advocacy and liberation.

Introduction

Caution

This book is for and by neurodivergent individuals. Neurodiversity is the ideology that the infinite range of neurocognitive function and cognition in humans is normal, naturally occurring, and a valuable type of human diversity that is socially constructed like other forms of human diversity.[1] Neurodivergence includes things like Anxiety, Depression, Attention Deficit and Hyperactivity Disorder (ADHD), Autism, Dyslexia, Dyscalculia, Obsessive-Compulsive disorder (OCD), Tourette Syndrome, and more.

While empathy and understanding from neurotypical peers is important, we caution and advise against neurotypical players using the neurodiversity mechanics. There may be many aspects of neurodivergent traits that are relatable to a neurotypical person, but the research group emphasized the importance of how relating to a character and lived experience are different.

Instead, the research group suggests creating game mechanics for your character based on relatable personality test types and labels. We suggest trying to make game mechanics for your characters based on the Myers–Briggs Type Indicator (MBTI) test, the True Colors test, or other personality tests that are not specific to neurodivergent experiences.

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1   (Walker, 2014; Dellinger, 2019, pp. 4, 8, 10)

Before You Play

Before the Dungeons & Dragons sessions, I interviewed each player and the Dungeon Master (DM) about their lived experience as neurodivergent people and TTRPG players. Our group of players was Alexander, Danielle, Erica, Steven, and our Dungeon Master Finn. You will learn more about them later. These interviews informed the Session 0 activities and safety tools we used in our game.

> "I'm pretending to be a normal person. Like I'm pretending like I'm doing these things I see other people doing in order to relate to them in some way. I don't mean like compromising my values for conversation. Like, it's like body just like bodily things like, the way I hold myself, the way I talk, or like the way I present myself. Definitely, I used to be a lot more... I was more self conscious about it. I felt like, you know, huge imposter syndrome. Like everyone knows there's something wrong with me, and especially in a professional environment."
>
> — Alexander

You may be aware that behaviours and social norms are social constructs. Society or culture creates a shared understanding about how people are meant to interact. These behaviours can include many things, like your tone or volume of voice, making eye contact, standing too close or too far from someone or smiling or laughing at certain times. The problem is that there is not actually a shared understanding of social norms and socially constructed behaviour because there are no explicit rules recorded anywhere. These expected behaviours can change for many reasons. For example, prior to COVID-19, it would be strange to wear a medical mask in public in North America, but now it might be rude not to wear a mask, whereas in some countries it might be a social norm to wear masks, especially during flu seasons. The mask example is a socially-constructed norm for health and safety, but other socially-constructed norms exist for different groups.

Sometimes we struggle sensing or knowing these rules because behaviour and social norms are typically implicit (suggested, unwritten, and unspoken rules that are not discussed or agreed upon). Not knowing these unwritten rules can cause stress or anxiety, as it's hard to know people's expectation of your behaviour without discussing it. People typically learn these implicit rules through trial and error when socializing and interacting with others, especially as kids, but it may not come as easily to us.

> "So I have, I have the dreaded, dreaded problem. And I know everyone says they have this problem where when there's a conversation going on I can't figure out, when there's a pause, where it's okay for me to speak up. And so I either end up running over people and it's awkward or I end up not getting to say anything.

I think that's actually less bad in the era of everything is video
conferencing because like it's just a shit show for everybody."

— Steven

"I had very few friends, because most people couldn't keep up or
tolerate the same intensity and like trajectory of my thought patterns
and like regular conversation. So people's patience was extremely
limited. So, yeah, it's like those things started to build up over the
years and like kids got more vocal about as they got older things."

— Alexander

However, neurotypical people may struggle to understand us, our barriers, struggles,
or disabilities just as often as we struggle to understand our neurotypical peers. We
are different people with different brains and experiences, but are often pressured
and expected by a predominantly neurotypical society to change our behaviour for
neurotypical people. In Critical Autism Studies this is called the Double Empathy
Problem Theory, which discusses the experiences of autistic people interacting with
neurotypical people.

This theory explains that neurotypical people struggle to empathize with autistic people
just as much as autistic people struggle to empathize with neurotypical people because
of the differences in the ways neurotypical and autistic people experience the world.[2]
Neurotypicals are the dominant neurotype, which means neurotypical society creates
dominant social constructs and expectations of behaviour. The Double Empathy Problem
Theory has only been discussed in relation to autistic people's experiences, but I think it
also applies to other neurodivergent folks' experiences.

The research group and I discussed experiences of not necessarily knowing how to
act, but knowing when we did something wrong or taboo across many neurodivergent
identities. Neurodivergent traits or behaviours such as avoiding eye contact, talking too
little or too often, etc. are harmless, but neurodivergent people might experience stress,
anxiety, or even consequences in certain groups for struggling or feeling pressured to
present as neurotypical. We feel the need to mask, camouflage, or change ourselves to fit
in more.

"Like that can be because you know, I think in workplaces a lot of
times there's an idea of like going with your gut about someone
and a lot of that is tied to like how well you can perform these sort
of social things. And so it's like, you have to be able to seem like
very normal and very typical or else, you know, risk being fired.
Or you know, like I said, not put on shifts that make you money or
anything like that. Like for sure that's a big... That's a big stress."

— Danielle

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2   (Milton, 2012, p. 884)

"I guess I have a reputation with certain people for being very quiet. But it's not so much that I'm a quiet person as... Growing up autistic, I used to talk a lot about things that other people didn't necessarily care about. And I wasn't the best at picking up that they didn't care about it. So I guess kind of as a pre-emptive measure, I silenced myself, which doesn't always feel good."
— Finn

A lot of this stress comes from the lack of structure and explicit rules (clear, direct and spoken rules that everyone is aware of). You may feel more confident with clear social expectations instead of subtle social cues. You and other neurodivergent people might be drawn to D&D or other TTRPGs because of the clearer rules for how and when to socialize in the game.

One study of a Live Action Role-Playing (LARP) camp for autistic youths observed that campers thrived at the camp because of their comfort in knowing and having rules and structure for the game and socializing.[3] Our players said similar things about the structure and rules of D&D being comforting and less stressful when socializing, but there remains a lot of mystery and unknown rules when socializing outside of the game and when organizing games.

"Well, I really like the social interaction. I usually find that's positive even if it can be stressful at times. And also, like I said before, I consider myself a storyteller by nature. And playing Dungeons and Dragons gives me a good opportunity to tell stories to and with other people... I mean, often during a session, you will have socialization within the game as well as socialization outside of it frequently at the same time. But while in the game, speak, well speaking within the game can sometimes be hard to hold people's attentions, and that can cause additional stress."
— Finn

"And also, you know, people are much less likely to ask, ask you in a D&D context, like, what did you do last weekend, and then you have to figure out something appropriate to say. It's like, you're probably going to be talking about the challenges and the situations that are in front of you.

And I've found, I really enjoy that sometimes too, partly because, you know, it's like a social situation except you're not having to guess. And you know, you don't have that thing where if you say something, you can't ever take it back, and all of that, like, you worked out how you want it to go down ahead of time,

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3   (Fein, 2015, p. 7)

and you have a chance to revise and collaborate and then play it out. Like, that's a really unique experience for me.

You know, there's still pressure to like think of something that would be good and not say something that's gonna weird out the other person… I worry a lot about like just feeling stupid and not being able to have a conversation. And in some ways, that's worse when I'm playing in a game especially if I'm DMing because you are kind of supposed to be on and verbally clever and fluent and think of things and, you know, entertain people. But when we're doing the more meta gaming stuff that feels a little better because it means you can take your time and you don't have to perfectly express yourself right in the moment."

— Steven

We identified out-of-game interactions as stressful because there are so many different ways to play and enjoy D&D. For example, some players prefer combat more than roleplay, while some prefer roleplay over combat, or some groups and players want to explore content that might be unenjoyable or mentally harmful to others. We may have different preconceived ideas about what a D&D game looks like or how it should be played. These differences can result in unenjoyable gameplay experiences for some players because their idea of fun is different. We need to consider other players' mental health and psychological safety, whether you are a player character or a Dungeon Master.

Psychological safety usually comes up when discussing workplaces, work culture, and team learning, but it is not exclusive to workplaces. Psychological safety is a group's shared belief that they feel safe to take risks without negative consequences or judgement.[4] This is important for us neurodivergent players, as we may experience more anxiety about the less-defined social elements of D&D and be more reluctant to participate because of our lived experience with judgement and stigma for our differences. We need to be not only safe to take risks in terms of gameplay, but also feel included in the group and comfortable mentioning difficulties (see page 61 to read more about psychological safety) or even sometimes self-disclosing.

Safety Tools

We can make the group norms, expectations, and social rules (important elements for building inclusion and psychological safety) in the game more explicit by using safety tools. The Player's Handbook and the Dungeons Master's Guide lack rules or advice for organizing games and addressing group social dynamics. Most of the contents of these rulebooks detail the lore of the D&D universe and how-to play the game in terms of mechanics, but there also is little guidance on different leadership or facilitation skills which help groups organize and communicate.

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4   (Kahn 1990, p. 708)

The TTRPG community has created and shared Safety Tools to address these gaps in rulebooks and TTRPG culture. Safety Tools are exercises and strategies for groups to communicate their needs and boundaries. Safety Tools can include discussing content warnings, creating a process for players to communicate needs and accommodations before the game and as the game develops, and more. There are many existing resources on Safety Tools like the *TTRPG Safety Toolkit: A Quick Reference Guide*,[5] as well as online communities, forums, and independent TTRPG designers which discuss and freely publish Safety Tools and tips.

Session 0

We recommend having a Session 0 before you start gameplay to set up the game and go over Safety Tools. We did three activities in our Session 0: The Same Page Tool,[6] Lines and Veils,[7] and Accessibility Accommodations.

Before our Session 0 we did a co-design session. While these activities were not intended to be Safety Tools, many of the players thought the activities were helpful for learning more about the group and creating game expectations. The co-design activities we did were Rose, Bud, Thorn (see page 20 to read more about Rose, Bud, Thorn) and the Neurodiversity Mechanic Design (see pg page 21 to read more about Neurodiversity Mechanic Design).

The Same Page Tool

The Same Page Tool is an exercise for players to discuss "how we play what we're playing".[8] I recommend this exercise for all groups, whether or not you have neurodivergent players in your group. Essentially, this activity asks you and your group questions about how the game is structured. For example the Same Page Tool has prompts like *what is the role of the DM? Does the DM control the events, or does the DM create a story based on players' motivations? Or is there no DM?*

The Same Page Tool is formatted as a multiple-choice document, but it is meant to be treated like a checklist where you add what makes sense for your group. You should discuss the choices together as a group, not complete it individually. Our group even modified some of the answers to better suit their game, setting, and group. You can do this exercise for each new campaign, group of players, or when your group needs a refresher.

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5   (Shaw & Bryant-Monk, 2021)
6   (Chinn, 2010)
7   Recommended by Level Up Gaming; (Shaw & Bryant-Monk, 2021, p. 1)
8   (Chinn, 2010)

The Same Page Tool is useful because it gives examples of possible in-game situations or conflicts so you and your group can discuss how the group should handle it. One of the prompt examples is what should happen when a player turns evil against the group. Is this okay to happen without the group's knowledge or prior discussion? Or is it okay for this to happen after a discussion between the DM and the potentially evil player? Players' expectations about this situation could be different and could create disagreement if you did not discuss it beforehand. The goal of the Same Page Tool is to talk about the game structure and story possibilities in advance so that you and your group can avoid conflict during the game.

Lines and Veils

The Lines and Veils safety tool was recommended by the DM/occupational therapist at Level Up Gaming, a TTRPG group that hosts for neurodivergent young adults in Toronto, Ontario. Lines and Veils is also listed in the TTRPG Safety Toolkit: A Quick Reference Guide. This tool asks you and other players to explicitly define what content cannot be included or should be avoided in a game. A Line is content that players do not want to engage in at all--it is a line that you do not cross. A Veil is content that can be indirectly alluded to, but not directly discussed, like it is hidden by a curtain or a veil.

The example I gave to players to explain Lines and Veils was that a player did not want substance abuse to be included in a game. As a Line, drugs and alcohol would not be mentioned or included in the game at all. As a Veil, players could allude to consuming drugs and alcohol, but it would not be a major part of the story or characters' actions, nor would players describe the effects of drugs and alcohol.

You are allowed to bring up Lines and Veils at any time, and can pause gameplay to bring up a Line or Veil if it unexpectedly comes up. I also told players they could privately message me or the DM their Lines and Veils if they did not feel comfortable discussing it with the group. The Line in our group was sexual violence and sexual assault (non-consensual sexual content) and we had no Veils.

Accommodations

This is not a specific tool, but is about creating a dialogue where your group can set up multiple ways to play and enjoy the game. Creating a culture in which accommodations are discussed and updated as needs change is important to curating safety and inclusion in a TTRPG group, and groups in general. Accommodations are essential human rights for disabled people, which is the most important reason you should ask players how to better meet their access needs. You should aim to start an on-going dialogue so that your group continues discussing how their access needs might change. If it hasn't been emphasized enough, creating an environment where players can speak up at any time is critical as players' accommodations may change depending on their energy or state of mind.

Our group discussed access needs, and how accommodations needed to be flexible. Some players may not have a lot of energy to speak or socialize one week, or may need help with understanding rules or strategizing because of fatigue. One of our group's accommodations was providing materials in advance so players could prepare and reduce anxiety. I sent co-design activities and Safety Tools in advance to the group in our private Discord Server. Finn, the DM, also gave a synopsis of the game setting at our Session 0 so players were more prepared and could better design their characters.

While this handbook discusses disability from the perspective of neurodiversity, many neurodivergent people are also physically disabled. It is important to discuss players' needs if they are Blind, partially sighted, Deaf, hard of hearing, or have mobility disabilities in addition to neurodivergent related disabilities. Using platforms that offer captioning or allow players to participate via text, or helping players find alternative character sheets and dice may be important. For example, there are braille and plain-text character sheets and re-designed character sheets for dyslexic players and players with cognitive disabilities, braille dice, electronic dice systems and more. You can find many different ways to modify the game to include players, and there are many resources and TTRPG enthusiasts detailing ways to make TTRPGs more inclusive and accessible. You and your group should focus on checking in with each other to see that everyone's access needs are being met so that you create a group culture where accommodations and accessibility conversations are normal and encouraged.

Setup

Discord
discord.com

We did not play in person due to COVID-19 restrictions and safety concerns, but D&D can be and has been played online before COVID-19. All you need to play D&D is a character sheet, friends, a way to communicate, and your imagination, but there are many helpful tools that can add to your experience.

We used a private Discord server to talk in real time in voice calls and text chats, and for asynchronous text discussion. A central hub like a Discord server is useful to discuss and plan your games since you can upload and pin important messages. However, all you need is a video conferencing with text chat of your choice.

D&D Beyond
dndbeyond.com

D&D Beyond is an official seller of D&D 5th Edition rulebooks and adventures, and a digital toolset. Their tools include a digital character sheet and character builder which allow you to create your character through a guided process. One of the best features

of the digital character sheet is that you can digitally roll your dice and ability checks directly in D&D Beyond. This is useful for new players who are learning the rules and unsure how to apply a character's modifiers to their rolls, and for players with fatigue and brain fog. However, D&D Beyond is not accessible for people who use screen readers, and some players may also find it visually cluttered and overwhelming. If you use a screen reader or find D&D Beyond overwhelming, there are alternative character sheets and plain-text character sheets for people that use screen readers, like the character sheets created by The Knights of the Braille.[9]

Roll20
roll20.net

Roll20.net is a Virtual Tabletop (VTT), which means that it is a website with tools for playing TTRPGs. Some groups that play in person like to use large maps with miniature figurines (called miniatures or mini figs) to help players visualize and represent combat situations and maps. Roll20 and other VTT allows players to create and interact with custom virtual maps and miniatures. There are many rules in D&D about the range of attacks and spells, so understanding where everything and everyone is located is vital to playing D&D.

While some players may be able to keep track of everything with oral descriptions, some players may struggle with working memory or maintaining focus, be Deaf or Hard of Hearing, or play better with visual aids. Shared understanding and perception of a problem, combat situation, or puzzle helps the team work together.

Beyond20
beyond20.here-for-more.info/

Beyond20 is a browser extension that connects the D&D Beyond character sheets with different s. This allows players to roll directly from their character sheets in D&D Beyond and have it automatically imported into Roll20 for the Dungeon Master. This allows players to use the digital roll features of D&D Beyond while still having the visual aids of Roll20.

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9   (*Knights of The Braille*, 2018)

Co-Design Session

Before our Session 0 and designing our mechanics we had a co-design session to discuss the elements of D&D that we wanted in our game. Our first meeting had the following structure:

Introduction (5 minutes)
Introduce and learn each other's names, why they wanted to participate in the study, and what is their favourite D&D class to play. People can optionally disclose their neurodiversity identity, but it is not required.

Ice Breaker (10 minutes)
Show off your favourite D&D Accessory like a favourite case, book, set of dice etc.

Rose, Bud, Thorn (30 minutes)
Discuss the rose, buds, and thorns about past D&D experiences and gameplay to discuss what people like, dislike, or would like to improve about D&D:

> →   Rose: something that is working well or something positive

> →   Bud: an area of opportunity or idea yet to be explored

> →   Thorn: something that isn't working or something negative

Affinity Mapping (15 minutes)
Cluster and group ideas from rose, bud, thorn to identify themes and ideas from discussion.

Break (5 minutes)

Neurodiversity Game Mechanic Design (30 minutes)
Individually, design what your neurodiversity might look like as a D&D game mechanic. Please include at least one advantage or one disadvantage for a character playing with your neurodiversity game mechanic.

Rose, Bud, Thorn was the first activity we did, before any other mechanic design or safety tools. I wanted to learn about what parts of D&D could be applied in real life to make everyday communication clearer and easier for neurodivergent folks. During the *Rose, Bud, Thorn* and *Affinity Mapping* activities we mostly discussed the pain points and ways to make D&D more enjoyable. Our discussion largely centred around different play styles of TTRPGs and D&D, such as preferences for roleplay, combat, meta gaming, and more.

Some players enjoyed the activity more than others, but most viewed it as a safety tool which allowed them to discuss previous bad experiences, good experiences, and how

they wanted to play this game. This activity was less useful for understanding the skills that players developed when playing D&D, or what qualities of D&D could be used in the real world. But it did help start a conversation about what game elements were important to the group, what kind of game they wanted to play, and what world and story they wanted to collectively build. This wasn't what I intended or expected, but shows the potential for using co-design and participatory design activities to help TTRPG players discuss and build their games and group culture.

Designing Your Mechanic

Why Design a Mechanic

Dungeons & Dragons and many TTRPGs replicate the power structures and social construction of our real world. The rules and game mechanics model both fantastical and real-world elements and how things work. Characters' abilities—Strength, Dexterity, Constitution, Intelligence, Wisdom, and Charisma—represent potential qualities of real people. People are more complex and can have more qualities than they do in D&D, as well as some of the other mechanics within D&D like combat, alignment, and more. However, game designers model these systems by simplifying them so mechanics can be easily understood and played in the context of a game.

Other real-life qualities and identities are also represented such as race. D&D implies "genetic determinism" because certain races in the game have boosts to some abilities while others do not, so some characters will excel more at certain parts of the game.[10] A character's class and background also impacts how a player can play the game. Players from a noble background will start with more money and have more opportunities to buy equipment than a character with an urchin background.

This parallels people's real-life experiences—people's identities and intersections of identities impact their lives and choices, and the game rules and mechanics meaningfully reflect that. Characters' backgrounds and identities impact how they can roleplay their character, the actions and choices a character can make, and reflect how different people exist in simulated worlds. However, disability doesn't have the same impactful representation in the world that the official D&D rules model. Ability scores are the main ways for characters to interact with the world, so disability is an important consideration.

There is a growing movement to increase representation and inclusion in games by homebrewing and designing game supplements (added content and modules). Homebrew is creating custom, unofficial game content for your TTRPG, and can be anything from rules, creatures and monsters, special items and weapons, spells, abilities, or socially constructed and intersectional identities. Designing homebrew content is a chance for you to be creative and increase representation and inclusion in your games.

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10   (Garcia, 2017, p. 240)

Neurodivergent mechanics can more clearly define your character's traits, and increase your closeness to your avatar. Avatars are representations of you or your character. This can be an icon or picture to represent your character, or the whole idea or concept of your character.

TTRPG Designer and Writer Sara Thompson created The Combat Wheelchair supplement for D&D, which has its own rules and stats which meaningfully impact the game.[11] Inspired by sports wheelchairs, The Combat Wheelchair has combat and defensive actions, optional upgrades, subclasses, and its own mini figure design. Even the lore is inclusive-minded, explaining that it was co-designed by Artificers and disabled consultants. You could just say that your character was disabled and has a wheelchair, which would include disabled folks in your game, but this wouldn't impact the world within your game.

Nearly everything in the D&D world has rules and stats: objects like doors have hit points and an armour class depending on its material. This is how the D&D system models things, making it more real or concrete in the game. Simply saying your character is disabled doesn't offer them the same realness in the game as objects, especially when assistive technology and accessibility devices and aids are very important objects in disabled people's everyday life.

Homebrewing or using a game supplement that has mechanics that affect the character and their assistive technology, as well as the character and their assistive technology affecting the world, allows disability to become more real in your game, and will impact how you play or roleplay. And most importantly, and as The Combat Wheelchair ruleset says, it shows that "Anyone can be an adventurer."[12]

Instructions

There are many existing homebrew disability and neurodiversity game mechanics. However, your experiences and traits of your neurodiversity might be vastly different than someone else with the same kind of neurodivergence.

I asked the group to **Individually, design what your neurodiversity might look like as a Dungeons & Dragons game mechanic. Please include at least one advantage or one disadvantage for a character playing with your neurodiversity game mechanic.**

I provided an example to our group from this collection of homebrew D&D disability mechanics created by disabled and neurodivergent D&D players.[13] The example I provided was:

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11   (Thompson, 2021)
12   (Thompson, 2021, p. 1)
13   (sleepyspoonie, 2017)

"**Auditory Processing Disorder**
The hero has a -1 penalty to all perception checks and
a -2 penalty to perception checks related to hearing."

Your game mechanic design doesn't have to totally encompass your neurodivergence or your experience, and it could be easier to focus on one part or aspect of your neurodiversity. Ability scores are the main way characters interact with the world and make actions, so consider how your neurodivergence may affect your different abilities. This common metaphor may help explain the different abilities if you're unsure how they work.[14]

Strength is being able to crush a tomato.

Dexterity is being able to dodge a tomato.

Constitution is being able to eat a bad tomato (and survive).

Intelligence is knowing a tomato is a fruit.

Wisdom is knowing not to put a tomato in a fruit salad.

Charisma is being able to sell a tomato-based fruit salad.

I encourage you to make a positive attribute as well as a negative attribute. Not only does this help balance your character for play, but it can help adjust how you think of yourself and your neurodiversity. Even things you perceive as weaknesses can be strengths in certain contexts. In our design session, Steven designed his mechanic with a negative to Charisma because socializing can be difficult, especially in large groups. However, Steven also designed a plus to his Charisma with advantage when talking with someone about one of his special interests. The group and I hadn't considered how things we perceive as universally negative about our neurodivergence can also be strengths depending on the situation.

There are three main mechanics you should consider when designing your neurodiversity mechanics: feats and features, items, and conditions. There are more elements to D&D, so feel free to homebrew wherever your imagination takes you, but these are provided as a starting point for your own design.

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14   (tan620, 2013)

Feats & Features

Feats are talents or expertise in a certain area beyond a character's class, and taken instead of ability score improvements at level ups. These can be proficiencies in certain skills such as being an Athlete, Observant, or Lucky. Finn designed a Special Interest mechanic.

> ### Special Interest
> Choose Arcana, History, Nature, or Religion. You become proficient in this skill if you aren't already. With your DM, pick a special interest within that subject. Gain a second special interest at 8th level, and a third at 16th.
>
> Apply only half your proficiency bonus to the options you didn't choose if you have proficiency in their related abilities. Make those checks with disadvantage if you do not have ability proficiency.
>
> When making a skill check related to that special interest, you apply double your proficiency bonus.

You could have anxiety points, like luck points, that build up over time in certain events. This idea is also similar to Ki points, a class feature of Monks. Class features are special features or skills related to a character's class, but also provide useful guides for how to create your own mechanics or features. For example, Steven designed a Spoons mechanic that is similar to the monk's Ki points features.

> ### Spoons Mechanic
> Your character has a certain amount of spoons which represent the amount of energy you have available, and when you roll disadvantage you lose spoons. Lose all spoons and get exhaustion points.

Mechanics generally say what the feat or feature does (pluses or minuses, advantages or disadvantages), limitations on what you can do, what ends the feat or condition, how often you can use it, and how you can recharge your ability. Your design doesn't have to have all these qualities, but consider these possibilities while thinking about your lived experience with your neurodivergent traits as you design your mechanic.

Items

Other mechanics that can alter a character are items. One example from the core rules is certain Paladin fighting styles where specific items give them a boost or other abilities. Defense and Protection are class features that only work when a character has a certain item equipped.

Defense[15]
While you are wearing armor, you gain a +1 bonus to AC.

Protection[16]
When a creature you can see attacks a target other than you that is within 5 feet of you, you can use your reaction to impose disadvantage on the attack roll. You must be wielding a shield.

You can only pick one fighting style as a Paladin, but these fighting styles are examples that rely on having certain equipment. Consider if there is anything that helps you with your neurodivergent traits. Items and companions could be important parts of how your neurodiversity mechanic works. Do you have a service animal or emotional support animal? Do you use assistive technology to help you read or communicate? Or do you use things like noise cancelling headphones, fidget toys, stim devices, or weighted blankets? How could using a specific item boost your character's abilities?

Conditions

You should also consider what conditions your neurodivergence might cause. Conditions alter a character's ability or possible actions. These are generally disadvantages with the exception of Invisibility which can be useful in some situations. Prone for example is a condition where your character is prone (laying or knocked down). Your prone character can only crawl until they use an action to stand up, has disadvantage on attack rolls, and your attackers have advantage on attack rolls within 5 feet.

You can homebrew your own condition related to your neurodivergence, and it could be either an advantage or disadvantage. Do you experience anxiety or panic attacks? Do you get over-stimulated or experience sensory overload? What triggers tics? Does reading make you dizzy or give you headaches? Also think about what advantageous conditions you experience. Do you experience periods of inspiration, creativity, or focus? Do you become very sensitive and aware of others and your environment?

Think about how you experience your neurodivergence internally (not just what others see) what triggers these experiences or conditions.

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15   (Player's Handbook 5th Edition p. 72)
16   (Player's Handbook 5th Edition p. 72)

Other Tips

It can be useful to look at existing feats and mechanics within D&D if you've never created homebrew before. They provide a good blueprint for what elements and conditions a mechanic needs, and you can fill in the blanks to start.

Also think about how you experience your neurodivergence in certain situations, daily, weekly, and monthly. Stress and some of your experiences may build up over time, but you might experience some of your neurodivergent traits more often.

You should consider how often your neurodivergent mechanic would be triggered alongside the length of the campaign. If your mechanic design takes a while to build up, then you may not get a chance to use it if playing a short campaign.

And most importantly, Iterate! If you're not happy with your neurodiversity mechanic design, redesign and keep tweaking it. All game mechanics are rigorously tested, so it's unfair to pressure yourself to get it right on the first try. As well, your experience with your neurodivergence may shift throughout your life, so why wouldn't your neurodiversity mechanic also shift? Continually changing and refining your design as you play will help make your design better, as well as relieve some pressure from getting a perfect design on the first try.

Gameplay
Setup

I tried to recreate the same atmosphere of a Dungeons & Dragons game, not just the feel of a research study. We could not meet in person due to COVID-19 safety concerns and restrictions. D&D can be played online or remotely, so we used different digital tools. I created a private Discord server to host our game voice chat and text chats about the game, and also used our Discord server for the co-design activity and Session 0. Players used D&D Beyond to host their character sheets, which helped less experienced players build their characters as the site guides you through the process.

Setting

Our adventure took place in the elven city state of Triunae, a homebrew created by Finn, our Dungeon Master. The independent, sovereign city of Triunae elects a representative from each of the city's three districts to rule as a council. Built atop the oldest discovered elleven ruins, Triunae was founded and runs as a collaborative effort of Dark, High, and Wood elves to create a united home for elves of all kinds.

The cavernous ruins below the city are filled with the artifacts and history of ancient elves. The study and retrieval of relics is relegated mostly to a non-profit organization known as the Relic Hunters. Some of the ancient underbelly of the city has been mapped by the Relic Hunters, but most of it remains uncharted.
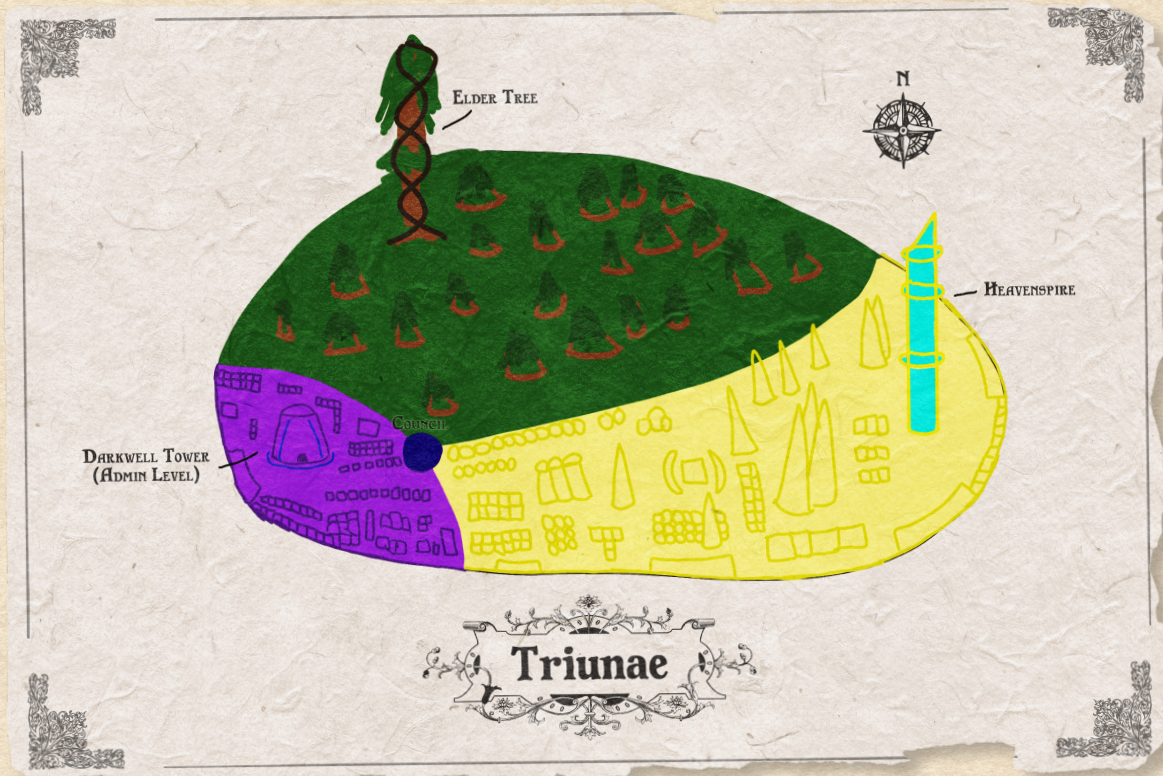
Figure 1: Map of Finn's homebrew setting, Triunae.

Adventuring Party

Our entire group identifies as neurodivergent, including our Dungeon Master and me (the researcher). All the players said this was important because people felt more comfortable and free from judgement to roleplay and talk about their lived experience. Especially crucial was having a neurodivergent Dungeon Master to understand and respect everyone's differences, their game mechanic designs, and help them feel free from judgement.

Our group identified with many different neurodivergent phenotypes including autism, ADHD, anxiety disorders, depression, OCD, and borderline personality disorder in addition to the umbrella identity of neurodivergent. Our three male players had experience with being formally diagnosed, and identify as both neurodivergent and with their diagnosis, while our two female players had no experience with formal diagnosis, but are interested in pursuing it in the future.

Women, girls, and People of Colour are specifically underdiagnosed with autism and ADHD because the diagnostic criteria centres the experiences of white male

neurodivergent children.[17] Neurodivergent women and girls may behave differently than their male counterparts because their neurodivergent traits are different, or because women and girls are socialized (taught to behave) differently. The behaviour of People of Colour and women may also be interpreted differently by doctors due to biases about race and gender identities. This is important to consider when we think about neurodiversity, how it affects different people's lived experiences, and how players create their neurodiversity mechanics. See page 61 to read more about intersectionality and neurodiversity.

Dungeon Master

Finn is our neurodivergent Dungeon Master, and creator of the homebrew setting Triunae. They wrote the entire campaign, and created maps and assets for our VTT.

Bruborg / Elswyth

Bruborg is Alexander's character, a firbolg Bard from the College of glamour. Firbolgs are half-giants with bovine-like faces, but as the College of Glamour has origins in the Feywilds, Bruborg is trained in the literally and figuratively enchanting arts of music and disguise. Bruborg performs as his alter ego, a small sometimes human, sometimes elfish musician Elswyth. Bruborg guards his secret identity closely, and uses his magical abilities to be talkative and charming, since Bruborg himself is not.

Firbolgs have the natural ability to cast Disguise Self and Alexander's neurodiversity mechanic, called Two-Faced, builds off this ability. His neurodiversity mechanic is not called Two-Faced because Bruborg is insincere or talks behind people's back, but because he has two personas. Bruborg represents his neurodivergent, unchanged self, and Elswyth who represents a neurotypical mask or camouflage. Disguise Self is a shape-changing spell cast on yourself which changes how you look via an illusion, but doesn't actually transfigure or change your physical self. The illusion of Elswyth is much smaller than Bruborg's half-giant frame, so people can bump into him while it appears there is nothing in the way.

Bruborg gets 1 point per level to use the Two-Faced neurodiversity mechanic (like sorcery points), so during our game at fourth level he had 4 Two-Faced points. Disguise Self lasts 1 hour, but Bruborg can use a point to extend the Disguise Self spell for an additional hour. Additionally, he has advantage on Charisma saving throws and Charisma checks when he uses his Two-Faced mechanic. After this effect wears off, he rolls a D20 to see for how many minutes he is Dazed. Dazed is a condition which makes a character "befuddled" and affects their ability to cast spells and concentrate.[18]

17   (Ratto et al., 2018; Mandell et al., 2009, p. 497)
18   (Player's Handbook 3.5 Edition p. 307)

Dorin

Steven's character Dorin is a human Battle Master archetype Fighter interested in elvish culture. Dorin is a country boy, but took up the arts of war to help manage his fragmented senses and consciousness, and is specifically interested in the spiritual discipline elves have around fighting and yearns to learn from them. Quiet with an intense stare, he takes his job as a fighter and protector very seriously, willing to put himself in harm's way to protect his charges. Hazel and Lorcan have used part of their budget at the Relic Hunters to hire Dorin as a bodyguard to accompany and defend them from whatever monsters and fiends have made home in the ruins under the city.

Steven has a few neurodiversity mechanics and feats to represent his lived experience. First, there is Panic At The Dungeon which reflects his lived experience with comfort in predictable or familiar situations. If he can plan for or expect a situation, Dorin gets a +2 buff on Perception, but gets -2 debuff during ambushes and surprise attacks.

Panic At The Dungeon
-2 on surprise attacks

+2 on perception in high risk or premeditated decisions

Steven created a strengths-based neurodiversity mechanic called Accommodation which lets his character create accommodations and roll with advantage, or add +1 to attack and damage rolls when in combat. Fellow players can also help him create accommodations, reducing the time needed to prepare. However if Dorin's environment is opposite to his needs (like a loud and disorganized place), he will receive -1 to attack and damage rolls.

Accommodation
You understand what kind of environment helps you function at your best. You must pick something ahead of time to share with the DM (for example, quiet surroundings, bright light, playing with a stim toy).

If you have 5 minutes to prepare before making a skill check, and can reasonably create your accommodation, you make that roll at advantage. The setup time is reduced to 1 minute if another character spends that time helping you.

In combat, if you can change the environment to provide your accommodation, receive +1 to all attack and damage rolls.

If you are in a context that is particularly hostile to your accommodation need (e.g. you need quiet and you are fighting in front of a roaring waterfall), receive -1 to all attack and damage rolls

Lastly, Steven created Self-abnegation which reflects his experience with disassociation and performing neurotypical traits. He can reroll Strength and Wisdom checks and saving throws, but takes a penalty to Intelligence, Charisma, or Dexterity saving throws for the next hour. This represents his experience with pushing himself to appear high-functioning, but also reflects the toll it takes on his mental and physical health.

Self-abnegation
You can activate this ability to re-roll a failure on any Strength- or Wisdom-based skill check or saving throw. You then take a -1 penalty to all Intelligence, Charisma, or Dexterity saving throws in the next hour. This ability can be used any number of times, but you can only reroll once per roll. Multiple instances of the penalty are cumulative.

Hazel

Erica's character, Hazel, is a human Circle of the Land Druid, specifically a member of the Grasslands Circle of the Land. Hazel is passionate about nature, animals, and preservation, and works for Relic Hunters with the goal of preserving the natural flora and fauna of the ruins while exploring the artifacts within. Smart and witty, but a little clumsy, Hazel relies on her Charisma to get out of demanding situations. Erica's neurodiversity mechanic is a representation of her experience with anxiety. Hazel has an anxiety threshold and experiences advantages on rolls in expected situations or disadvantages in surprise situations, which also contributes to her anxiety level.

Hazel also has an animal companion who is a sort of emotional support animal. Opal the rat is curious and inquisitive, and helps Hazel explore new spaces and situations. Hazel's anxiety is also affected by Opal, so she can be calmed if Opal is cuddly and affectionate, but her anxiety worsens if Opal is withdrawn.

Lorcan

Lorcan is Danielle's half-elf Monk character who follows the Way of the Cobalt Soul monastic tradition. Lorcan is a small teenager that looks frail, but appears like she might be fairly dexterous in her monk attire. She is driven by the pursuit of knowledge, as are most Way of the Cobalt Soul monks, and is affiliated with the local university. Lorcan's thirst for knowledge is how she came to work for the Relic Hunters, and frequently works with Hazel exploring the artifacts within the depths of the ruins.

The neurodiversity mechanic Danielle designed for Lorcan is a Hyperfixation feat which allows Lorcan to hyperfixate on a subject to gain expertise in a subject over a long rest.

Hyperfixator
If you have access to study materials (a library, or a book on a subject you would like to learn for example) you may sacrifice one long rest in order to gain the knowledge held within the text or else gain the ability to have temporary expertise in checks made about that subject. Once a period of hyperfocus is used to gain knowledge of something, you gain advantage on checks made about that subject for 24 hours, and after that period may then use one action to recall that knowledge at will, and retain it for the time of one hour. You may have a number of uses to recall knowledge that is one plus half your character level, rounded down (minimum of one) per long rest. At the end of a long rest you gain these uses back. At the end of the long rest period, roll a d20. On a natural one, you lose one item (at random) currently equipped in your inventory.

Despite being smart and a fast learner, Lorcan does struggle with confidence about her intelligence. When Lorcan rolls badly for Wisdom, Intelligence, and Charisma she becomes anxious and has disadvantage on saving throws and ability checks.

Researcher

I did not play D&D with the group, but I did sit in and silently observe every session. I would say hello and bye at the start and end of each session, and remind them to take breaks halfway through, but did not play or offer commentary while they played.

Everyone joked that the study was my own private D&D Actual Play podcast.

> "I was wondering what you were thinking about this before."
>
> — Alexander

> Finn: "I'm going to give [Caleb] like 10,000 feet of night vision."
> Hazel: "Damn, it pays to be the observer!"

> "I'm just imagining like a little ghost with like a
> clipboard and a pen scribbling down notes."
>
> — Danielle

I can't deny that I loved their storytelling and silently laughing along to their jokes. The group wondered if I was entertained, and we discussed the Observer effect: did they change how they played knowing that I was observing? So although I didn't play, I'm also part of the campaign group as a sort of bard tasked with recording and writing about their heroic deeds.

Game Structure

There were 5 gameplay sessions, each 3 hours long. The game was unintentionally structured with alternating combat focused and roleplay focused sessions. The Dungeon Master designed certain combat encounters, but when they happened depended on the players' choices. However, this was a great way to structure games because it helped balance the experience for players with different interests (combat or roleplay).

Session 1

Hazel, Lorcan and Dorin are called into the wood elf district Relic Hunter headquarters for a meeting. They spend the morning waiting for their meeting with Vorian, the middle-aged wood elf responsible for handing out assignments at this branch of the relic hunters. Hazel and Lorcan are acquainted with Vorian, having worked with her before, but Dorin is a new hire.

As they enter the conference room, Hazel and Lorcan comfortably take their seats at the large conference table, Hazel sitting with one leg curled beneath her and Lorcan sitting cross-legged. Dorin stands behind them, looming protectively until he awkwardly takes a seat. After they make introductions Vorian gives them their next assignment.

> DM as Vorian: *"Thank you for coming today Hazel, Lorcan, and... I'm sorry, I don't think I've caught your name?" She checks her notes "Dorin?"*

Vorian indicates to the papers on the desk that Lorcan passes out to her team. The papers detail some notes about the mission, but primarily there is a large map of the ancient ruins beneath the city with a large red X over the furthest charted area.

DM as Vorian: "I don't know if y'all are aware of this, but our exploration of the ruins has been stalled out for quite some time due to a number of hazards, but recently," and she reaches over and puts her finger on the space that's been crossed out. "An elite team managed to clear out the ghoul nest that had taken root in this section. And that opens us up to explore a much wider area we believe. And so we'd like the three of you to go in as an advanced team to scout out this area. See what you can find."

Hazel: "Sounds good."

Lorcan: "Yeah. A ghouls nest."

Hazel: "Ghouls are cool."

Lorcan: "I don't know... They seem quite ghoulish. Pardon the pun."

Hazel: "I can make friends with anybody, so."

Vorian informs them that the nest has been cleared out so they should only run into a few, if any. However, as usual their safety isn't guaranteed in the ruins, especially past the red X on the map. Vorian gives them magical flameless torches that allow relic hunters without dark vision to see in the ruins, and allows those with dark vision to see in colour.

They depart from the Relic Hunters' headquarters and start making their way to the council building at the intersection of the city's three districts, where the elevator to the ruins is located. On route they stumble upon a musician performing in the street. As they approach, Elswyth uses Enthralling Performance on the crowd, but they make a successful Wisdom saving throw, and are not magically compelled by this performance. However, Lorcan fails her Wisdom saving throw and is completely enamoured by the performer.

Lorcan pushes to the front of the small crowd, eager to see what musician is visiting their relatively quiet city. Elswyth performs a bardic interpretation of Toxic by Britney Spears, and with a successful Performance check of 14, the crowd isn't mystically charmed by Elswyth but is enjoying their rendition. With a flourish, he tips his hat to the crowd suggesting they tip him for his performance. A few people in the audience deposit copper coins, but Lorcan is gobsmacked by this performance and tips a few gold coins. Elswyth thanks Lorcan for the gold and asks after the names of the group.

Bruborg / Elswyth: *He then pulls out a delicate origami flower and gives it to Dorin saying, "Do not forget my name, but pray forget my appearance because I will be gone."*

Elswyth leaves and enters a phone booth where he transforms back into his true form, a firbolg name Bruborg. Through the small windows of the booth, Hazel sees his magical transformation and learns the secret identity of Elswyth. They approach him to ask why he disguises himself, and learn that most people shun Bruborg because of his appearance and awkward manner. "Not many people like to see a giant green monster playin' the lute for the dainty ladies," so he disguises himself as Elswyth the human performer and studied at the College of Glamour to enhance his enchanting skills.

The party doesn't care about his appearance or differences, and are more interested in learning about him and his abilities. Still enamoured by his Enthralling Performance and never having met a firbolg before, Lorcan invites him down to the ruins with them. Bruborg agrees, feeling safe with the open-minded group.

To prepare for their trip into the mines Lorcan and Dorin go to the university library to study up on the undead in case they encounter any ghouls. Using her Hyperfixator neurodiversity mechanic, Lorcan reads an encyclopedia of the undead to gain expertise with Dorin's help since it's a short rest. While Lorcan and Dorin studiously prepare for their adventure, Hazel and Bruborg opt to go to a restaurant—Panera Bard—and grab a meal.

The group makes their way to the elevator but have a small hiccup: Bruborg doesn't have authorization to enter the ruins. The group persuades the guard that Bruborg should come and that they can vouch for him.

The elevator descends deep into the earth for what seems like eternity. When the elevator doors finally open, the group take out their magical torches to make their way through the dark caverns. Ever the protector, Dorin leads the group. They traverse the tunnels of the ruins towards the destroyed ghouls' nest on their map.

As they turn the corner to the ghoul's nest, Hazel and Lorcan see symbols drawn onto the stone floor in red chalk and a figure turned away from them. Hazel and Lorcan warn Dorin to wait, trying to grab his arm, but he steps onto the rune. Everyone makes a Dexterity saving throw as fire erupts from the rune, but only Bruborg succeeds. The others take three fire damage, and Hazel's anxiety goes up. The noise of the fire alerts the person in the room to their presence, and as it turns towards them they realize it is a zombie.

Everyone rolls for initiative.

More zombies and one ghoul filters into the room and they start fighting and killing the zombies off. When one zombie is left, Dorin has very low health. Bruborg goes to use Cure Wounds on Dorin, but Dorin protests, "Don't bother healing me, just finish this! Finish it." Bruborg attacks the zombie instead of healing Dorin, but Lorcan gives the killing blow.

They search the bodies, but only the ghoul has anything. The ghoul has a trade ingot made from the same rare stone of the ruin's walls, which they can turn into the Relic Hunters for a pay bonus. Hazel investigates the room and notices a second chalk symbol drawn on the floor, suspecting that the team that cleared the ghouls' nest left the runes there, but cannot be certain.

However, they all notice booted footprints that track further into the ruins where there should be none, as no one has ventured further than this before... The group takes a short rest in the ruins where Dorin uses hit dice to tend to his wounds, recovering some health.

Session 2

After their short rest, the team decides to press on. Unfortunately, they know nothing about what lies ahead, and Dorin's neurodiversity mechanic of unexpected situations kicks in. If they encounter more foes, he will be at a disadvantage.

They trek further into the ruins and encounter a deactivated ancient power station. Walking further into the curving hallways, they find perfectly smooth doors with no handles. The doors are unmoving when pushed, and the group senses that they require power to open. Lorcan knows that the magical technology for these doors was lost long ago, but there are scholars working to reverse engineer it.
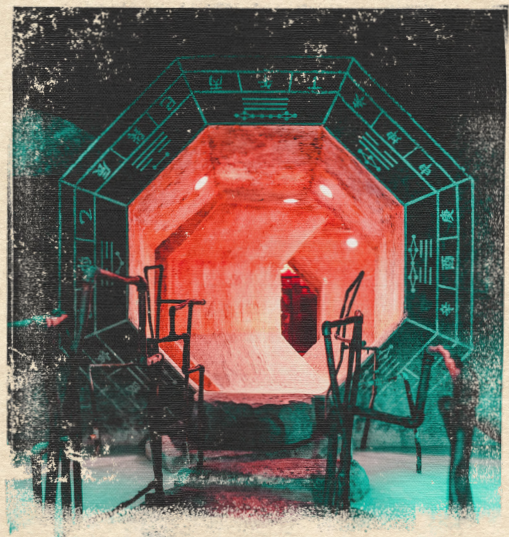
Hazel walks slightly ahead of the group and stumbles upon a man with a sword. Startled, she calls out, "Friend or foe?!" The man doesn't have night vision and cannot see who called out to him. He raises his blade in the direction of the voice, and pulls out his own magical torch to see who called out to him. When he raises the torch he spots Hazel and Lorcan, and starts walking away from them.

When he illuminates himself, Hazel notices that he is a human wearing scruffy leather armour and armed with a cheap scimitar. They assume he is a Relic Hunter too, and Lorcan nervously calls out, "Hello, friend! Are you, are you down here with the Relic Hunters as well?"

The man continues down the hall yelling, "Hey, guys! We've got intruders!"

As he rounds the corner, Lorcan says to the group, "Yeah, I think these people are not allowed to be here. I'm just gonna say, I think they're not with the Relic Hunters. So we might have to get in a bit of a scuffle."

While combating raiders is not an official part of their job, they are tasked with preserving and protecting the relics within the ruins. They ultimately decide to spy ahead and assess the situation. Lorcan peers around the corner and sees about five people, a demonic looking creature and a blue device. Bruborg suggests they send Hazel's rat, Opal, into the room to investigate and perhaps relay a message. However, Hazel is anxious and scared for Opal's life. She is more willing to cast an Invisibility spell on herself and investigate rather than send her companion.

The group discusses what spells or abilities they have left, and create a plan of action. While planning, Hazel notices that the blue device is the same technology as the deactivated generators in the ancient power station, and the demonic figure is ripping out one of its components. Before they can decide on a plan, a purple clad gentleman in the room points his hands out and the room becomes brightly illuminated.

Everyone rolls for initiative.

Hazel tries to reason with them, saying, "Hey guys, we know, we see that you're here and that's cool. You probably shouldn't be doing that but maybe we could all save ourselves the trouble and just part ways."

The guy in scruffy leather armour looks over his shoulder at the man in purple robes, and they exchange a look. Bruborg, Hazel, and Lorcan all roll an Insight check, but all they can tell is that the man in purple robes is a well-dressed elf. The well-dressed elf says, "No you fools! They can't leave this place alive."

> Hazel: *"Who you calling a fool?!"*

> DM as Elf: *"My own subordinates!"*

They engage in combat, and on Dorin's turn he enters the room and is able to do his Insight check. He rolls a natural 20 and is unmistakably convinced that the regal looking gentleman in purple robes is Alvar Sunstorm, the high elf representative on the city's ruling council. However, his behaviour is completely different from any of his public appearances: Alvar isn't known to be a spellcaster, and his way of speaking and demeanour is completely different. Unfortunately, Dorin has a disadvantage during this fight because it is a surprise encounter.

While they fight the other men in the room, the demon continues to yank at the central mechanism in the magical generator. When the demon finally removes the part, it causes a surge of power to flow through the demon, severely damaging it while it lets out a blood curdling scream.

Dorin has taken a lot of damage during this fight as well, so Hazel moves to heal him with Healing Words.

> Dorin: *Dorin looks angry and he's like, "I didn't need that!" And then he stops like, "Thank you."*
>
> Hazel: *"I couldn't do anything else!"*
>
> Dorin: *"No I... I feel a lot better. Thank you."*
>
> Hazel: *"Yeah. I'm glad. Anything I can do to help. We appreciate you Dorin."*

Dorin attacks Alvar non-lethally with the flat of his blade, hitting him directly in the centre of his face. But it's like hitting a wall. Alvar motions to hit Dorin with an open hand but stops before making contact with Dorin's face. The demon drops the ancient tech, and Alvar turns, grabs it and teleports away. Dorin tries to make an attack of opportunity before Alvar can teleport, but misses.

The demon is all that is left, so Hazel uses Ice Knife at it, nicking Lorcan on her throw. The demon dies, the battle is done, but the group is shaken.

Dorin notices the demon had the strength of an old elf, but the old elf had the strength of a demon. He sits and plays his flute to calm himself and Hazel joins in by playing her lute. Bruborg uses Detect Magic to try to sense whether Alvar turned invisible or transported, but cannot sense any magic in the room. They search the bodies of the demons to find nothing, but the raiding bandits have 32 gold pieces each, and 2 ancient trade ingots. When searching the bandits, they all notice a golden badge on their chests which resembles a scale.
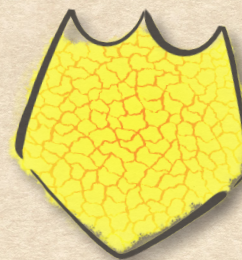
Lorcan further investigates the badges and identifies that they appear to be golden dragon scales, but are thicker than a dragon scale. The group investigates the magical generator again, but have no idea how to fix it, especially with the gaping 3 foot diameter hole of the stolen component.

> Lorcan: "No, we failed. They took a thing."
>
> Hazel: "They took that thing, but we got rid of them. And we got their fun, scaly things. Let's stay positive people. We got this, but let's carry on because this is a dead end, and we should probably go a different way. I cast happiness on Lorcan. It's not a real spell, but I cast it."
>
> Lorcan: "It's not gonna work."
>
> Hazel: "Damn it! Critical fail."

Hazel sends Opal ahead to scout out in case there are more enemies, but everything appears safe. They walk back to the elevator, discussing whether to report their findings to the Relic Hunters. If Alvar, an esteemed politician on the town council, is involved, there is no telling who can be trusted or how deep the conspiracy goes.

Session 3

The party leaves the ruins and opt for a long rest. Lorcan heads back to her home ready to study up on undead creatures using her Hyperfixator neurodivergent ability, and Hazel heads out in search of a burrito. Dorin asks everyone to join him in a tea ceremony, as he wants to discuss their strategy for future combat. They meet at Lorcan's home for the tea ceremony, where everything is strewn about. Every surface is covered in books, piles of parchment, and quills, giving everyone the sense the Lorcan is forgetful and quickly forgets about what she was doing once she puts something down. Lorcan moves some piles of books and papers from the chairs so her guests have somewhere to sit.

Dorin begins discussing his needs as a member of their group.

Dorin: "Thank you for sitting down to talk. It's...
           I see it is my role to have an awareness of
           everything that happens around me."

Hazel: "That's a lot to take on."

Dorin: "Yes. Well, there are a lot of things in the world. And
           I try to keep myself grounded, so I don't go off. Next
           time we are in combat, I'd like to know what to expect.
           I figure it's my job to get hurt. And that's what I do."

Hazel: "You saying that breaks my heart. What can
           we do to make things easier for you? What
           can I... what can I do to support you?"

Dorin: "As my clients, your job is to stay alive.
           How can you help me do that?"

Lorcan: "Well, I... if we do get into combat situations, which I
           don't, you know, I was not expecting this this time. I am
           trained in the martial arts, but it does mean I have to
           get really up close, you know, with people. I'm not very
           strong, as you might be able to tell. And so if I could have
           some would back me up that could maybe, you know,
           give the old heel every once in a while I'm quite, you
           know, I'm not very strong, but I know how to use each
           strike. That's how we were trained. To make it count."

Hazel: "Oh, I'm more than happy. If helping you means staying
           alive, then I or I guess if staying alive means helping you
           both ways. I'm more than happy to continue to hang back,
           offer support as much as I can, avoid direct hits as much
           as I can. And I'm always here to either just cheer you on,
           or give you some health. All that stuff. I'm your girl."

Dorin: "I have... I have to admit, I appreciate the cheer."

Hazel: "You mentioned just kind of knowing what's around
           you and being able to better prepare, if there's ever a
           time when you are curious about something or need
           to know something or have a feeling that something
           bad could happen... I, being one with nature, and
           quite zen with my surroundings, would be more than
           happy to either ask Opal or use my own senses to sort

of assess the situation better we go running in. But I
don't know what I don't know. So if there's something
you need, please reach out we're here to support each
other you know, it's not just a one way street."

Dorin: *"I'll try."*

They continue discussing battle plans and strategies and their strengths, workshopping some names for different battle plays like "Terrible Flapjacks" for distracting an enemy while doing a sneak attack. Hazel has been overwhelmed with anxiety because of the messy state of Lorcan's house. After finishing the conversation, Hazel wanders away from the table to tidy up.

Lorcan: *"Oh, no, please don't. Don't, don't. No, that's*
it... I have a very specific system. I know where
everything is. Don't. Don't worry about it, please."

Still feeling anxious, Hazel clears a space on the floor to sit and ground herself. They all rest for the night, but Lorcan stays up all night totally focused and engrossed in researching the undead.

In the morning they return to the Relic Hunter's HQ to report back their findings to Vorian. They report that they mapped out past the ghoul's nest and finished off the remaining ghouls, and that the city councillor Alvar was leading a group of bandits while stealing some ancient tech. Vorian is very concerned because it is a serious accusation. Dorin, a huge fan of elves, knows that Alvar has no arcane powers, but the person they saw in the ruins was using some sort of magic. He is hopeful that it was an impostor, or else he would have to sell his Alvar Sunstone trading cards.

Vorian paces the room a bit considering both theories before informing the party that Alvar spent all day in a diplomatic meeting with dozens of witnesses, and agreeing that Dorin's theory sounds correct. Vorian plans to follow-up with Alvar. The party introduces Bruborg to Vorian and explains how he joined them and fought alongside them in the mines, so Vorian grants him clearance to go into the mines. Lorcan shows Vorian the strange badge they found in the ruins and asks if it is familiar. Unfortunately, Vorian doesn't recognize the badge, but does mention that golden dragon scales have certain symbolic meanings. However, the symbolism doesn't match any of the actions or groups of the bandits in the ruins.

Bruborg raises his hand and asks if it's possible that the Alvar in the meeting was the impostor. This didn't occur to Vorian, who becomes very frustrated. Lorcan asks for the information of who was at the meeting so the party can further investigate, and Vorian directs them to the inn where the diplomats are staying.

Before leaving the Relic Hunters' headquarters, they trade in the trade ingots for payment. They receive 225 gold for the ingots, opting to give each party member 50 gold and saving 25 as group funds. Lorcan wants to further research the gold badges, so she plans to go to her university's library. Dorin opts to follow Lorcan along to the university, but Bruborg wants to research Alvar's family tree and records about them. The party decides to split up, with Dorin and Lorcan going to the university library and Bruborg and Hazel going to the Town Council library.

At the university, Lorcan researches that golden dragons are symbols of redemptions and change. She also finds an ancient elven legend which is the story of a powerful golden dragon that sowed destruction across the world. According to this ancient myth, a civilization of elves bestowed a gift upon the dragon, which caused it to change its ways and stop destroying things. Lorcan also finds less relevant details about golden dragons such as their anatomy, wingspan and dental structure, and becomes very distracted and interested in this info.

Lorcan also finds a dissertation from another relic hunter on the ancient power stations within the ruins. The dissertation details that it's not known how the magic power generators work, which is why the city relies on using these ancient magic power generators instead of building new ones. The latest research shows that the ancient magic generators draw in magical energy from the earth and convert it so that it's easily transmitted through magical conduits.

Lastly, Lorcan finds historical records of the city which detail that Alvar was one of the founding council members. Triunae was founded about 500 years ago, and Alvar was the first high elf representative and has held the position ever since.

At the Town Council, Hazel and Bruborg look for Alvar's office. Alvar isn't in the building because there is no council meeting today. However, they find one of their aides in the archives going through a filing cabinet.

Hazel asks the aide what he's up to, is he filing or looking for something? Alvar's aide replies that he is getting some extra work in, but he doesn't need to explain himself to them. Bruborg asks if there is a restroom nearby, and is directed to the clearly labelled restrooms he walked by to get into the archives.

Bruborg goes to the washroom to transform into his alter ego, Elswyth. While Bruborg is transforming in the bathroom, Hazel asks the aide more questions about himself. He mentions that he is very proud to be Alvar's aide, so he fetches paperwork, handles the schedule, and even gets to sit in on some council meetings. Hazel mentions how cool that is because her friend has Alvar's trading card, and what is Alvar like in real person?

> DM as Aide: *"I mean, Alvar themself is very wise, and he's gentle. And I get some pretty good time off paid. It's a good job."*

> Hazel: *"Do they let you call him Al?"*

"I would not dream of asking to call him Al. Oh, I would never consider it. Yeah, just getting nervous thinking about it."

Hazel asks if it's because Alvar is dangerous, but the aide assures her it would just be improper. She asks more questions about the council, and the aide says, "You didn't hear this from me, but the new council member is inexperienced." Trying to see if perhaps the new council member is part of the Alvar impostor conspiracy, Hazel asks if the new council member is causing problems with his inexperience. The aide says the councilman has only been in the job for 10 years, but give him another 50 years and he'll get the hang of it (reflective of the relativity of time because of elves' long lifespans).

Meanwhile, Bruborg is transforming in the washroom stall, where lots of synth music and glitter accompanies his transformation. He takes so long to transform because he is waiting for the person in the stall next to him to exit since it would be strange for a large firbolg to enter a stall and a small elf to exit. Hazel and the aide are still deep in conversation as

DM as Aide: *"So you see, really the best part about paperwork is—Oh my God, is that Elswyth?"*

The aide asks what Elswyth is doing here, and Elswyth informs him that he is there to arrange a private dinner and concert for Alvar and his closest confidants, and is meeting with the aide to schedule it. The aide is panicking because he is completely unaware of this appointment, worried he forgot Alvar's birthday. Elswyth reassures the aide that he is doing a great job, it's just a last-minute scheduling because the life of a famous bard is unpredictable. To help with the deception of getting information about Alvar's potential enemies, Hazel poses as Elswyth's manager.

Hazel asks if Alvar has any potential enemies or stalkers they need to be concerned about, because as Elswyth's manager she is responsible for his safety and works directly with his bodyguards. The aide believes the lie, but can't think of any enemies or person of interest. Even Alvar's political rivals are tame and not dangerous. She suggests a private meet and greet with Elswyth before the performance, which the aide thinks is a great idea. On their departure, Elswyth signs the aide's hand and he says he won't wash it for a few days.

The party uses their magical communicators to fill each other in. Hazel is craving tacos, so they meet up for lunch and discuss their next plan of action. Over tacos, Bruborg / Elswyth reveals that his plan with the private concert was to hypnotize, kidnap, and interrogate Alvar on their way to the private dinner and concert. Not wanting to become wanted criminals, the Lorcan and Dorin votes against this plan, but Hazel isn't opposed. However, Hazel does point out it might be best not to let on that they are investigating Alvar because it could tip him off that they're suspicious.

The group debates whether it would be best to also include the foreign diplomats in the concert, and plan to make the concert public. Lorcan suggests going to the inn that the diplomats are staying at to plant false information about a second magical power source being transported to the university so the party can ambush the diplomats if they try to steal the power source.

They ultimately decide to make the concert a public performance, and head to a theatre after lunch. They book the venue for later that evening, before heading to the inn that the diplomats are at. The party approaches the inn, where a large sign outside reads The Ettin's Cup. It's much nicer and larger than you would expect of a simple inn.

Lorcan whispers with the group her plan to start talking about transporting the ancient magic power artifact to the university with Dorin in elvish so the diplomats can overhear. However, the party is surprised to learn that Dorin doesn't actually speak or understand elvish despite being enamoured with elvish culture. He knows a few phrases of popular elvish poems, but that's it. Scrapping that plan, Lorcan wants to confirm what they're going to do in The Ettin's Cup.

Everyone is nervous about making a decision, but they ultimately decide that they should be overheard saying that there is a concert tonight. Lorcan will talk about how happy she is not to miss it because the ancient magic power generator artifact transfer is scheduled for tomorrow morning as everyone is expected to attend Elswyth's concert this evening, and be too tired or hungover to steal the artifact in the morning.

Agreeing on the plan, the party enters the inn. The Ettin's Cup is marketed towards and built to be accessible to various monster folk, so the tavern floor is full of lizard folk, ogres, and other large creatures which wouldn't fit into an environment built for elves. There are larger chairs, tables, and cutlery, and it seems like everything here is built to accommodate larger creatures. Hazel turns to Elswyth to be sad that he isn't in his true form right now.

Hazel: *"Man, it's too bad you're Elswyth right now. You'd actually be able to relax."*

Session 4

Hazel is usually happy to chat people up like their plan requires, but her rat, Opal, isn't happy with Hazel today, so Hazel's anxiety is high and her charisma is low. Lorcan is still exhausted from staying up all night researching the undead, and is too tired to socialize. They still need to let Alvar know that the concert is no longer a private concert, so Bruborg / Elswyth writes a letter on parchment sealed with a kiss and a flower to inform Alvar's people. Hazel uses Animal Messenger, instructing her rat, Opal, to deliver the letter to Alvar.

Dorin is nervous because he's never been here before, and has never been in a monster-sized inn. He's not sure how he would fight or be an effective bodyguard when everything in the room is much larger than he's used to. Lorcan walks up to the bar and asks the hobgoblin bartender where the visiting diplomats staying at this inn might be. The bartender silently continues washing a glass with a rag and nods to the back corner of the room.

The party turns to see two ogres sitting in the back corner of the table. One of them is wearing an elven silk coat over rougher clothes, and the other is wearing armour. Lorcan wonders if they are the only diplomats, or if there are more.

> Lorcan: *"Are these the only two here? These two ogres?"*

> DM as Bartender: *"They're the only ones here. I don't know if they're the only ones in the city. I'm a bartender."*

Lorcan's anxiety rises because she feels told off by the bartender. She relays the information to the group, a little shaken by her social interaction. She feels like she could've asked more questions, but lost her head a little and couldn't inquire further. The party expected there to be more diplomats, but figures if they invite the two ogre diplomats, the invitation will extend to others if there are more.

As they approach the table, the ogres do not notice them, continuing with their conversation. Bruborg tells his party to be confident and pretend like you have a secret, and bows to the diplomats. The ogre in the silk coat looks down at the group and asks what they're doing in the inn. Bruborg tells them about tonight's benefit concert to promote peace between elves and other races. The ogres are interested in the concert, so the armoured ogre reaches into her pocket to find her planner. She removes multiple items from her pocket including her planner. She adds the concert to the diplomats' schedule.

Bruborg / Elswyth notices one of the items the ogre diplomat removes from her pocket, a golden dragon scale badge. He maintains his composure, careful not to alert the ogres that he notices the badge. Bruborg / Elswyth asks if there are any other diplomats in town as he wants to invite everyone. The ogres aren't aware of any other diplomats in town, as they are only in Triunae to negotiate a standard trade agreement.

Trying to alert the rest of his party to the badge, Bruborg / Elswyth comments on the beautiful golden dragon scale broach. The ogre laughs and shares that she just got them after looting the body of someone who attacked them last night. Bruborg / Elswyth warns them of rumours of dangerous activity surrounding the golden dragon badges, and the ogres thank him for letting them know. Bruborg / Elswyth bows and the party leaves the ogre diplomats to their own devices. As they walk away, Lorcan starts a conversation in Elvish, quietly but loud enough for the diplomats to overhear. She says that there are fewer diplomats than she expected, and that they can do the relic drop off at the university tomorrow morning. They worry if "relic drop off tomorrow morning" isn't specific enough, and Hazel worries about having to get up at dawn because she isn't an early riser.

Lorcan mentions that she plans to drop more details at the concert tonight. The party goes around the tavern letting its patrons know about the concert tonight. After they've informed everyone, the party leaves the inn's tavern. From behind, the group hears one of the ogres call out for them to wait up.

The ogre says "I get a feeling there's more than you're letting on here," while gesturing to the golden dragon scale badge on her chest. She continues, "Nothing can get someone to jump a lady that looks like she could squish ya even when she skips breakfast like religious fervour." The ogre emphasizes she doesn't know what is going on, but wanted to let them know about her gut feeling. She tips her helmet to the group and returns into the inn's tavern.

The party walks to a guard station to ask if there have been any attacks on the city, as they're trying to get a fuller picture of enemies of the city or council members. The guards inform them that there hasn't been a rash of attacks on visiting diplomats, but there has been an upturn of unexplained attacks on the city. The attacks are called unexplained because there are no discernible motives, but there have been some eyewitness accounts of golden badges in these attacks.

Heading back to the Relic Hunters' headquarters, the party wants to report back to Vorian. They report back to Vorian that the visiting ogre diplomats were attacked by bandits with the same golden dragon scale badge. Exasperated, Vorian doesn't understand why she hasn't been informed. She relays that she was unable to get a meeting with council person Alvar as they already have a meeting tonight. The party recognizes that Alvar's prior engagement is probably their concert, and extends an invite to Vorian.

Vorian assumes the concert is part of a bigger plan and doesn't want to get too involved. Lorcan asks her to let them know if anyone approaches asking about a rare relic shipment tomorrow, and to make note of who asks. Vorian agrees and the party departs.

Dorin mentions that they should have the golden dragon scale badge investigated to see if it is a religious symbol. He suggests bringing it to a local temple to see if the acolytes

recognize it, even if it isn't their holy symbol. The head acolyte at the temple tells the party that the badge is definitely not a holy symbol of any major religion, and it's likely for an obscure cult. Dorin makes a donation to the temple and thanks them for their knowledge.

The party makes their way to the concert venue, and Bruborg / Elswyth realizes he will have to use his Two-Faced ability to extend his Elswyth disguise another hour. The group discusses how to schedule the fake relic drop off so that Bruborg / Elswyth can have a long rest, as using his Two-Faced neurodiversity mechanic will mean he will be sick and exhausted afterwards. After discussing what would be realistic, the group decides the fake drop off will be at the delivery loading dock of the university at 7:00 am. Lorcan reminds everyone to keep their wits about them and not to drink too much ale so they can execute the plan. Bruborg / Elswyth asks if anyone can play an instrument to be his opener, and while Lorcan has a lute, she doesn't feel confident enough to perform in front of a crowd.

They arrive at the theatre early to prepare for Elswyth's performance. The audience starts to pour in; a crowd of high elves, dark elves, wood elves, and a few miscellaneous officials filling the venue. The two ogre diplomats that the party met earlier also arrive, but alas, Alvar and Vorian are nowhere to be seen.

The show must go on, so Elswyth begins his song called "The Very Lonely Teacup" about "a really lonely teacup in a ruin and all of its friends were taken and now it's sadness and loneliest teacup because it's all alone and nobody wanted it because it had a crack in it and they thought it was ugly, and they only took the pretty ones. So now it's sitting in this sad, dusty, old forgotten bookshelf without its friends."

During his performance Elswyth uses Detect Thoughts to see if Alvar is nearby, but he cannot detect his presence and only detects thoughts of the audience members excited by the performance. Dorin is walking around, trying to blend in and search for anyone who looks suspicious. Hazel moves to the bar for some ale, and Lorcan joins her for company. Lorcan is also looking out for suspicious characters, but Hazel is too distracted by the ale and menu to survey the theatre.

Dorin notices Vorian entering the venue, helping Alvar's aide into the venue. The aide looks to be beat up physically, and in rough shape. He rushes over towards Vorian and Alvar's aide, waving towards Hazel and Lorcan to get their attention.

> DM as Vorian: *"Has anything happened yet? You didn't really give me... I don't 100% know what your plan is here, but I don't think Alvar is going to be coming."*

> Dorin: *"What happened?"*

> DM as The Aide: *"Oh, oh, I'm so confused! We were on our way over from the Heavens' Spire Tower, and we were coming through little dwarf holds to get to the theater. But just when we stepped out, a bunch of goons attacked us! They were being led by Alvar, but Alvar was with me, and they kidnapped Alvar. And why was there two of him?!"*

Dorin tries to reassure the shaken aide, using his insight as to what would be a compassionate response. Dorin says that they will protect him with their lives, and that he's still sure that Alvar is good because there is an impostor besmirching Alvar's good name. In the crowded, loud room, Hazel and Lorcan do not notice Dorin waving them over, so Dorin makes his way over to tell them about Alvar's kidnapping.

He lets them know that Alvar was kidnapped by another Alvar. Stressed out, Dorin squeezes his head and takes a deep breath to centre himself. Dorin lets the ogre diplomat know to keep a close eye on her charge because he's unsure if Alvar was specifically targeted, or if all high-ranking politicians are at risk. Lorcan moves to the front of the stage, waving her arms to catch Elswyth's attention. He announces an intermission, and makes his way offstage to meet the rest of the party.

The party meets with Vorian backstage where Bruborg / Elswyth is filled in about Alvar's kidnapping. Vorian tells them that she must inform the other council members, to which Hazel drunkenly agrees. Vorian politely suggests they get Hazel a cup of tea before they do any rescuing. Unsure where to begin their investigation into Alvar's disappearance, Elswyth suggests making an announcement onstage while everyone investigates the crowd for suspicious people.

Dorin stands by the exit to see people that are leaving, while the other three remain on stage. The crowd is shocked to hear that Alvar has gone missing, asking if it was a

publicity stunt for Elswyth's concert. Elswyth asks everyone to stay vigilant and report anyone wearing a golden dragon scale to the authorities as they may be dangerous cult members. He uses Detect Thoughts a last time to see if any of the exiting audience members have any information.

He doesn't sense any thoughts, but alternating images of Alvar's face and a golden dragon's face flash in Elswyth's mind. Then he only senses a feeling of urgency as the person files out of the theatre. Elswyth successfully tries to probe deeper into the person's mind, seeing the image of the golden dragon once again while feeling a sense of reverence for the dragon. The person is still exiting, so Elswyth calls out, "Stop that person!"

Panicking, the person starts to make a break for it. While Lorcan starts to chase the person, Elswyth casts Charm Person. He stops fleeing, and looks bewildered. Lorcan collects the person and brings them backstage with no resistance. Elswyth shares with the party the thoughts he detected in this person. They offer a seat and some water to the suspicious person, and ask what happened to Alvar.

The charmed informant tells them that his master needed elf blood to power his machine, and while it didn't need to be Alvar, his master thought using Avalr's blood would be poetic. Elswyth asks if his master is the golden dragon or the person impersonating Alvar, finding out that the impersonator and the golden dragon are one and the same, but he wouldn't hurt a fly. The charmed informant tells them that the machine is in a secluded part within the city, but not sure where because he is a low-ranking minion.

Still charmed and confused, the henchman is unsure why he is backstage. Elswyth offers him a t-shirt and assures him they aren't taking him to the authorities. Elswyth ties a makeshift blindfold over the charmed minion's eyes, using a scarf from his bag, and leads him to the authorities. They relay the information they've learned to the guards before starting to form their own plan.

The party is sure there is a golden dragon in on the scheme, but not sure what other foes may be involved. They worry about facing a golden dragon because they are notoriously powerful, but reflect back on the henchman saying that the golden dragon wouldn't hurt a fly. What does this mean? Is the dragon a pacifist, or in need of help? Dorin also remembers that in their fight the dragon posing as Alvar looked angry, but didn't attack him. He speculates that perhaps something is forbidding the golden dragon from committing violence. Lorcan recalls the legend about the destructive golden dragon which was given a gift from elves long ago and never caused destruction again.

There have been more random attacks in the underground warehouse district of the city, so the party heads there. Nothing seems immediately out of the ordinary, but Dorin begins making a battle plan with the group. He says he will try to stay in front, spell casters should be at the back, and if they see anything resembling an actual dragon capable of hostility that they should run while he covers everyone's retreat.

Bruborg / Elswyth's glamour begins to wear off, and he takes his true form. Because he was using his neurodiversity mechanic and exhausting himself to glamour, Bruborg / Elswyth now has the disadvantages of his Two-Faced mechanic. However, he can transform once more, but will totally exhaust himself. Lorcan investigates for footprints, blood trails, or signs of struggle, but can't find anything. Upset that she stayed up all night researching the undead, Lorcan is frustrated to not be performing at her best.

The party suggests Hazel tries to ask the bats and rodents they've noticed if they've seen anything. She casts Speak with Animals and begins asking a bat if they've seen anything suspicious lately. Unfamiliar with human behaviours, the bat says no. She clarifies and asks the bat if it's seen a large group of people with two people who looked exactly the same. The bat says yes, and offers to show them where if they make it worthwhile.

They at first offer the bat blood, but it's appalled and wants surface fruit. Dorin offers some dried fruit from his rations, and while not fresh or juicy, it is a surface fruit which is rare and enticing to the bat. Excitedly nibbling on the dried fruit, the bat flies over to a nearby warehouse, leading the party to where it saw the group with two identical figures

Session 5

The party enters the warehouse, which is very dark. Hazel opens the foyer door and sends Opal to investigate ahead. Opal's temperament is very independent today, so Hazel is unsure how Opal will behave after she sends Opal to scope out the rest of the warehouse, so Bruborg tries to appeal with Opal to be cooperative.

> Bruborg: *"Hey, I know it's been a day, but could you not do that? Could you help us?"*

Opal scurries down the hall, but as some time passes she does not return. Hazel's anxiety rises, worrying for her companion. Hazel uses Wild Shape to turn into a rat and scout out ahead and search for Opal. Before she departs Dorin gets on the ground to coach Hazel and hype her up, and ask her to figure out what's going on.

While they wait for Hazel to return, Dorin does Tai Chi. Hazel returns, but in a wildshape form she can only speak animal language, but she can still understand people's languages. Bruborg asks her to squeak once for yes, twice for no. Hazel climbs up Bruborg's leg to talk to him

> Bruborg: *"Did you see anything suspicious?"*

> Hazel as a rat: *Squeak [yes].*

> Lorcan: *"Did you see 2 Alvars in there?"*

> Hazel as a rat: *Squeak squeak [no].*

Lorcan:	"Did you see 1 Alvars in there?"
Hazel as a rat:	Squeak [yes].
Lorcan:	"Was he tied up or restrained in some way?"
Hazel as a rat:	Squeak [yes].
Lorcan:	"Interesting, could be the real Alvar. Were there enemies there as well? Squeak for as many enemies you saw."
Hazel as a rat:	Squeak squeak squeak squeak squeak [5].

The group tries to make a plan, and Hazel opts to transform back since she can still use Wild Shape once more before a long rest. She confirms in more detail that there is a really long and narrow hallway with 2 turns. Down a set of stairs in an open area is one person that looks like Alvar standing on a platform with red insignia etched into it, and five potential enemies, seeming very ritualistic. Hazel suggests they should sneak in instead of storming the warehouse, and offers to turn into a rat and transform back inside the warehouse as a distraction.

They discuss if this is the best way to disrupt the ritual, but are unsure about the best approach. Dorin points out that any plan will only give them 10 to 20 seconds of advantage, so they need to prepare to clear the room of enemies anyway. Hazel discusses what animal forms she could become using Wild Shape, including goats, warhorses, giant weasels and, once again, a rat.

The plan is for Hazel to transform into an animal, with Lorcan following. If they need backup, Lorcan will yell "Fireball!" to signal to Dorin and Bruborg that they need backup. Worried about a warhorse fitting through a doorway, Hazel decides to turn into a donkey. They group walks down the hallway, and Lorcan takes a moment to centre herself before they burst into the room. Hazel (in donkey form) searches for Opal in the room, but cannot find her.

Lorcan tries to draw the henchman away by running away and up the wall with her spider boots of climbing. They notice that one Alvar is tied up and bandaged. The bandits level their crossbows at the adventuring party, but all their bolts miss. One bandit swings his scimitar at Hazel the donkey, knicking her in the side. A captain throws a dagger at Lorcan, but she expertly dodges it. Hazel finally notices Opal, sitting in the brim of tied up Alvar's hat, and she is excited to know that her companion is safe.

Lorcan climbs into the corner of the wall and notices that the etchings in the ritual platform aren't coloured red, but rather they are filled with a fresh, red liquid. Lights run along the etchings towards bound Alvar's feet. She can't recognize the ritual, but Lorcan knows that the restrained Alvar is standing on a piece of ancient tech. Lorcan takes out her Decanter of Endless Water, and aims it at the imposter Alvar, yelling "Geyser!"

30 gallons of water shoot out at the impersonator, hitting him square in the chest. He doesn't budge from the impact, but the water dilutes and washes away the blood in the ritual etchings. The fake Alvar turns to Lorcan with a look of pure fury flowing through his body. Hazel makes her way towards the real, bound Alvar, an enemy swinging at her as she passes. The enemy misses and Hazel reaches Alvar, intending to chew through the ropes tying him up. As she approaches, Hazel sees that her rat, Opal, has already started gnawing through the bonds. Hazel joins Opal, and chews through the ropes alongside her.

Dorin swings at a bandit, severely damaging them. Another bandit turns to return the attack, but shoots himself in the foot with his own crossbow. Inundated with a barrage of attacks, a third bandit aims his crossbow at Lorcan and fires. Fighting at her best, Lorcan Deflects Missiles, and snatches the crossbow bolts of the air, taking no damage, and throws them at the Alvar impostor. Unfortunately, her thrown bolts completely miss.

Dorin is a heavy hitter, swinging and damaging the bandits. They are outnumbered though, and another crossbow wielding bandit successfully shoots Lorcan. Hazel also takes damage, braying as a donkey in pain. Bruborg sings a song to give Lorcan Bardic Inspiration so they can fight better. Dorin and the bandits continue trading blows, and Lorcan drinks a potion of healing. Lorcan tries to throw darts at some of the bandits, but fumbles and drops them.

Hazel and Opal successfully chew through the ropes, and Hazel donkey brays in celebration. Alzar cautiously climbs onto Hazel's donkey form, and Hazel retreats up the stairs. A bandit tries to attack Hazel as she trots by, but Dorin intercepts the attack, blocking Hazel and Alvar from any harm. Dorin blocks the door to prevent any other bandits from chasing after Hazel and Alvar, and attacks one of the bandits in his path. The bandit deflects the attack with his scimitar, but Dorin Action Surges and attacks a second bandit and knocks the weapon from his hand.

The party is fighting and in sync like never before. More crossbow bolts are fired at Lorcan, but she grabs the bolts out of the air once again to avoid damage. One of the bandits takes aim again, but accidentally shoots his friend in the back. Bruborg uses Mantle of Inspiration to give his party members movement speed without attacks of opportunity and extra hit points. Lorcan climbs further up the wall, and runs across the ceiling towards the exit. Bruborg copies her and also runs up the wall and across the ceiling towards the door.

Fake Alvar's body starts to give off steam, then grow, and then change... He turns into a large humanoid golden dragon.

Lorcan: "Let's go! Fireball! Let's go!"

The golden dragon opens his mouth and a cone of flame pours out in front of him, and this raises Hazel's anxiety. One of the bandits is caught in the cone of flame and falls into a cindered heap. The golden dragon winces and falls to its knees, but the sides of his mouth curl up into a pained smile.

All of the cultists cheer despite one of their friends burning to death. Hazel is past her anxiety threshold, and is shaking with panic. Dorin gets the impression that the ritual the golden dragon and his cultist bandits were performing was to undo whatever prevents the dragon from harming people. Thankfully, the ritual only partially succeeded, but didn't completely succeed.

They all retreat, and the bandit captain takes a swing at Dorin as he runs past. The captain's blade glances off Dorin's armour. Dorin rounds the corner, running to his party yelling, "Fireball!!!"

Bruborg is still on the ceiling, and 2 bandits shoot their crossbows at him, and miss. The bandits look worriedly at their dragon boss, and Bruborg dashes out of the room yelling, "Y'all better form a union!" One of the cultists chases Bruborg up the stairs and tries to throw a dagger at him, but misses. The party keeps running, and bursts out of the warehouse to find a large group of dark and high elven guards, and some wood elven rangers. Some guards help Alvar off the donkey and whisked away for medical attention while other guards rush into the building.

The party reports what happened in the warehouse. They later find out that after the guards and rangers stormed the building, the bandit cultists were still present, but the dragon was gone. Most of the ancient magic power device was also gone, with only a few scraps remaining. Alvar was successfully saved and the entire party received commendations from the city for their bravery and heroics.

Fin

Session 1

Hazel, Lorcan and Dorin get an assignment from Relic Hunter's to investigate a ghoul's nest in the ruins.

They leave to prepare for their mission and meet Elswyth the bard on their way.

Elswyth is an alter... a College of Glamo... people are prejudi...

Session 2

The party presses onward and investigates an ancient magical power source that hasn't worked in centuries.

A stranger spots them and alerts his group that there are intruders. The bandits are stealing components of the ancient magical generator.

Session 3

They head back to Lorcan's home for a long rest. Dorin asks them to join him for a tea ceremony for a talk.

Dorin tells them that surprises disadvantage him. They strategize how to accommodate him and work better together in the future.

They report back to the Rel... Hunters. Alvar was seen in... meeting at the same time as... the theft. They agree to spli... up to investigate further.

Session 4

The party is feeling anxious for various reasons. They enter the inn and locate the visiting diplomats.

They approach the ogre diplomats and invite them to the concert. The ogres tell them they were attacked by bandits wearing golden dragon scale badges.

The party visits the city guard and temple. The... out there have been ra... attacks by the badge w... bandits, and the badge... likely part of an obscur...

Session 5

They send Hazel's rat Opal to scout out the situation. When Opal doesn't return, Hazel *Wildshapes* into a rat to investigate.

Hazel returns to let them know that they are using Alvar for a blood ritual. They devise a plan so Dorin isn't disadvantaged by a surprise.

Hazel transforms into a donk... and they head in for battle. Lorcan uses her Decanter of Endless Water to wash away the blood from the ritual.
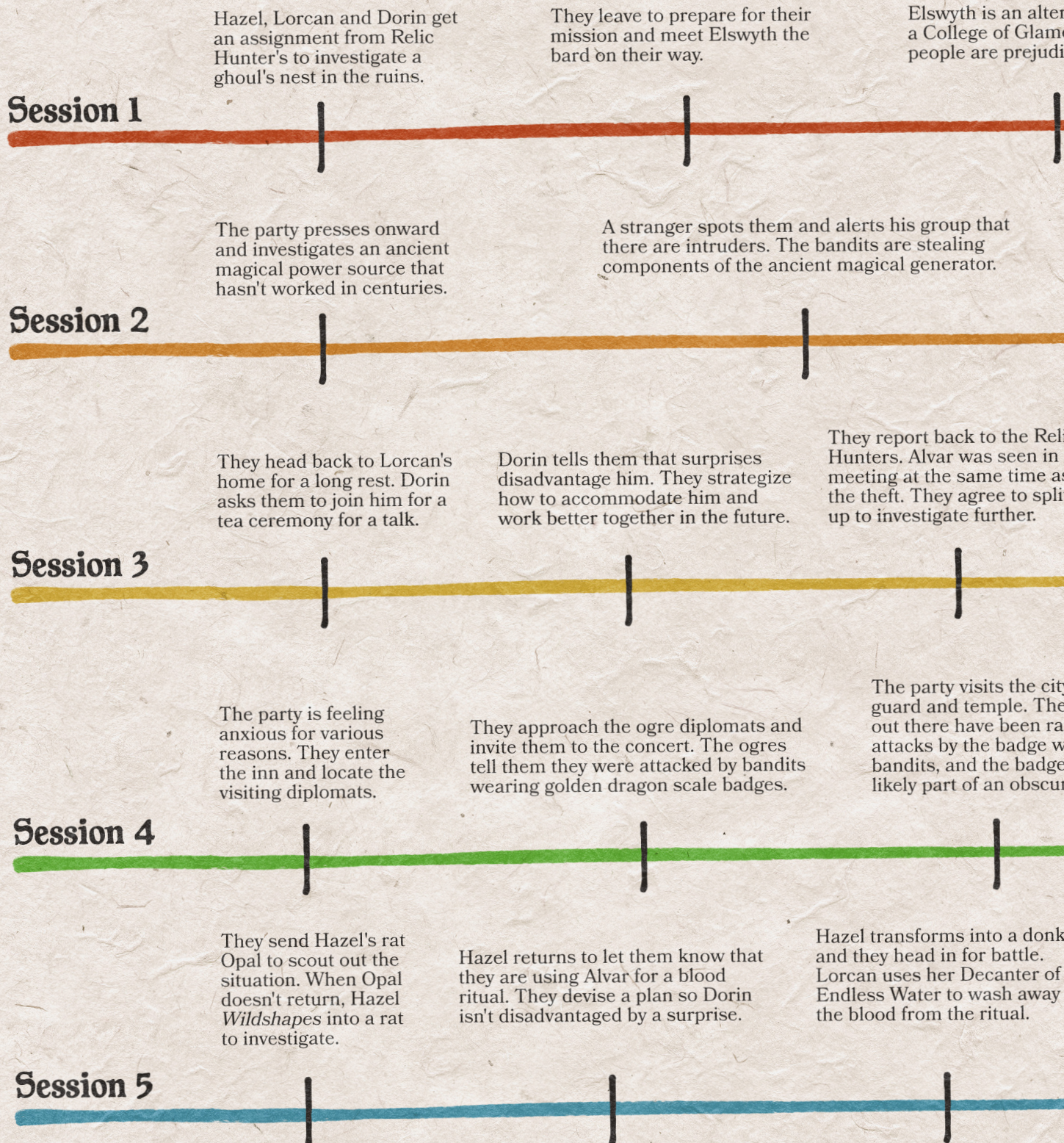
Figure 2: Timeline of important plot and gameplay events.
Note. Plaintext version in Appendix A on page 87.

rego for Bruborg,
our Bard because
ced to firbolgs.

Bruborg agrees to join them on
their quest. The party eliminates
the last of the ghouls in the ruins.

They notice footprints leading further into the
caves, but have a short rest before investigating.

They win the fight, but Dorin is disadvantaged
because of the surprise fight. He recognizes the
magic leader as Alvar, the high elf city councilor.

Alvar escapes, and his dead hirelings leave
behind golden dragon scale badges. They
leave the ruins to report their findings.

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Lorcan and Dorin go to
the university library to
research golden dragons,
Alvar, and the ancient
magical technology.

Hazel and Bruborg head to
the Town Council. Bruborg
transforms into Elswyth, and
Hazel poses as his manager.
They invite Alvar to a concert.

They meet up to share
info. They plan the
concert and how to
plant false info about
an artifact transfer to
ambush the bandits.

Suspicious of the visiting
diplomats, the party goes
to the inn to invite the
diplomats to the concert
and plant the false info.

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e cult.

Elswyth begins the concert and
uses *Detect Thoughts* to see if
Alvar is in the crowd. Dorin
spots Alvar's beat up assistant.

The assistant tells them that Alvar
was abducted by a doppelgänger.
The concert is cut short. Elswyth
detects the thoughts of a bandit
involved in Alvar's abduction.

They head to the district,
where the random attacks
have been happening. Hazel
uses *Speaks with Animals*
to talk with a bat that leads
them to the warehouse
where Alvar is being held.

ey

The party fights as a great team. Bruborg
plays music, inspiring the party. Dorin
intercepts attacks and gives powerful blows.
Lorcan catches arrows out of the air and
fires them back. Hazel and Opal free Alvar.

The party escapes the warehouse
with Alvar. The city guards go
back in to investigate but the
Golden Dragon pretending to be
Alvar and the ancient magical
power source is gone.

Alvar is successfully saved,
and the party receives
commendations for their
bravery and heroics.

Real Life / Debrief / Potential Effects

There are many factors which made this research project the positive experience it was for the players, and me, the researcher. And the players were well aware of these factors.

As I mentioned earlier, we discussed how important having a group of neurodivergent players and a neurodivergent Dungeon Master is to feel comfortable and vulnerable. Players also acknowledged that they felt comfortable participating and being vulnerable in the game because they felt there was a certain level of protection. The group felt comfortable because they knew the research was approved by a Research Ethics Board (REB), and that their information would be protected. There was also a sense of institutional trust because the research was associated with a university. As well, OCADU is a reputable and known university to some of the research group members.
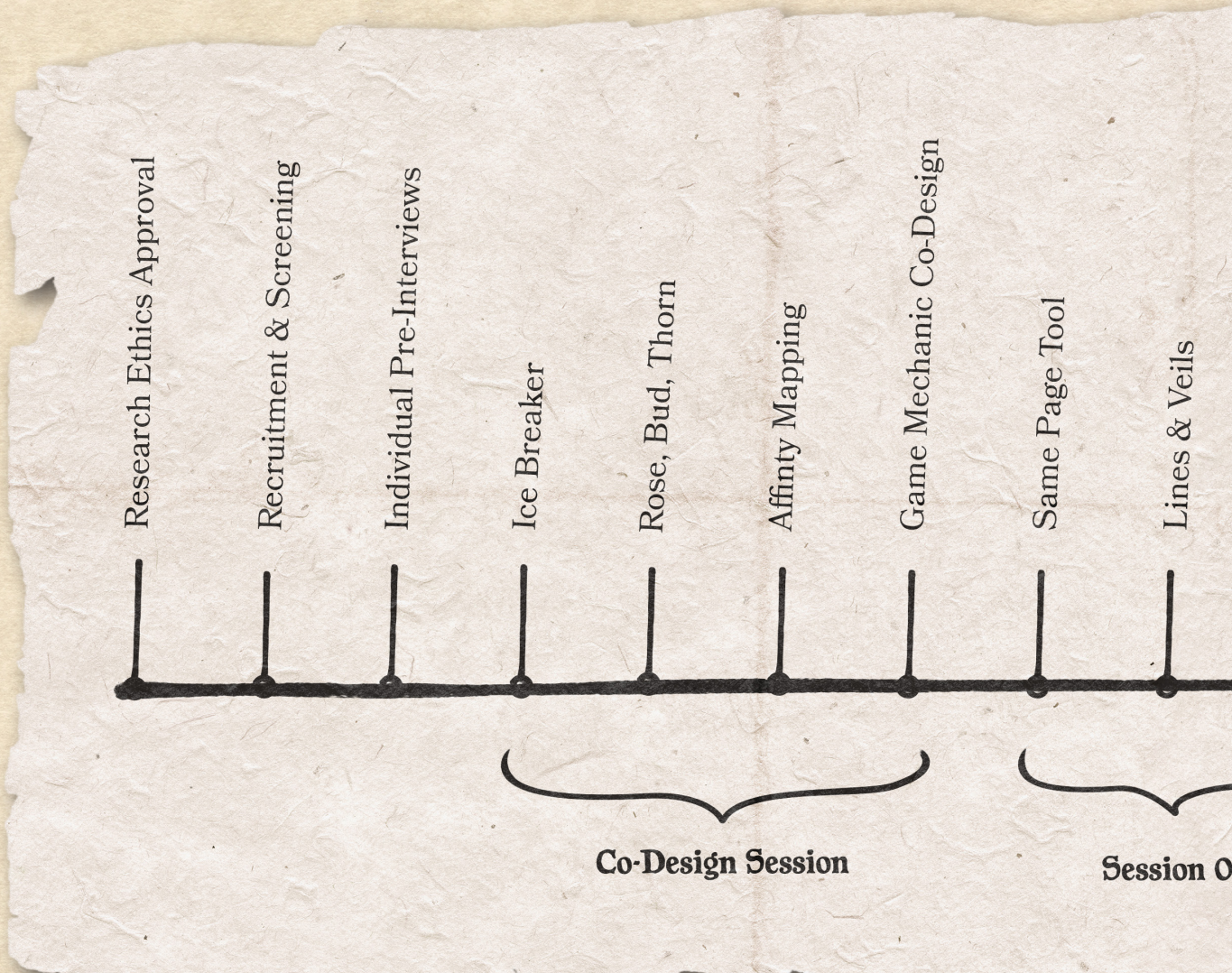
Figure 3: Timeline of research study activities.
Note. Plaintext version in Appendix B on page 89.

Most players mentioned that the experience was great, but they probably wouldn't have participated the same way if they had been asked to play in the same way outside of a study. They felt the structure and organization of a study that screened participants felt safer than if they looked for a group of strangers to play D&D games focused on exploring neurodivergent mechanics. Steven probably wouldn't suggest the neurodivergent mechanic game to his D&D groups because it could be too emotional and not fun.

> "It did also feel there was a sense of almost like group therapy too. With getting to play since we all, I think we all had different in the end... I thought it was a good group because we all had different takes on like our different like neurodiversities, but also lots of overlap as well. So I think we all kind of ended up going with a different kind of flavor for all of our characters. But it was like so we all had like so many similarities

Character Design & Planning · Individual Pre-Game Interview · Session 1 · Session 2 · Session 3 · Session 4 · Session 5 · Group Debrief · Individual Post-Game Interview

Gameplay
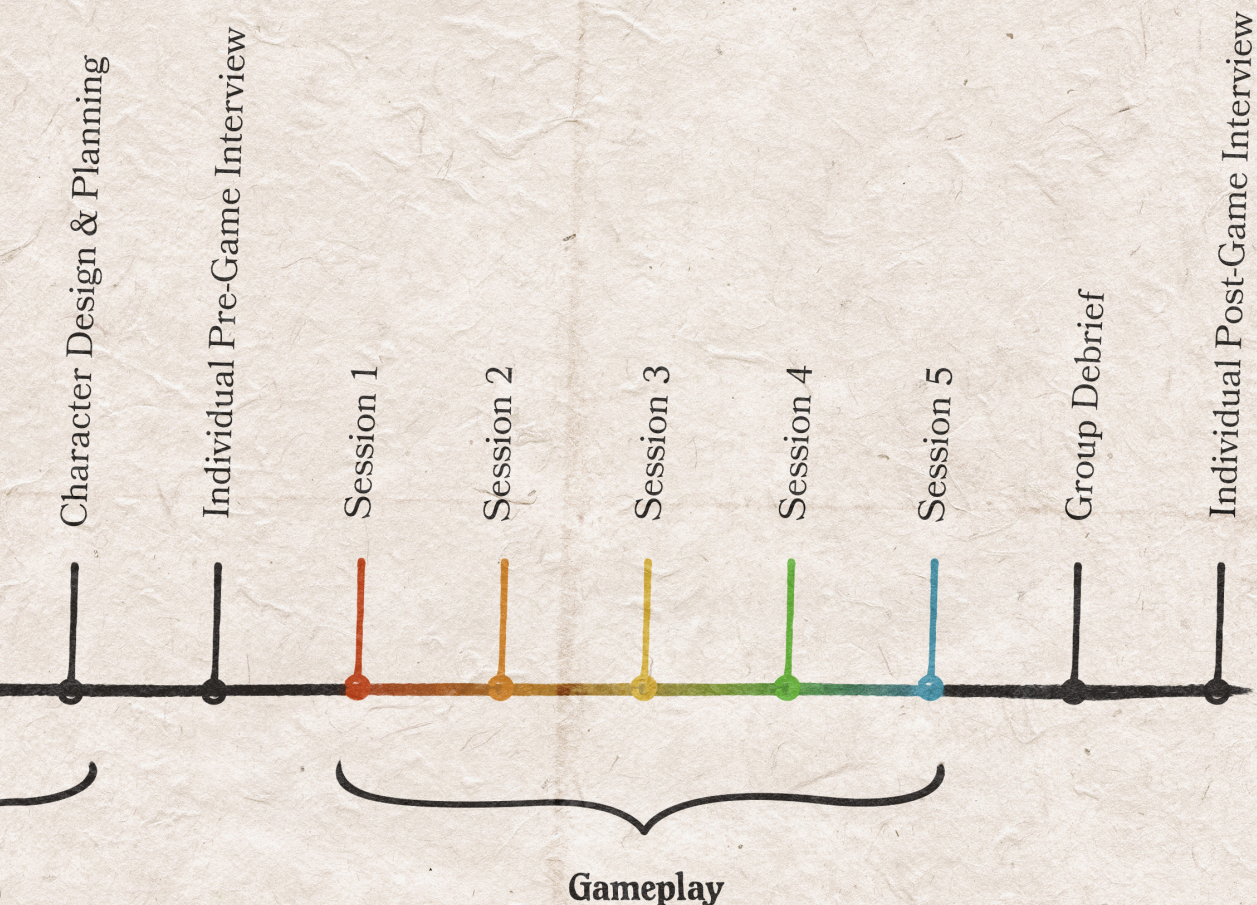
kind of at the core. And it was it was really fun to get to play with other people who just kind of like understood right away those things that you usually have to like, like worry about explaining to people or being, you know, misunderstood about or whatever. So that was like, selfishly again, it was like a little group therapy sessions to be like, 'Ugh, this experience, you know,' and everyone be like, 'Yeah, totally.'"

— Danielle

Finding a D&D Group

I recruited players in online gaming communities on Discord and social media. You can see the ad I shared in Appendix C on page 90. There are lots of different online communities to meet players if you are looking for a group to play with—both Roll20 and D&D Beyond have forums of groups looking for players and players looking for groups. I did offer players a $25 honorarium for participating, but everyone tried to turn it down.

I screened players to make sure everyone was over 18 years and identified as neurodivergent. It was important that participants identified as neurodivergent because it is a distinct identity with certain beliefs. You may be aware that there are three important but distinct ideas about neurodiversity and neurodiversity as an identity: neurodiversity, the neurodiversity paradigm, and the neurodiversity movement.

The neurodiversity paradigm aligns with the social model of disability, and areas of study like Critical Disability Studies and Critical Autism Studies. These areas of study criticize deficit-based definitions of neurodiverse conditions that come from the medical model of disability.[19] The medical model of disability says that disability is a sickness or medical condition, and focus is placed on disabled people individually. The social model of disability puts focus on society and how society is designed to socially-construct disability and exclude disabled people. Essentially, we are disabled because the world isn't designed to consider people from all abilities. For example, a wheelchair user isn't inherently disabled from entering a building, but may be unable to use stairs. If we designed more buildings, and places with different abilities in mind, less people would be disabled in those spaces. If you are in an environment designed for your specific needs, you might not experience negative aspects of your neurodivergence. Disability can be caused by a mismatch between you and your environment or setting.

The neurodiversity paradigm is a foundational part of the neurodiversity movement, but separate. The neurodiversity paradigm includes the belief that we should remove pathologizing or medicalizing terms and approaches to neurodiversity, like using words such as disorder. The neurodiversity movement is a social justice and civil rights movement championed by activists that embrace the neurodiversity paradigm.[20]

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19   (Walker, 2014; Woods et al., 2018, p. 974)
20   (Walker, 2014)

While you may be diagnosed with conditions that would be considered examples of neurodivergence, you may not identify as neurodivergent because you don't believe in or know of the ideas of the neurodiversity paradigm or movement.

I screened players for identifying as neurodivergent because there are many barriers that prevent people from getting or even pursuing a diagnosis. This was important to me to make the project more inclusive to neurodivergent people that are often excluded from research. Playing D&D or a TTRPG before wasn't a requirement, but everybody had at least some experience playing D&D. I also screened players for their D&D experience to balance the amount of novice players with more experienced players. I made this choice to reduce the amount of time spent teaching people to play. There is a learning curve to D&D, and it can take a while to learn. New players aren't bad, we just had a limited time to play because of the timeline of my master's program.

Participants

Finn.. Dungeon Master

Alexander .... Bruborg / Elswyth

Steven .... Dorin

Erica .... Hazel

Danielle .... Lorcan

We had 2 novice players (less than 1 year experience), 2 intermediate players (2 to 5 years of experience), and 1 experienced player (more than 5 years experience). I explained years of experience to players as if an average D&D session was approximately 3 hours long, and they played at least once every three weeks in a year. By this definition, roughly 150 hours of D&D experience would be 1 year of experience. D&D is not typically measured in exact hours of experience, but I defined it like this so players could clearly and comfortably self-define their experience.

As I mentioned, I planned to balance the experience of players so we spent less time teaching the rules and how to play. Although I didn't intend this when designing the study, more experienced players helped less experienced players by coaching them on rules and strategy. This really showcased the teamwork parts of D&D, and how it is an exercise in creating shared intentionality.

Playing & Sharing Intentionality

Shared intentionality is a process where you communicate by sharing your mental state or understanding of a problem. We share attention and goals to cooperatively solve problems, as well as share background knowledge.[21]

If you and a friend need to open a box, you share a goal of opening the box and both of your attention will also be focused on opening the box. You both need to understand how the box works and share an understanding of what skills or tools you need to open it. You both also need to decide who will do which actions to help, and communicate these decisions. Who will hold the box and who will use the knife? How will you coordinate your actions? There are many ways to communicate about a problem like gaze, gestures, and verbal communication. This over-simplifies the process of cooperative problem-solving, because you also have to predict potential outcomes, share those predictions with your team, and make group decisions.

Opening a box is also a simple problem which you can likely already imagine. However, many cooperative problem-solving situations involve defining both the problem and the solution. If I were to ask you and a friend to build an IKEA bookshelf, it would be more complicated than opening a box. There would also be a solution or shared intention of following the instructions. But if I were to ask you to build a bookshelf from scratch, you and your team would need to define what kind of bookshelf you want to build, and how you will build it as a team. A shared intention in this scenario means you need to share a mental model of the bookshelf, share each other's knowledge and skills to build it, and decide how to build it.

The pressure is put on neurodivergent people to understand neurotypical people, but neurotypical people make assumptions and judgements about neurodivergent people without the same pressure to understand us as equal members of society. Neurotypical ways of curating shared intentionality, communicating, and thinking are not better or more correct, just different from neurodivergent ways. Categorizing our behaviour as deficits or disorders assumes there is one uniform culture. You can be part of many cultures because you can have many intersecting cultural identities. If gestures and communication skills for modelling shared intentionality are culturally-learned, we should also understand there are many ways to have shared intentionality just as there are many different cultures and cultural norms.

For example, in Filipino culture there is a cultural way of sharing intention by pointing with your lips called *nguso*. In western cultures it is more common to point with your hands, but being more common doesn't mean it is the right or only way. Neurodivergent people may have different perceptions and cultural cognition than our neurotypical peers. Your cultural cognition and communication norms are impacted by your race, gender, sexuality, class, disability, neurodivergence, and more.

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21   (Tomasello et al., 2005, p. 681)

Our entire group expressed how they avoid conflict and confrontation in everyday life. They will go with the flow with other's ideas even when they don't agree to avoid conflict or disagreement. This is a way of coping with mismatched cultural and communication norms.

> "In my quest to always feel like I have everything together, and also that I am very easygoing. I do tend to shy away from conflict. So even in situations where like, I know that I'm right, and someone else is wrong, I will generally, in my brain, I'm like, I'm going to let them figure out for themselves that they're wrong, because I don't want to be the one that tell them. So like, if I'm working on a project with somebody, and they have this idea, and they're adamant that like, this is the thing, I usually will tell myself like, okay, we'll do that thing. And it's not going to go very well. But let's let you figure out for yourself that this is not the right idea. So it often makes projects lasts a lot longer than they need to, because I wasn't willing to stand up for my own beliefs and ideas, or will make it so that projects just like don't work out well. On the flip side, my ability to back down from my own, like, ideas and beliefs and my ability to not get too attached to things that I feel strongly about has at times, like, maybe I wasn't right, I thought I was right. And I wasn't, and it's put me in situations where, you know, I didn't dig my heels in, and then we ended up going the correct route. But at the same time, it definitely leaves me seeming very wishy washy, and not as passionate about things as I could be."
> — Erica

> "When it comes to like, really big strategic things like what should we do or what should we want, I tend to often just go along with the group and not feel like I can question that. But smaller scale stuff. And also because like I said, you know, that kind of fits into that thing of having a role to play. Uh, that works for me, it's something I crave. But yeah, when it comes to, you know, ordinary collaborative conversations, I think I do okay. I think those are okay for me."
> — Steven

In D&D, players are continually deciding what their shared goals are, discussing their skills and abilities, and coordinating their actions as a group. Playing D&D also involves asking questions about the current model of reality in the theatre of the mind, or displayed by mini figures and oral descriptions. As well, you share knowledge and help each other establish shared or mutual knowledge to solve a problem. D&D requires you and your group to imagine scenarios and environments based on the Dungeon Master's descriptions and questions that you ask.

Everyone will likely have a different mental model or picture things differently, so it is more common to ask questions. You can practice asking questions and creating shared

understandings of a problem. In our game, the more experienced players helped the novice players by teaching them how to use certain spells or actions in D&D. All of these game actions can help you develop communication skills for collaborating and shared intentionality.

Curating Psychological Safety In Your D&D Group

In their everyday life, it might appear like the players are successfully collaborating or experiencing shared intentionality, but they are frequently deferring to and prioritizing others' wants and decisions. Typically they aren't actively involved in group problem-solving and avoid potential stressful situations by not speaking up. The shared intentionality model touches on how we share cognitive states and mutual knowledge, and how learning how to collaborate is socially constructed and culturally learned. However, it doesn't include the influence social dynamics and fear of judgement and exclusion has on discouraging people from collaborating and sharing intentionality.

> "Traditionally I haven't thrived working in group settings, for reasons I'm not really sure of myself. I usually, I just for the sake of not having to argue with people... I guess I try to go with the flow with groups. But I've never had a good time working with groups really."
> — Finn

Despite their lived experience of struggling with collaborating, all the players reported what this group did best was teamwork and communication. They didn't all use these exact words, but described feeling comfortable and safe to contribute to the game, and having the respectful space to discuss decisions, and balance players' different styles and dynamics.

> "I'm gonna go with communication. I think all of us communicated pretty well in regards to, you know, our boundaries and with the group planning stuff in the game, and with my role as the DM and helping out with resolving scheduling conflicts and stuff. I think communication."
> — Finn

> "I felt like when I wanted to be like, 'Okay, hang on. Like let's talk this out.' Like there was still totally room for that. And I felt like, you know, I, I had the space to do that and everything, which I did, for sure. Because I was like I don't know what the fuck we're doing or what I'm supposed to say or do, which was really fun. But yeah, I think we did. I think that was something that we did really well is being able to incorporate all those different kind of vibes. Make it work and have everyone feel like heard and as though, you know, everyone had their moment to, to like have their however, they wanted to play their character. I think we, everyone made space for that for everyone else."
> — Danielle

"I like that everybody got some opportunity to spotlight their characters skills. I mean, I guess, you know, poor Lorcan got to spend some time in our library, but didn't actually use any of that deep undead knowledge. But you know, she at least got to make use of that aspect of her character. And, you know, Hazel got shapeshifting and some rat communication. And Elswyth got to like do a whole show, and figure out how to use that position to, you know, manipulate the situation. And I got chances to do all of my fancy combat stuff, and tried to take being a tank very seriously. So, I'm thinking about to what extent that was like the group working together versus individuals doing that alone, versus our DM making sure that we all had opportunities. But overall, I think that was something that we did well together."
— Steven

"Think we just got along really well. Like we really supported each other. And there was just a lot of cooperation. And we were all really supportive of each other and our strengths and our weaknesses."
— Erica

While we do practice communication skills while playing D&D, the bigger benefit of this experience was curating psychological safety. Trust is an interpersonal connection—between you and another person—where you have confidence in them and their abilities. Psychological safety is a group phenomenon, and a group trust where you have confidence that your group will trust and support you. In the study Psychological Conditions of Personal Engagement and Disengagement at Work, the researchers looked at what qualities cause people to be engaged and be themselves in their work, or be disengaged and withdraw their preferred self and behaviours.[22]

Psychological safety is a condition in which you feel (1) included, (2) safe to learn, (3) safe to contribute, and (4) safe to challenge the status quo – all without fear of being embarrassed, marginalized, or punished in some way.[23]

A useful model of psychological safety looks at it in four stages that build on each other: inclusion safety, learner safety, contributor safety, and challenger safety.[24] In their everyday life, it seems like the players didn't experience psychological safety often, as they talked about in their lived experience. Avoiding conflict, withdrawing their thoughts and opinions and silencing themselves are ways that we, as neurodivergent people, disengage and withdraw our preferred selves because we don't feel a sense of psychological safety.

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22   (Kahn 1990, p. 701)
23   (Clark, 2020)
24   (Clark, 2020)

Your ability to collaborate, problem solve, work together, and make decisions is impacted by psychological safety, and it is impacted by interpersonal relationships, group dynamics, management style and process, and group norms.[25] But these are also core activities and qualities of playing D&D, and other informal, non-professional hobbies and parts of our lives. My theory at the start of this project was that the structure and rules of D&D made it a more comfortable and inclusive experience for neurodivergent players. As I mentioned in Before You Play, this was observed in a study about autistic campers at a youth LARP camp, where campers were more comfortable socializing because of the structure and recognizable tropes of the fantasy genre.[26] However, when they tried to replicate the structure of the camp in other therapeutic settings, the same "magic was not there," forgetting about the importance of the relationships and group norms of the camp.[27]

> "But at the same time, like playing with friends is really great for socializing, because it gives you something to do when you have these lapses in conversation that are usually really awkward, but can be filled with gameplay. Um, and also playing with friends, like there is....are playing with strangers, there is a little bit of anxiety of like, how seriously do they take this? Like, how, how much leeway do I have here? Like it's, it's that one variable that D&D has of like, how seriously do they take this, that is not necessarily explicitly outlined before you start and you kind of have to figure out as you go. That does give me a little bit of anxiety."
> — Erica

There was a lot of satanic panic and negative perceptions of D&D, so much of TTRPG research has focused on its benefits and positive qualities.[28] However, more people are researching negative experiences in role-playing games, and considering psychological safety in the TTRPG community.[29] Important parts of psychological safety—formal and informal group structure, norms, dynamics, and roles—are all parts of D&D and other TTRPGs too. One of the themes that we organized from our Rose, Bud, Thorn activity was Cooperative Comfort. Players mentioned a lack of trauma awareness and intersectionality in the core D&D books and in their previous playing experiences. This theme also included the importance of communicating expectations, making everyone feel involved, and giving everyone the time to explore their character and roleplay.

> "But being able to play a character, getting to like, play with other people who, you know, I realized it's only fun if you kind of like know, and can like trust the people that you're playing with. Because the first D&D group that I'm part of, I realized, I don't know the DM

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25   (Kahn 1990, p. 708)
26   (Fein, 2015, p. 12)
27   (Fein, 2015, p. 12)
28   (Bowman, 2013, p. 4)
29   (Bowman, 2013, p. 5)

that well. And he's like a straight guy and kind of had sort of, like, slightly uncomfortable, sort of moments. Nothing like where I felt unsafe, but moments where I'm like, "Oh, we don't think the same way. And like you don't understand the way I think, and I maybe I'm not understanding why you think. And so this is weird."

— Danielle

"Like my campaign that I'm playing where it's like a straight guy DM who was sort of like weird about my character will sometimes slip into, what I'm sure for him are like unconscious biases and things. Because what I've generally consumed, if I'm watching or listening to, you know, podcasts, or shows or whatever that are D&D based, I feel like the ones that I'm drawn to all kind of have a similar play style and like inclusivity, and stuff."

— Danielle

Players had experience in other groups with Dungeon Masters giving sexist, offensive, or out-of-character portrayals of their characters, as well as traumatic and triggering events happening to their characters without consent. While this project focuses on neurodiversity, it's important for you to approach representation and psychological safety in the game with an intersectional feminist lens. You should examine and consider how identities and lived experience other than neurodivergence affect your fellow players. Many of our players' past bad experiences weren't because of a particular kind of bias, but how their combination of identities affect their everyday life. For example, Danielle's past bad experience playing D&D was because of biases against her as both a woman and a gay woman.

We cannot separate Danielle's identity and lived experience as a Queer person from being a woman because they affect each other and are intertwined. Similarly, a Black woman's lived experience is affected by her race and gender. We develop words to describe the way prejudice and oppression for multiple identities intersects like misogynoir. Misogynoir is the distinct form of misogyny (prejudice against women) that black women experience. This is also distinct from transmisogynoir which is the distinct prejudice that black trans women experience because of their intersecting identities as black transgender women.

There are more and more community-designed resources to help you and your TTRPG group facilitate conversations around consent and boundaries to create a culture of safety and inclusion, as mentioned in Safety Tools. Because of players' past bad experiences with D&D groups, I felt it was especially important to include safety tools in our group.

"There's an assumption that the way that I imagined it should be played is like what other people would also think. And so it's interesting to see, even though we mostly agreed I feel like on most things. It was just like, it's interesting to consider, like, "Oh, yeah, people might play this way." And if I was going into a game, and I didn't know

everyone was playing that way to begin with, and I came in with different expectations like that would cause probably some strife or some issues. So it was cool to be able to kind of lay out all the different things and be able to see that we're on the same page."

— Danielle

This made a big impact on how players approached the game and felt about the group and the game. Everyone said how they're going to start using safety tools and the strategies we used in their groups and future games. Alexander talked about his "for fun game" (to distinguish it from this study's D&D group), and some issues they were having. Because of the study, he recognized that their group's problems were because they didn't talk about their boundaries and expectations before playing. He planned to use the safety tools and frameworks we used in the study with his everyday group of D&D friends to help resolve conflict.

"And it was just surprising how easy everything became because we spent time doing the design work for it. It just made everything easier. Like there was just that weight that I feel in my like for fun campaign. That weight was not there. Like going in and playing, I was just like this is just there's so much weight off my chest, and like shoulders that I feel I carry in my regular game that has started to make me not enjoy playing my regular game. I've been ruined. I've been ruined by good design. So now I'm like, Oh, I can't go back."

— Alexander

Practicing skills is the first step to building them, and players also recognized how using safety tools and having these difficult conversations can prepare them to have similar conversations in everyday life. All the players craved more structure and understanding that not everyone has the same perspectives and assumptions, and wished something like the Same Page tool or safety tools were normalized in real life.

"Like just setting those sort of ground rules and having that. Just ending the idea that societal expectations are universal for everybody, and that everybody knows what they're supposed to do in any given situation. Like, there's just this idea that everybody knows, like, common sense. And it's like common sense isn't common. Outlining it leads to so many fewer issues."

— Erica

"When I think about something that's a closer analogue to like the same page activity, it's a little hard for me to imagine people saying, you know, we want this group to be able to go anywhere and do anything versus we want this group to, like, run through a specific scenario. So obviously, we have to be somewhat different and those differences are not trivial, but I like the idea. It's very nice."

— Steven

You practice many important skills in D&D (communication, group coordination, and problem solving), and practicing conversations for setting boundaries and expectations is an important skill for you to develop. Safety tools and boundary setting conversations can help you discuss differences in assumptions and expectations, and are part of building self-advocacy skills. Autism advocacy organizations like ASAN identify self-advocacy skills as especially important for autistic folks to build because the most common therapies for autistic people are harmful. Applied Behavioral Analysis (ABA) trains autistic people to suppress their own needs and behaviours to accommodate others, with the goal of making autistic people pass as neurotypical.[30] This can put autistic people in dangerous positions because they are trained to ignore their own needs, comfort, and possibly safety.

Self-advocacy skills are usually discussed as a priority for autistic people, but I think it's important for all neurodivergent folks. All of the players in our group talked about going with the flow or not speaking up, even players that didn't identify as autistic. There is a lot of masking, camouflaging, and hiding yourself across neurodivergent identities, which can lead to not advocating for your needs.

Building self-advocacy skills is an important benefit of safety tools, but the most important thing is that you establish a safe and fun game for all players in your group. The content of games can be triggering and difficult, and people can experience deep connections to the game content and their characters. This experience is known as bleed, where real life and game life bleed into each other.

Playing to Experience Bleed

Just as your characters' joys and triumphs can bleed into your real life, so can the pain and loss. The worlds you imagine and co-create in D&D have social constructs, just like the real world. These in-game social constructs impact your character like how real-world social constructs impact you. It is called bleed when you experience the thoughts, feelings, and mental state of your character, or when your thoughts, feelings, and mental state affect your character.[31] This is why safety is so important in role-playing games.

Games have a magic circle, which is an agreement that the rules of the real world are temporarily paused while everyone plays according to the game's rules. The magic circle is a social contract or alibi that your group agrees that what happens in the game stays in the game. Our group discussed how choices and role-playing in D&D feels less risky and reduces fear of social consequences, which other researchers also observed in their TTRPG studies.[32]

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30   (Gardiner, 2017, p. 2–3; Amy Sequenzia, 2016; Pyne, 2020, p. 344-345; Devita-Raeburn, 2016)
31   (Stenros & Bowman, 2018, p. 420)
32   (Bowman, 2013, p. 20)

The alibi or social contract can add to your sense of psychological safety in a group because it limits the social consequences you might feel for in-game actions. This can allow you to immerse yourself into virtual worlds and experiment with your identity and behaviour. Virtual worlds don't necessarily mean a digital or online world, but virtual meaning a virtualized, simulated world. A virtual world imitates and recreates real world social constructs, or imagines and builds new social constructs.
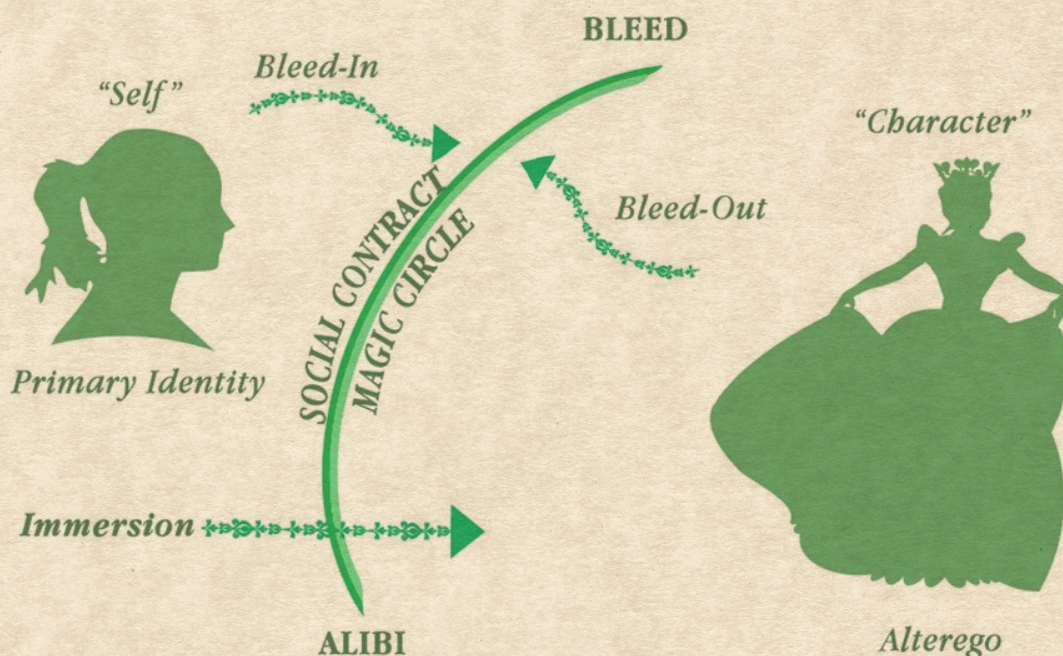

Figure 4: Diagram of role-playing studies terminology, including the relationship between bleed and alibi.

Note. RPG Terminology Image by Mat Auryn, Design by Sarah Lynne Bowman in Bleed: The Spillover Between Player and Character, *Nordic Larp* by S. L. Bowman, 2015, (https://nordiclarp.org/2015/03/02/bleed-the-spillover-between-player-and-character/)

Bleed can be a positive and cathartic experience. Catharsis is feeling an emotion and releasing it, especially a repressed emotion or a feeling that you don't have opportunities to feel and let go. Bleed and catharsis are useful for learning experiences, introspection (looking into your own mental states and emotions), and self-analysis.[33] Some of our players discussed how it can be a refreshing break to be someone else, or an opportunity to behave differently than they do in everyday life.

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33   (Bowman, 2013, p. 16)

"Sometimes I go into it with a desire to sort of learn more about myself or like, be able to be a little bit more me. And so I'll make characters that are a little bit more me. But sometimes, I'm just like, I'm so fed up with being me right now. Like, I get sick of myself all the time. Like, sometimes I just pity the people around me, because I'm like, you have to put up with me all the time. Like, I'm so sorry. And I have to be with me all the time. And it's just draining. So like, sometimes I want to be somebody else, because I'm just so sick of myself. And so like, sometimes I make characters that I purposefully do not identify with at all. Because it's just easier than having to be me for like, a few more hours."

—Erica

Just like bleed can be a positive experience, it can also be negative. *Social Conflict in Role-Playing Communities* discusses how in-game and out-of-game conflict can happen because the social construct is implied (suggested, unwritten, and unspoken rules that are not discussed or agreed upon, like described in Before You Play). You can make the social contract more explicit by using safety tools, like the Same Page Tool. However, a more explicit social contract isn't an unbreakable wall, and bleed still happens. In *Social Conflict in Role-Playing Communities*, the players discuss how out-of-game online miscommunication and disagreements about scheduling or creative differences can bleed into in-game conflict and resentment in the group.

Safety tools are important for creating ways your group can talk about and resolve disagreements, and to help people feel comfortable actually coming forward. As well, safety tools can help you process the negative emotions that bleed-out from the game. You might experience grief when their character or a beloved Non-Player Character (NPC) companion dies, or feel shame from an awkward in-game encounter or failing a quest. If your group checks in with each other you can support each other and make sure everyone is still having fun.

Ensuring the Bleed is Emancipatory

Experiencing these negative emotions or confronting emotionally challenging content in the game isn't always bad. Role-play is an effective and popular learning tool because when you practice skills in pretend situations it can help you prepare and learn how to deal with situations in real life. Role-play can be powerful if you experience prejudice and oppression because this can make you more aware of oppressive situations and practice how you handle them.

Jonaya Kemper contributed Emancipatory Bleed to role-play studies and culture. Emancipatory bleed is when you navigate in-game oppression as your character, which can empower you for out-of-character and out-of-game liberation.[34] Bleed, and especially

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34   (Kemper, 2017)

emancipatory bleed, requires what is called steering. Steering is when you intentionally influence, or make decisions or actions for your character for out-of-game reasons.[35] Essentially, steering is when you guide your character or the game's plot or for reasons not related to your character's motivations or the plot. Steering could be choosing for your character to head back into town because you can't play that week, or making choices because an in-game situation might be cathartic for you.

An example of this in our game was Lorcan's interaction with an NPC bartender at the inn. In Session 4, the party went to the inn to question visiting diplomats about their connection to a city councillor. Lorcan asks the bartender questions about the diplomats, and if there are any more in the city. The bartender answers curtly that he doesn't know because he's just a bartender.

> "There was, I remember, there was a moment like, where my character
> asked the bartender, something the bartender was like, I don't fucking
> know. And I was like, Oh my God, if that happened to me, in real life,
> I would have like, disadvantage. I wouldn't be so like, shaken by that
> by someone just being like, not even really, like he wasn't even rude.
> It was just like, being not nice to me that like really affected me."
> — Danielle

This affected Danielle and directly paralleled her lived experience. Sometimes she would read into a response like that and assume she did something wrong. Danielle's first instinct was to suppress and minimize her feelings and reaction to the encounter because she felt that being hurt by it would be an abnormal reaction. However, Danielle felt that having an explicitly neurodivergent character changed her experience of this situation. Because her character was neurodivergent, Danielle felt she should role-play her actual reaction without minimizing her feelings to make other people more comfortable.

> Danielle: "The bartender was just sort of like short with me. Again,
> like not even rude just being like, 'I don't know.' And I
> was like, to me, I personally felt like 'Oh my god, I was
> so stupid. I shouldn't have asked them that. Like, I feel
> so like, I feel embarrassed about this.' And I was like,
> that's something that I recognize this would actually
> impact me in real life. And now I'm like, it's important
> to like translate that to my character as well because I
> think, in general, I'm so used to knowing that the way
> my brain works is a little bit different. And so I like,
> I often have to just like take those, those things kind
> of internally without like showing it or whatever, just
> to like be a human being in the world. And so it was
> interesting to have to like confront that and be like, 'Oh,

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35   (Harmer et al., 2018, p. 453)

no, that would actually affect me.' It's important that I show that that would affect me, as opposed to if I was playing another character, who isn't like, who I wouldn't necessarily label as like neurodiverse in that same way. I would go in a different direction and like pretend that that didn't affect the character in the way that affected me, just because I personally think that, or it's like something that I would.... Oh gosh, how do I say this? It's like, those are things that would go untouched like in my own life just to keep comfort with other people. I don't know if that makes sense. But like, if someone said something, and it like kind of hurt me, but I knew that it wasn't like a typical reaction to be hurt by that I would just ignore it or not say anything about it. Whereas with playing this character who has the same kind of situation as me, it's like, 'Oh, that does, that did affect me. And I, and it's important to playing this character to show that.' I don't know if that makes sense at all. Like, it's almost like saying that you're hurt by something that you wouldn't normally because it wouldn't, that's not like, necessarily a quote unquote, normal reaction to have, but being able to be like, 'Oh, I can be honest about how this thing is affecting me, even if it feels like I shouldn't be affected by this.' If that makes any sense.

Caleb: "Yeah, like, almost like you're able to be like, open and vulnerable about an actual lived experience in the game, that you don't necessarily feel like you can be open about in real life."

Danielle: "Yeah, and I felt bad because I didn't want to make Finn feel like he did something wrong by just having a... Because that's like a normal reaction for a person to have. Someone is like, 'Oh, can you tell me these really weird, specific answers to this question?' And they're like, 'I don't fucking know.' Like, like, I didn't, I almost didn't want to react to save him from feeling bad, which is a thing I also deal with that is like something I can improve on. You know, like making my own needs quieter so that it doesn't interrupt someone else. And so I had to fight that to be like, 'Oh, don't show him that that upset you because then he'll feel upset maybe. That, or he'll think he did something wrong.' But it's like no, those things can coexist. Like he did nothing wrong, and also, I'm hurt by this thing. And like, I can show that maybe. I still felt nervous about saying it.'"
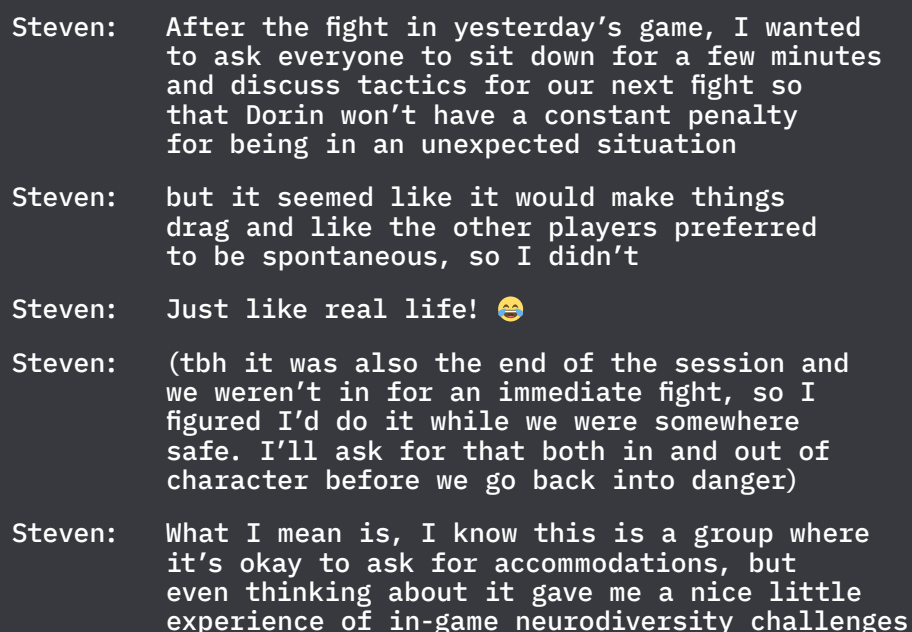
Daniele even noted that she hasn't felt the need to mirror her lived experience with other characters or games because they were not explicitly neurodivergent. As well, she felt safe and comfortable to role-play this vulnerability with the group because of the group culture of we established in our Session 0.

The neurodiversity mechanic is a form of steering for emancipatory bleed that I steered the group toward when designing the study. I created the study with the goal of seeing how including neurodivergent representation in D&D would affect players. However, players individually made choices based on their neurodiversity mechanic designs and how they chose to role-play the mechanics.

Everyone discussed how the neurodivergent mechanic impacted how they chose to role-play. Most players typically thought of role-play and combat sections as separate functions of the game. Steven brought up how to role-play combat—how does a character's mindset and personality affect how they fight? This sparked a discussion and inspiration with other players. They felt neurodivergent mechanics and traits were more closely linked to the state of mind or personality of their character than ability scores. This might be because it's easier for people to relate to and mirror their lived experience in many different scenarios.

Another noteworthy event in our game of a player experiencing emancipatory bleed was Dorin's tea ceremony. Dorin was disadvantaged during the battle in Session 2 because of his neurodiversity feat which gives him disadvantage in surprise environments. It can be frustrating as a player to be disadvantaged, but Dorin's feat was designed to simulate Steven's lived experience as a neurodivergent person. This could make the surprise encounters frustrating as a character, but also stressful as a player because of the lack of

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Steven:    After the fight in yesterday's game, I wanted
           to ask everyone to sit down for a few minutes
           and discuss tactics for our next fight so
           that Dorin won't have a constant penalty
           for being in an unexpected situation

Steven:    but it seemed like it would make things
           drag and like the other players preferred
           to be spontaneous, so I didn't

Steven:    Just like real life! 😂

Steven:    (tbh it was also the end of the session and
           we weren't in for an immediate fight, so I
           figured I'd do it while we were somewhere
           safe. I'll ask for that both in and out of
           character before we go back into danger)

Steven:    What I mean is, I know this is a group where
           it's okay to ask for accommodations, but
           even thinking about it gave me a nice little
           experience of in-game neurodiversity challenges
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planning. Steven messaged the group on our private Discord to bring up how he and his character were negatively affected in the last session. Steven also role-played as Dorin having a conversation about his accommodation needs during the tea ceremony. The group offered their support out-of-game, as well as role-played during the tea ceremony to offer their support and make plans for future situations. In many ways, they role-played a safety tool in their game to discuss how they could better support each other and work together. This was not planned or set-up by me in any way, but naturally occurred in the group's role-play.

Both Danielle's and Steven's experiences required them to be vulnerable. The group's culture of psychological safety and inclusivity allowed these emancipatory bleed experiences to happen. As Steven said, he knew it was safe to ask for accommodations in our group. Similarly, Danielle talked about the vulnerability she brought to her character because her character was a raw expression of her younger self.

Danielle: "You know how people say like be the person that you needed when you were you younger as a sort of way to like look at your life and experience? It sort of felt like I was almost caretaking for like a very like the most sort of vulnerable... It was almost like that character was like, you know, in Harry Potter where like Voldemort at the end is that like ugly baby, like crying? It's almost like if I took the most like vulnerable, little baby me. And it was like, that's what that character felt like a little bit. It felt like me in high school. Almost like feeling that I had to perform at this certain level or else that meant I was a terrible person or whatever. It was almost like I had to then like be a caretaker for that person. And it made me feel more... Um, what's the right word? Almost like softer towards it in a way. It was almost like a healing, like a moment of looking back on your past self as like, "Ah, what a fuck up." Like I was so stupid like all these stupid things I did and said. It was almost like I had to take care of it. Like it was like I was taking care of a young child, but it was me also. So it was almost like this, this weird kind of healing experience to be like I have to look after this person. And I have to like be totally understanding of where they're coming from. And so that was a weird kind of unexpected thing to be looking at. What is arguably like some of my more, things that I found more difficult about myself or like the traits that I, you know, I have trouble accepting about myself, and having to be like I have to take care of this character. Like I have to look out for her needs and stuff. And so that was a weird sort of healing moment to be like I have to look at my past self in this, in this sort of nurturing way with no like judgment about it.""

Caleb: "It's kind of like a symbolic retroactive self care exercise."

Danielle: "Yeah. And that was, yeah. That was an unexpected thing. Because, yeah it's like it was like me, but with none of the kind of toughness of growing up and learning and growing. It's like this, just little raw nerve that is like some very like vulnerable parts of myself. I had to like make sure she was okay."

While Steven and Danielle had gameplay examples of emancipatory bleed, Alexander and Erica had similar experiences about feeling vulnerable and kind to their avatars. Erica and Alexander both had a boost to their self-esteem after designing and playing their neurodiversity mechanics. They both realized that they are very self-critical, especially of their neurodivergent traits. Erica realized that she likes herself a lot more than she thought, and that all the cool, awesome things Hazel did were because of Erica's positive traits. Alexander recognized his neurodivergent mechanics design was very harsh on himself. While the neurodivergent traits he designed were accurate at one time, Alexander was able to appreciate how much he has grown and learned because of therapy and his own efforts.

"It was a reminder to myself of the work I have done and the work I still need to do. It was a thought experiment, it was fun. It was like a playground to get to test like my growth as a person. I got to quantify that. And then I got to from that, understand what my base relation to where I came from designing this, and then what I'm saying about myself, and how I refer to myself, and how I relate to other people through these mechanics, and like, this is how I do those things. It's like, oh maybe if I'm designing it, like I'm designing myself this way, a little bit too heavy handed, I think I'm being too hard on myself. And so doing therapy and things like that, it's like, I'm not going to, you know, I'm not going to exaggerate these things, or what I think would be an exaggeration. Or do these things because I'm being more critical of myself, so that I have to have all these negative things. So I was trying to cut that thinking out. So it was more than I thought about in other games, like period. Or ever. I think very few pieces of either media or you know, like, even especially like video games, that personable experience is usually very lacking. You never get to have that kind of relation to a character in the same way. There are some video games or there are some movies or books or whatever that do allow you to have those connections or build that connection to the world and character. But this was... This was more personable. This was you. You're creating everything from the foundation up, and the foundation is you. And even if you do those things in other D&D campaigns where you're like, I'm just myself, but I have magic. This was more. I am myself. These are my traits. These are these things. It was just like it was a reminder I'm too hard on myself. I don't want

to, if I'm exaggerating these things or writing these down, things to
be so detrimental. Maybe my mindset around my relation to my own,
neurodiversity isn't as healthy as I originally thought. So it was a good
way to remind. Yeah, remind myself to be nicer. Be nicer to myself."

<div align="right">— Alexander</div>

Everyone agreed that our playtime was too short to develop their characters or
experience the full extent of their neurodiversity mechanics. While 5 sessions does
equate to 15 hours of gameplay, that isn't necessarily a long time to play D&D. Depending
on the size of a group or a task, 3 hours of playing D&D could be 1 combat scenario (as it
often was for our group). However, everyone could appreciate how designing and playing
with a neurodivergent mechanic in a longer term campaign could cause more shifts in
self-esteem and self-confidence. A group culture of safety and inclusion is important if
you want to steer for emancipatory bleed, but so is enough time to meaningfully engage
in self-reflection and confront negative self-image or oppressive systems.

Experiencing Multiple Realities

The bleed and emancipatory bleed models have 2 understandings of reality: your
out-of-game "real world" reality, and your character's in-game virtual world reality. This
can help you develop skills to analyze things beyond their surface meaning. In one study,
a D&D player said he was able to understand the structures of molecules because he
learned the game's rules and system.[36] TTRPG players also "keep game systems and
meta-plots in mind when they make decisions, many gamers start to adopt a view of
reality that looks beyond the surface and identifies the inherent structures underlying all
things."[37] Games are also structured for you to investigate mysteries and conspiracies,
which can encourage and train you to examine explanations and reality more closely.[38]

The study *The Transformative Potential of Role-Playing Games* proposed a structure and
genre of Transformative Tabletop Role-Playing Games (TF-TTRPGs). In a TF-TTRPGs,
the game was designed to have many existential experiences to trigger players' personal
growth. Then the group would link their in-game experiences to their growth in formal
debrief sessions. This study theorized that in-game experience would impact players out
of game (bleed-out), but they found that players' real life existential changes impacted
their in-game choices and actions (bleed-in).

They developed a model that acknowledges how players exist in multiple dimensions
of reality while playing. These dimensions of reality are Character, Player, Person, and
Human Being. This study then purposely linked these dimensions of reality to UNESCO
Pillars of Education.

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36   (Bowman, 2010, p. 123–124)
37   (Bowman, 2010, p. 123–124)
38   (Bowman, 2010, p. 123–124)

Dimension of Reality	UNESCO Pillar of Education
Character	Learning to know
Player	Learning to do
Person	Learning to be
Human Being	Learning to live together

A character's knowledge and reality is related to the in-game world. A player's knowledge and reality are skills and knowledge related to playing the game, like communication skills and math. A person's dimension of reality are soft skills and interpersonal skills, like shared intentionality, collaboration, and critical thinking. A human being's dimension of reality is knowledge and skills related to introspection, understanding yourself and the world, empowerment, and liberation.[39]


Figure 5: Nested Model of Reality and Bleed
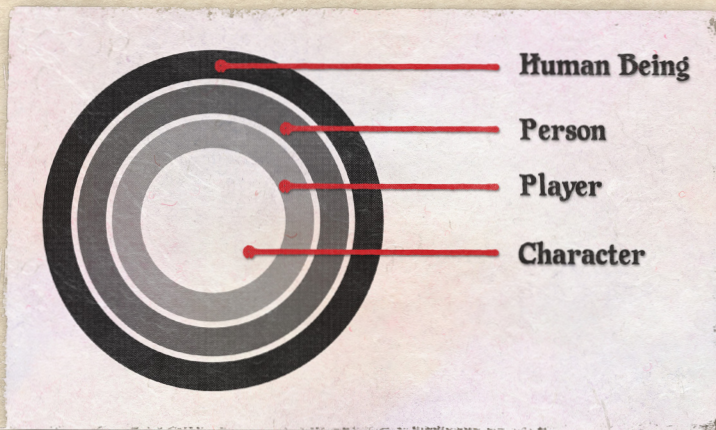
The typical model for bleed includes 2 realities—character and player. The dimensions of reality also correspond to the layers of a person as well as reality. Using this model, I observed bleed happening between all these layers of being. Each of these layers of reality and being have relevant skills and knowledge that can bleed through and influence your other layers.

Let's use the example of Danielle/Lorcan's interaction with the bartender. Danielle steered her character's reaction and role-play to let herself feel upset by the awkward interaction. This was based on her experience as a human being, self-analyzing the experience. As a player and a person, she worried about disrupting the game and offending others by reacting. As a character, her actions ultimately bled-in from her introspection as a human being. The character can also bleed through to the human being, like how Alexander and Erica described their character's traits and experiences impacting their self-esteem.

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39   (Daniau, 2016, p. 434–435)
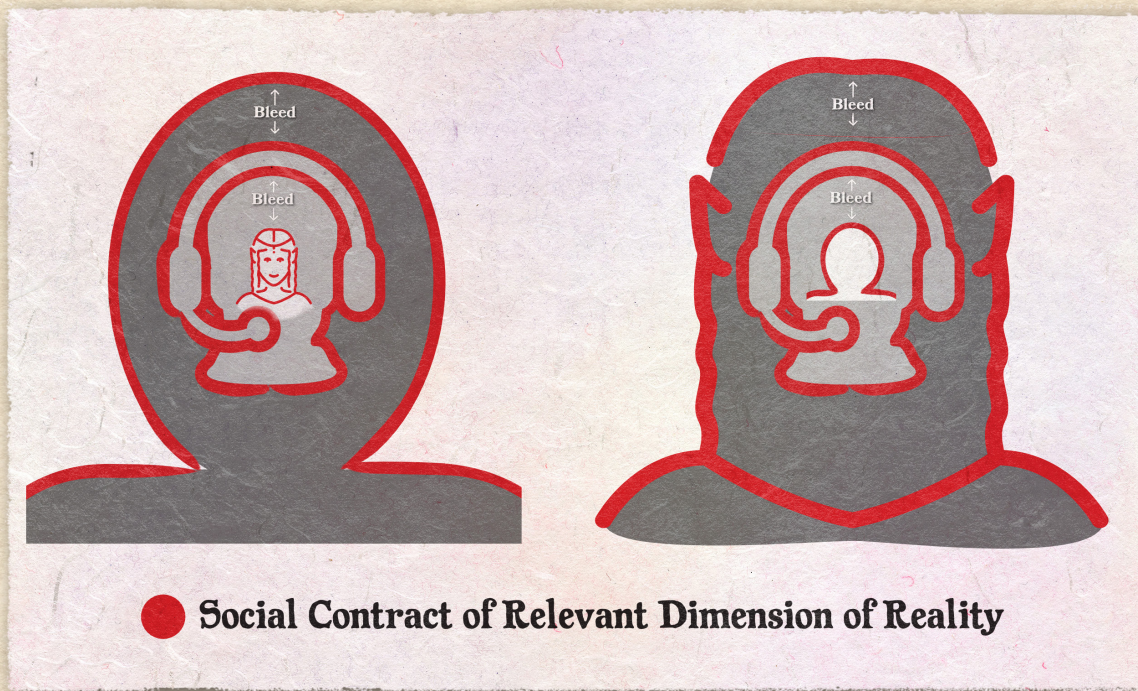
Figure 6: Model of Bleed Between Dimensions of Reality

Building Positive Experiences of Neurodiversity Inside and Outside the Game

Our group was well aware of the observer effect. While the players didn't use that exact term, they questioned how my lurking in their games might affect how they played. My silent presence was an inside joke throughout the campaign, and players wondered what I thought about the campaign. They wondered if I found them funny and entertaining, and if the study was going well. Everyone might have unconsciously played differently because they knew I was listening and that they were being recorded.

The focus of my research and my degree also impacted players. Many of them were drawn to participate because inclusivity and inclusive design was a core part of the project. This attracted players who were interested in inclusion. A similar study without an inclusive design lens or degree attached could attract very different players, and have a different outcome.

With these factors and the sense of institutional safety in mind, the group still had a great experience. Most of my analysis has centred on how the neurodiversity mechanics themselves impacted players. However, playing in an openly neurodivergent group was probably the best experience for players. Our Dungeon Master didn't get to play as an avatar with an explicit representation of his neurodiversity, but still felt positive experiences from participating.

Finn benefited from the safety tools and the group's culture of psychological safety. He felt supported when he needed to take time to collect his thoughts, or felt nervous about a role-play voice or performance. He felt more confident using leadership and facilitation skills as a Dungeon Master, and felt like he developed these skills.

The biggest surprise for all the players was how much they got along. Many players said they genuinely had fun and could see themselves being friends with each other. This was special, because we talked about how it's often hard to make friends or find like-minded people. Designing the neurodiversity mechanics prompted a lot of discussion about their lived experiences. We either related and were amazed how other people could articulate our experiences so well, or sympathized with each other for traits and experiences we did not share.

We continued discussing our lived experiences as neurodivergent people even after we finished designing our mechanics. When a character's neurodiversity mechanic was triggered, the player would often describe their mental state. This usually prompted a bigger discussion about neurodivergence and lived experience, with everyone eager to share and relate to one another.

Danielle: I took proficiency in deception because I feel like personally, being you know, quote, unquote, bright being the, you know, former gifted kid. You can deceive people in thinking that you're really good at something. Just because you're kind of smart, right? That would carry over well

Steven: I guess I wanted to share this because I'm not sure if everybody else knows it. But I, like spent my life having people ask if I had problems with perfectionism. And I was like, No, definitely not like, I don't think things have to be perfect at all. And then realize that the thing I do is exactly like perfectionism, except that it's related to like, perceiving something as being even vaguely, like, good. So you know, I will I will definitely put off doing things because I know there's going to be a part that won't be what I want it to be.

Danielle: 100. Absolutely.

Steven: Yeah. And then like, you know, either drop it forever, or wait until I'm forced to do it. So yeah, it's exactly like that. It's just perfect, or just good enough.

Danielle: If it's not perfect. I just don't do it.

The openness of the group when discussing their neurodivergent traits also helped the group grow close and create a culture of psychological safety. It was a novelty for some people to openly discuss their neurodivergence because it's so stigmatized.

> "'Oh, this makes me so weird.' Everyone was like 'Me too!' And it's like, I guess I'm not that weird in this group. Like I'm definitely not... I don't want to say like I'm not special because like we're all special. But it's sort of that whole like... I'm not the oddball here. We're all experiencing the same bullshit."
>
> — Erica

We also developed a lot of ideas of how to support each other as neurodivergent folks and the neurodivergent community. One of these ideas was a Hobby Swap app, because we all related to having special interests or hyperfocuses. We would invest a lot of money in a hobby before switching interests, so the group proposed a system where neurodivergent folks trade hobby equipment with each other to save money as their special interests change.

Another idea was the introvert/extrovert alignment chart. A recurring statement in our group was having "bad brain days." This was our way of signaling to each other that we were distracted, low on energy, or struggling cognitively that day. While we typically think of cognition as being consistent, it fluctuates from day to day. We complained that there wasn't a good system for explaining your social or cognitive energy. Neurodivergent friends will usually understand what someone means by "bad brain day" or being low on spoons, but neurotypical people often don't understand.

Quiet Introvert	Functioning Introvert	Chatty Introvert
Quiet Ambivert	Functioning Ambivert	Chatty Ambivert
Quiet Extrovert	Functioning Extrovert	Chatty Extrovert

Figure 7: Introvert-Extrovert Alignment Chart
Note. Created by Erica

We joked about creating an energy alignment—like the D&D alignment chart—to explain how we are feeling, and Erica actually created it. This was at the very end of the study, but shows a missed opportunity to have the group co-design safety tools. This chart could be workshopped for neurodivergent and neurotypical players to use in their game sessions to communicate ability that day.

Making rules and social systems more explicit made the game more playable for this neurodivergent D&D group. Creating explicit, concrete mechanics and models of neurodivergence in the game increased representation in the game, and expanded the definition of who can be a hero.

The group decided to continue playing together after the study. I'm obviously no longer involved in researching their experiences, but they are continuing to play with neurodiversity mechanics and iterating their designs. I organized the campaign schedule for the study, but I couldn't after we finished. Finn took charge in organizing

the continuation of their campaign. He typically wouldn't take the initiative or leadership role, but felt confident, safe, and empowered with the group.

My ultimate goal of this research was to examine how stories and collaborative storytelling can positively change your self-perception. Many of the players in our group noted how effective D&D with neurodivergence mechanics alongside therapy was for them, and could be for others. "Everyone should do this" was a common refrain. Alexander said therapy gave him the opportunity to learn important skills, and our game was the chance to practice them.

The timeline of this research may not have been long enough to explore the full potential of experiencing emancipatory bleed through homebrew neurodiversity mechanics. However, 5 players were able to experience a shift in how they think about their own neurodivergence, accommodations, or themselves in the short time we had together.

> "I think that by sort of playing with their own perception of their neurodivergence in a safe space, I would like to think that it can help shift people's perspectives to see the positive aspects more heavily than they have in the past. And working with each other to see how what they perceive as the negatives can be mitigated."
> — Finn

> "And maybe for people, you know, like us, playing in this game specifically to portray neurodiversity [what qualifies as a success] is a little less important because there's something refreshing just about portraying the shit that happens to you."
> — Steven

> "Yeah. I mean, this was all a really very interesting experience. But I think everything even having these like designing these traits and these extra features, like everyone should do this. Every single like D&D campaign and this should just be included and like, yeah, adds so much more depth and challenge because you actually like not only you're working within the rules of the world, the rules of the mechanics, you're adding another augmentation layer to that to work within the bounds. It's really unique, and really awesome."
> — Alexander

> "I guess, surprised me how much of a difference it did make getting the neurodiverse like part of it out in the open. I really didn't think that, um, I guess, being open about my needs, or sort of what my everyday struggles, I guess you would call them, are. I didn't realize that having that on the table was going to have such a profound impact on how I socialize. But it did, and it did actually make... I was never anxious to start the session. Like, there were times when I'm like, I'm exhausted. And I maybe don't want to socialize, but I'm going to do this anyway.

But there's never like, "Ugh I feel like I need to prepare something or I need to be ready." Like there was never that feeling. And I can only attribute that to the fact that we were all very open about our needs."

— Erica

"This was really fun. And I'm glad I did this. I'm glad I participated. And I hope that it was useful. I hope you get something out of this. I'll take stuff away from this that I'll think about probably forever."

— Danielle

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Appendix A: Plain-Text Game Plot Timeline

1. **Session 1**
    i. Hazel, Lorcan and Dorin get an assignment from Relic Hunter's to investigate a ghoul's nest in the ruins.
    ii. They leave to prepare for their mission and meet Elswyth the bard on their way.
    iii. Elswyth is an alterego for Bruborg, a College of Glamour Bard because people are prejudiced to Firbolgs.
    iv. Bruborg agrees to join them on their quest. The party eliminates the last of the ghouls in the ruins.
    v. They notice footprints leading further into the caves, but have a short rest before investigating.

2. **Session 2**
    i. The party presses onward and investigates an ancient magical power source that hasn't worked in centuries.
    ii. A stranger spots them and alerts his group that there are intruders. The bandits are stealing components of the ancient magical generator.
    iii. They win the fight, but Dorin is disadvantaged because of the surprise fight. He recognizes the magic leader as Alvar, the high elf city councilor.
    iv. Alvar escapes, and his dead hirelings leave behind golden dragon scale badges behind. They leave the ruins to report their findings.

3. **Session 3**
    i. They head back to Lorcan's home for a long rest. Dorin asks them to join him for a tea ceremony for a talk.
    ii. Dorin tells them that surprises disadvantage him. They strategize how to accommodate him and work better together in the future.
    iii. They report back to the Relic Hunters. Alvar was seen in a meeting at the same time as the theft. They agree to split up to investigate further.
    iv. Lorcan and Dorin go to the university library to research golden dragons, Alvar, and the ancient magical technology.
    v. Hazel and Bruborg head to the Town Council. Bruborg transforms into Elswyth, and Hazel poses as his manager. They invite Alvar to a concert.
    vi. They meet up to share info. They plan the concert and how to plant false info about an artifact transfer to ambush the bandits.
    vii. Suspicious of the visiting diplomats, the party goes to the inn to invite the diplomats to the concert and plant the false info.

4. Session 4
   i. The party is feeling anxious for various reasons. They enter the inn and locate the visiting diplomats.
   ii. They approach the ogre diplomats and invite them to the concert. The ogres tell them they were attacked by bandits wearing golden dragon scale badges.
   iii. The party visits the city guard and temple. They find out there have been random attacks by the badge wearing bandits, and the badges are likely part of an obscure cult.
   iv. Elswyth begins the concert and uses Detect Thoughts to see if Alvar is in the crowd. Dorin spots Alvar's beat up assistant.
   v. The assistant tells them that Alvar was abducted by a doppelgänger. The concert is cut short. Elswyth detects the thoughts of a bandit involved in Alvar's abduction.
   vi. They head to the district, where the random attacks have been happening. Hazel uses Speaks with Animals to talk with a bat that leads them to the warehouse where Alvar is being held.

5. Session 5
   i. They send Hazel's rat Opal to scout out the situation. When Opal doesn't return, Hazel Wildshapes into a rat to investigate.
   ii. Hazel returns to let them know that they are using Alvar for a blood ritual. They devise a plan so Dorin isn't disadvantaged by a surprise.
   iii. Hazel transforms into a donkey and they head in for battle. Lorcan uses her Decanter of Endless Water to wash away the blood from the ritual.
   iv. The party fights as a great team. Bruborg plays music, inspiring the party. Dorin intercepts attacks and gives powerful blows. Lorcan catches arrows out of the air and fires them back. Hazel and Opal free Alvar.
   v. The party escapes the warehouse with Alvar. The city guards go back in to investigate but the Golden Dragon pretending to be Alvar and the ancient magical power source is gone.
   vi. Alvar is successfully saved, and the party receives commendations for their bravery and heroics.

Appendix B: Plain-Text Research Timeline

1.   Research Ethics Approval

2.   Recruitment & Screening

3.   Individual Pre-Interviews

4.   Co-Design Session
>   i.   Ice Breaker
>   ii.   Rose, Bud, Thorn
>   iii.   Affinity Mapping
>   iv.   Game Mechanic Co-Design

5.   Session 0
>   i.   Same Page Tool
>   ii.   Lines & Veils
>   iii.   Character Design & Planning

6.   Individual Pre-Game Interviews

7.   Gameplay
>   i.   Session 1
>   ii.   Session 2
>   iii.   Session 3
>   iv.   Session 4
>   v.   Session 5

8.   Group Debrief

9.   Individual Post-Game Interviews

Appendix C: Social Media Recruitment Ad

Seeking Neurodiverse Adults for Dungeons & Dragons Research Study

Do you identify as neurodiverse?

Do you play Dungeons & Dragons or want to start?

Are you interested in talking about your experiences as neurodiverse adult and playing D&D with other neurodiverse adults?

This may be the study for you! Roll for initiative...

For more information contact:
Caleb Valorozo-Jones
caleb.jones@student.ocadu.ca

[REB# 2021-04]

Appendix D: Long-form Recruitment Ad

Seeking Neurodiverse Adults for Dungeons & Dragons Research Study

Do you identify as neurodiverse?

Do you play Dungeons & Dragons or want to start?

Are you interested in talking about your experiences as neurodiverse adult and playing D&D with other neurodiverse adults?

This may be the study for you! Roll for initiative...

If you would like to participate as a co-creator, you must:

- be 18 years or older;

- identify as neurodivergent (or identify with labels part of the neurodiverse umbrella such as autism, dyslexia, ADHD, anxiety disorder, etc.);

- and be interested in playing Dungeons & Dragons

The goal of the project is to examine how Dungeons & Dragons impacts and creates positive social environments and experiences for neurodiverse adults. The outcome of the project will help rethink what we consider therapeutic activities, and how neurodiverse people can co-create their own positive collaborative social environments.

If you are interested in participating this study or want more information contact Caleb Valorozo-Jones at caleb.jones@student.ocadu.ca.

[REB# 2021-04]

Appendix E: Pre-Interview Questions

1. What is your neurodiversity identity or identities?

2. How do you think your neurodiversity impacts you in social environments?

3. How would you describe how your neurodiversity impacts your life?

4. How do you feel interacting or socializing in groups?

5. Do you feel pressured to change your behaviour when interacting with people?

6. How do you change your behaviour? And how does it make you feel?

7. Do you feel differently interacting with other neurodiverse people?

8. How does your neurodiversity affect you collaborating or interacting in groups?

9. Do you connect with or relate to fictional characters?

10. Do relating to fictional characters affect how you behave or think about yourself?

11. What do you like about playing D&D?

12. How do you think communicating while playing D&D differs from communicating out of games?

13. What draws you to Dungeons & Dragons?

14. Do you play Dungeons & Dragons with strangers? Why or why not?

15. How do you connect to your Dungeons & Dragons characters?

16. Do you ever play disabled or neurodiverse characters?

17. How do you explore identity or your self playing Dungeons & Dragons?

18. How do you think Dungeons & Dragons impacts you out of the game?

19. What would you like to see change about Dungeons & Dragons?

20. What parts of Dungeons & Dragons do you feel could make your work, school, or social life better?

21. How would you describe yourself as a Dungeons & Dragons player?

22. How do you feel about the roleplay aspect of Dungeons & Dragons?

23. What does a good Dungeons & Dragons session look like?

24. What does a bad session look like?

Appendix F: Pre-Game Questions

1. How did you feel going into the group session knowing everyone was neurodiverse?

2. How would you describe your level of comfort during the session?

3. What did you think of the co-design session activities?

4. Which ones did you like and why?

5. Which ones did you dislike and why?

6. What do you see as the insights of the co-design sessions?

7. Did the sessions change your opinion or thoughts about D&D?

8. How do you feel about the other players' game mechanic designs?

9. How did you think about yourself after designing your neurodiversity mechanic? Has this changed?

10. How do you feel about being asked to design a positive and a negative / advantage and disadvantage?

11. Has including neurodiversity in your character impacted how you relate to them while designing it?

12. What do you think about the Same Page tool kit activity?

13. What did you like and dislike about it?

14. Do you think it was a useful or helpful activity?

15. Where do you think similar Same Page activities or conversations could also be used (outside D&D and RPGs)?

16. Do you think participating in this activity makes you more comfortable to have similar types of conversations or activities outside of D&D or RPGs?

17. How do you think this activity could help you specifically as a neurodivergent person?

18. How did this process or experience compare to preparing for other D&D or RPG sessions?

19. Do you have any questions or concerns about the D&D session?

20. Do you have any final thoughts or things you would like to say?

Appendix G: Group Debrief Questions

1. What 5 emotes would you use to describe the campaign's story? Can be for your character or the entire campaign, or both?

2. What 5 emotes would you use to describe your experience of the campaign? Not necessarily the story, but your overall experience and emotions.

3. How do you feel this D&D/TTRPG experience was because it was an all-neurodivergent group?

4. How did this experience compare to mixed neurodivergent/neurotypical groups that they've been in?

5. How did everyone's neurodiversity mechanic impact the game?

6. What impact would a neurodiversity mechanic have in your other games or future games?

7. How did the awareness of others' neurodiversity mechanics effect how you played?

8. If you were to create your own neurodiversity & dragons group, what three things would you put in your same page toolkit from this experience?

9. What challenges did the group encounter?

10. What should we do differently if we were to do this again?

11. What did not work well?

12. What parts from this group experience do you wish also happened in your everyday life?

13. What would you do differently if you were to play with a neurodiversity mechanic again?

14. What should other DMs and players do when playing with neurodiverse players and including neurodiversity representation in their games?

Appendix H: Post-Game Questions

1. What was the highlight of the campaign?

2. What was the most memorable moment of the campaign?

3. What was your favourite part about participating in the study?

4. Describe what surprised you about this experience.

5. Describe how everyone worked together.

6. Describe your confidence playing and socializing with the group.

7. Has your confidence increased or decreased?

8. How did this experience compare to mixed neurodivergent/ neurotypical groups that you've been in?

9. How well did you and your campaign group communicate overall?

10. What were some things your group did that helped you overcome a challenge or struggle in the game?

11. What do you think the group did best?

12. What were your contributions to the campaign's success in rescuing Alvar?

13. What new skills did you learn?

14. What skills did you improve?

15. Where can you apply these skills in your everyday life?

16. What parts from this experience do you wish also happened in your everyday life?

17. How will this experience change your future games whether with the same or a different group?

18. How did playing an explicitly neurodivergent character impact your game experience?

19. How did including neurodiversity in your character impact your relationship to your character or how you relate to your character?

20. How did positive attributes of your neurodiversity mechanic impact you?

21. How did the negative attributes of your neurodiversity mechanic impact you?

22. How would you iterate and design your neurodiversity mechanic for future play?

Appendix I: Asset Attribution

Foad Roshan. (2020). [Brown kettle on fire during daytime] [Photograph]. https://unsplash.com/photos/KFA2ahJVVds

@freestocks. (2016). [Person holding black rat photo] [Photograph]. https://unsplash.com/photos/qqjWNVn8CvU

Gioele Fazzeri. (2021). Portrait of a Medieval warrior [Photograph]. https://unsplash.com/photos/cEfbNxNqZ8g

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@Pixel Bazaar. (n.d.). Elf [Digital Image]. Retrieved August 27, 2021, from https://thenounproject.com/pixelbazaar/collection/lineking-fantasy-collection/?i=4122094

@Redd. (2019). [Gray stones near orange hole during night time] [Photograph]. https://unsplash.com/photos/vz2zGzFktBo

Todd Diemer. (2016). [Wine glasses on top of brown table near window in a vintage tavern] [Photograph]. https://unsplash.com/photos/SEFR62Upnqw

@TukTuk Design. (n.d.). Headset [Digital Image]. Retrieved August 27, 2021, from https://thenounproject.com/search/?q=headset&i=165527

Xuan Nguyen. (2018). [Woman wearing black dress swinging a light tube beside body of water] [Photograph]. https://unsplash.com/photos/LRAHyIUjFps

Zach Plank. (2021). [Brown wooden book shelf with books and ladder] [Photograph]. https://unsplash.com/photos/l74lLJRkpGA