

## **Appendix: Plan for Grammar Game**

Figure 1: Room plan, showing the physical layout of the game for all game moods

Figure 2: Room functions and puzzles

Figure 3: Extract from play of the Interactive Fiction version

Figure 4: Magnetic board instructions

Figure 5: Solution on magnetic board

Figure 1: Room plan

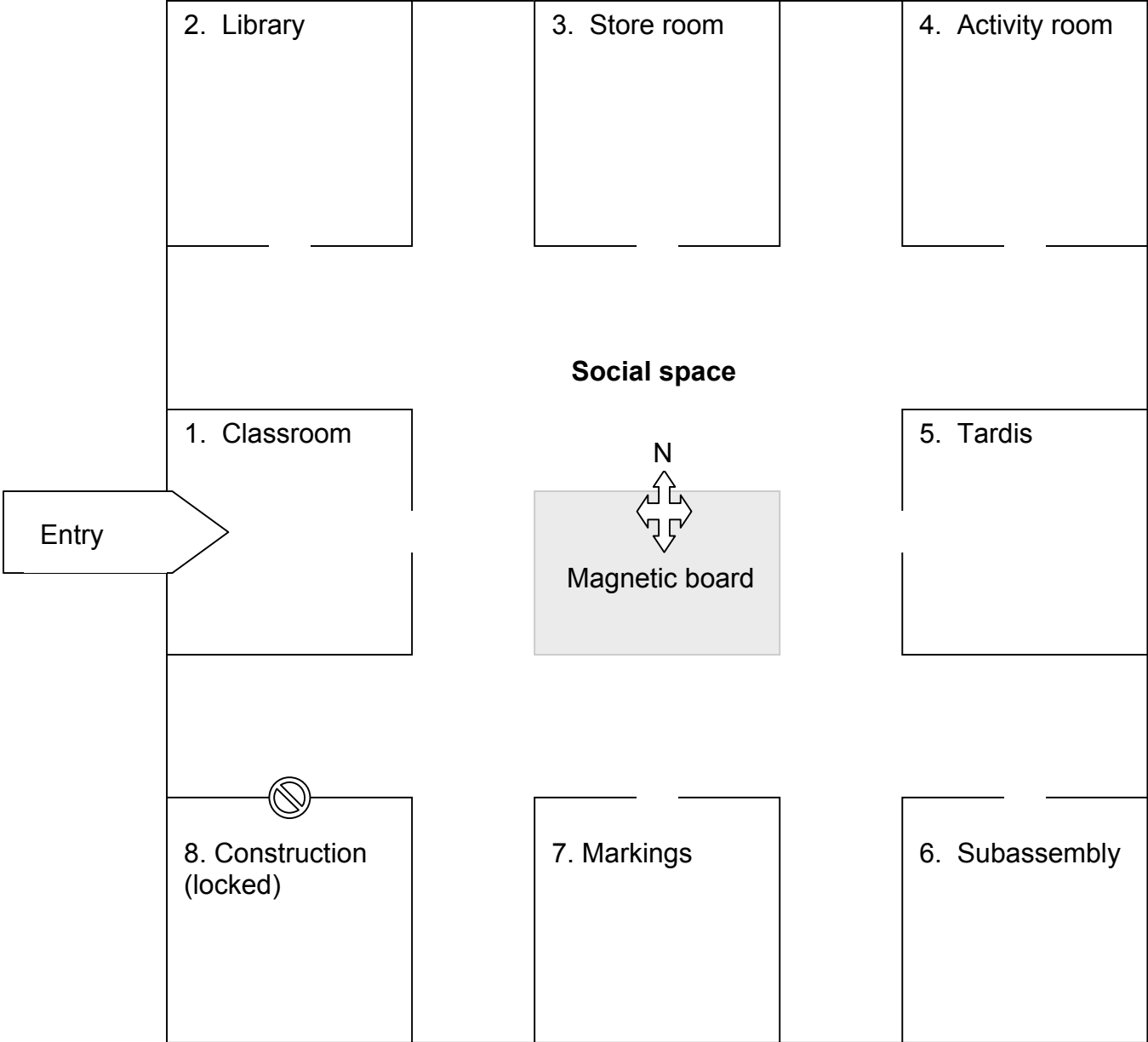


Figure 2: Room functions and puzzles

Room	Function	Puzzle
Entry point	<p>The spaces in the game have different functions: information, storage, different types of activity. Each of the 8 rooms has an associated puzzle. The endgame is in the social space in the centre, where the player also regularly meets three students – Barbara, Kim and Abel – who may or may not be helpful.</p> <p>After Room 1, the players can move in any sequence.</p>	<p>A puzzle can only be completed once, but a player may need to go back into the room later to pick something up. When a puzzle has been completed, there is an indication in the room – an award, a plaque, an inscribed cup. These are inert, but may be taken (and therefore may be distracting).</p>
1. Classroom	<p>Player's entry to game. The player is encouraged to type "help" to get basic instructions. Once the player types "east", uses the appropriate position key, or clicks on the appropriate place, the rationale for the player's presence appears and the player goes into the classroom.</p>	<p>The player can receive tutorials on the game and on grammar topics. Barbara is in this room and – when prodded a bit – will tell the player how things work in the game. She explains the quest vaguely – "Sort of putting sentences together." The grammar tutorials are not obvious until the player returns to this room after going into the social space.</p>
2. Library	<p>Find how to use the whiteboard eraser to change things. The player does not know why or how things need to be changed yet, but this is the tool to do it. The player will also need to take a briefcase from this room to store inventory.</p> <p><b>Reward:</b> point for using eraser correctly. A magnetic strip with the words <b>as the game progresses</b></p>	<p>The player can consult a dictionary, thesaurus, grammar glossary and librarian here. All the single words of the final paragraph are in a box here, but not magnetised and in random order. It's not clear why they are here. If the player takes a word and looks at it, the only information is what the word is.</p>
		<p>Retype wrong spellings and confused words.</p> <p><b>Reward:</b> point for each correction, bonus point on completion and the words <b>where   are   challenge   recognize</b> in magnetic form.</p>

Room	Function	Puzzle
3. Store room	Boxes marked participles, nouns, pronouns, adjectives, adverbs, conjunctions, prepositions, interjections, phrases and clauses are stored here. In each box, several examples of the type can be found and taken.	<p>After three turns in the room, the player accidentally knocks over two boxes and their contents spill out. The player has to put the right contents back in each box. Randomly accessed pairs of boxes are: adjectives/adverbs; phrases/clauses; conjunctions/prepositions.</p> <p><b>Reward:</b> point for each correct box and three strips containing the words: <b>Of course</b>   <b>there are</b>   <b>times in a video game</b></p>
4. Activity room	<p>Players can pick up verbs here that will be needed for other rooms.</p> <p>Verbs are moving about in here. Passive verbs are moping listlessly. There are ten different verbs (including the verb <i>to be</i> which has a glowing nature), using different tenses and voices. When a player removes one from the room, it turns into its infinitive form, e.g.</p> <p>&gt;After you leave the room, your verb turns into its infinitive form and its subject goes back to its box for now.</p> <p>&gt; You are left with the verb <i>to sing</i>.</p>	<p>The player has to take a verb from here into the Tardis and work out how to use it. A verb will also be needed to unlock the construction room. Players can carry as many verbs as they want (in the briefcase picked up in the classroom).</p> <p>Before a verb can be removed, however, it needs to have a subject. The player finds this out from one of the characters and/or from a notice in the activity room. Subjects are available from the box of words in the library, and from several boxes in the store room. (However, there are no boxes helpfully labelled “subject”.)</p> <p><b>Reward:</b> A point for matching a word from the library or store that is tagged as a potential subject for the chosen verb. Four strips: <b>players</b>   <b>These</b>   <b>They</b>   <b>a form of learning</b></p>

Room	Function	Puzzle
5. Tardis	This is a time machine, randomly set to past, present or future with additional instructions – e.g. the verb should be completed before something else; the verb is not finished yet.	<p>The player has to take a verb in here and type in its appropriate form according to the instructions that come up. When the answer is correct, the player is taken to a magical location where the appropriate action happens. This interlude ends fairly quickly, but the player gets a party bag with the reward at the end of it.</p> <p><b>Reward:</b> point and a magnetic strip with words <b>they are learning</b></p>
6. Subassembly	This is a place where phrases and clauses are put together.	<p>Kim comes into this room while the player is in here and shouts – “They’ve got too many clauses: they need to change some to phrases. Go and get one” She hands the player a clause (randomly generated from several) which has an equivalent phrase in the box in the store. The player gets a point for bringing the correct one back, but Kim says ruefully: “Sorry about this, but now they want this other phrase to be a clause. Can you find one?” The player gets a point and then Kim says, “Can you get me a conjunction – we’ll see if it works in a complex sentence.” When the player brings back any conjunction, Kim puts it together with the clause and adds a main clause. This sets a bell ringing – the sign of a complete sentence – and triggers the reward.</p> <p><b>Reward:</b> five points and the words <b>where learners see that their now-routinized mastery developed earlier in the game and in playing similar games breaks down.</b></p>

Room	Function	Puzzle
7. Markings	<p>This is where a lot of uncontrolled punctuation is kept. Apostrophes are flying about, trying to attach themselves to any s, commas are pretending to be full stops and are also sneaking into places where they are not wanted.</p>	<p>Abel is in here desperately trying to capture flying apostrophes and asks for the player's help. When the player holds a bag full of 10 apostrophes struggling to get out and has allocated a further five apostrophes to correct places, the reward is given. (In the process, the player is distracted by having to chase a wiggly comma and take it away from a sentence that is already full of commas.)</p> <p><b>Reward: magnetic strips containing a set of quotation marks   six commas   four full stops   two dashes   a colon   an apostrophe   a pair of round brackets.</b></p>
8. Construction	<p>This room is locked and needs a verb to unlock it. If there have been several unsuccessful attempts to enter the room, one of the students walks over and gives a hint: "You need some action for this room." or "The key here is to get a verb."</p> <p>This is the room where sentences are made. Each time a sentence is formed, a bell rings. Players should be able to use this space to test whether they have sentences or not (but only with the words available elsewhere in the game).</p> <p>&gt;This room can be used to test for sentences.</p>	<p>The puzzle is to work out that this is where sentences are put together from the description of the layout. Once a player has created any sentence, a bell rings and a box appears in a corner. The box contains the remainder of the magnetic strips.</p> <p><b>that   the times   and   such times become more common   face   a new   for which their now routinized skills don't work.   in cases like this   happens   that is just the sort we want to encourage in school but often have little success doing   transfer of prior knowledge mixed with innovation   Gee 2003 123</b></p>

Room	Function	Puzzle
Social space	<p>Area linking all rooms where the end puzzle is completed on a magnetic board. This is also the area where the three students are most of the time, offering help, doing things or being aggressive (depending on which mood of the game the player is in).</p> <p>Bits can be added to the board as soon as they are available. The view of the board can also be switched between instruction mode and completed it mode – i.e. at any stage, it can show the bits of the sentence that have been placed.</p>	<p>Put appropriate parts of a paragraph into place as instructed by the board. If a part of the board is touched, an instruction emerges. See figure 1.</p> <p>When a player takes a magnetic strip and presses it into the right place on the board, it stays there and cannot be moved. A point is scored. If it is in the wrong place, it stays there but can be moved.</p> <p>The final stage is to add the available punctuation, either by typing the correct version into a screen or taking punctuation marks on magnetic strips and pressing them into place.</p>

**Figure 3: Extract from play of the Interactive Fiction version**

**Syntactic Moves (the grammar game)**

An Interactive Fiction by Christine Sinclair

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**Entrance**

You're standing just outside the classroom where the grammar group meets. You can enter the classroom to the east. (New players should type "help".)

>e

You've heard that there is a group of people who will welcome you and not sneer at any problems with grammar you might have. You have your doubts, but you've decided to give it a try.

**Classroom**

A rather dingy space with the usual classroom stuff. Barbara, Abel and Kim are sitting round a table. They are hard at work and don't notice you come in. A door east leads to a corridor.

Barbara likes chatting to people.

You can also see a whiteboard (on which is a sentence) and an eraser here.

>look at whiteboard

A sentence appears on the whiteboard. It reads: "A sentence is a group of words with a complete grammatical structure."

>take eraser

(Barbara looks up and glares at you).

**Figure 4: Magnetic board instructions**

phrase | impersonal subject and verb | complement (phrase) | subordinating conjunction | subject | verb | conjunction |  
 noun clause | impersonal plural subject | verb | complement | co-ordinating conjunction | subordinate clause |  
 co-ordinate clause | relative clause + noun clause incorporating phrase with past participle | subject | article + adjective | object |  
 adjectival clause | phrase | subject (phrase) | verb | noun clauses | phrasal noun | citation

**Figure 5: Solution on magnetic board**

“Of course, there are times in a video game where players recognize that they are learning. These are the times – and, as the game progresses, such times become more common – where learners see that their now-routinized mastery, developed earlier in the game and in playing similar games, breaks down. They face a new challenge for which their now-routinized skills don’t work. In cases like this, a form of learning happens that is just the sort we want to encourage in school but often have little success doing: transfer of prior knowledge mixed with innovation.” (Gee, 2003: 123)