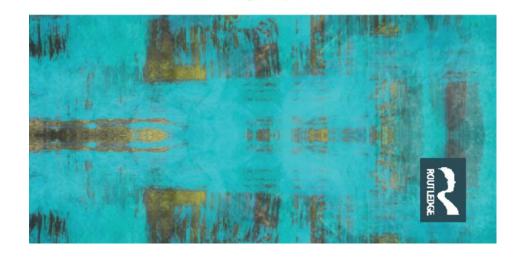
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LITERATURE, VIDEOGAMES AND LEARNING

Andrew Burn



REVIEWS

"Andrew Burn's rich and nuanced new book offers a meditation on the relationship between games and literature, considering what gets learned when students interpret classic works such as Beowulf and Macbeth through computer games. Along the way, he maps an ambitious and eclectic conceptual framework from multimodal analysis. This book makes valuable contributions to our understanding of the nature of literacies (old and new)." Henry Jenkins, Provost Professor of Communication, Journalism, Cinematic Arts and Education at the University of Southern California.

"Scholars, creators, critics, and consumers of media divide their attention into categories that feel natural—film, book, game. But the walls between them are also arbitrary. In this book, Andrew Burn demolishes and rebuilds them, showing how all media are made of play, and play can become a new lens for teaching, understanding, and enjoying them."

Ian Bogost, Ivan Allen College Distinguished Chair in Media Studies and Professor of Interactive Computing at the Georgia Institute of Technology.

"The most innovative proposal for reforming English classrooms yet proposed. We have tended to think of literature as content and games as activities. Andrew Burn shows us how to make literature come alive not just as words but as playful deeds and design. In the act, he is creating a whole new field." *James Paul Gee, Mary Lou Fulton Presidential Professor of Literacy Studies; Regents' Professor, Arizona State University (retired)*

"This book brings into focus profound and important insights into powerful links between the seemingly antithetical worlds of Literature and videogames. Grounded in deep knowledge of both, and of young people, pedagogy and curriculum, this book brings together decades of research with schools and major cultural institutions. It shows in practice how games and literature can work together, with students as active makers in creative and productive ways. A major contribution from Andrew Burn, the foremost figure in this field, it presents a rich vision of the future of Subject English, and contemporary forms of communication, imagination and play."

Catherine Beavis, Professor Emerita of Education, Deakin University, Australia

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INTRODUCTION TO SAMPLE CHAPTER

I've chosen Chapter 7 as a sample because it gives something of an overview of projects run by myself and colleagues in young people's game designs based, in this case, on Beowulf. It draws heavily on my colleagues' published work, while also offering an in-depth analysis of one game made by a 10 year-old boy in the workshop we ran at the National Videogame Arcade in Nottingham.

The chapter refers back to some of the arguments I've made in previous chapters about the playful disposition of literature in general, the cellular nature of game narrative in particular, the multimodal qualities of videogames, and the kinds of literacies that game play and game design involve.

It anticipates further chapters which go on to explore videogame transformations of Beowulf by graduate students of Anglo-Saxon, and game designs of Macbeth by secondary students in Cambridge, Yorkshire and London.

I hope readers may find this sample a sufficiently interesting taster to lead them to the whole book, which represents at least ten years of applied and theoretical research, as well as a hinterland of experience in classrooms, which honed my sense of the literature game and what young people make of it.

CHAPTER 7 [sample chapter]

PLAYING BEOWULF 1: LUDIC RHAPSODIES

Children's rhetorical engagement with children's literature and with game adaptations, presented in the previous chapter, revealed a critical understanding of the means used by literature and games to persuade, entice, enchant, and be credible, authentic, convincing: the aspect of communication known in social semiotics as modality. A poetic engagement would suggest an appreciation of what I've called, in Chapter 3, the semiotic toolkit of style: the distinctive configuration of patterns in communication by which its rhetorical aims are achieved, and by which it provokes affective response, whether these patterns (in the case of literature) be lexical, grammatical, figurative, or prosodic. To extend beyond literature into other media, including videogames, these rhetorical and poetic configurations extend to a wide range of multimodal resources, including the code which constructs the rules of the game.

In Chapters 5 and 6, we have seen how these patterns operate in games derived from children's literature; and explored the kinds of literacy involved in reading, playing, and engaging with fictional worlds across literature and game.

This chapter will move on to games designed by young people themselves as transformations of the Anglo-Saxon poem *Beowulf* in a range of contexts, from schools to coding workshops, drawing on the 2015 Playing Beowulf project described in Chapter 1.

The case of Beowulf

Beowulf is the best-known of a small surviving group of Old English poetry, existing in a unique manuscript held by the British Library, the Nowell codex. The circumstances of its composition and poetic nature are the subject of intense debate; indeed, almost everything about Beowulf is contested. Coles and Bryer (2018), who were partners in the project, suggest that its very instability and history of translations and transformations is precisely what makes it an ideal text for the project described in this and the next chapter, a project which included transformation into theatre, film and videogame:

Consequently, with its history of material and cultural adaptations and appropriations, its relation to popular fantasy genre and its heroic subject-matter, *Beowulf* presents us with an ideal literary text for exploring the transformative relationship between literature, drama, filmmaking and digital games. (Coles and Bryer, 2018: 55).

One debate in the scholarly history worth dwelling on briefly concerns the question of oral composition, with some scholars, notably Albert Lord (1961), arguing that *Beowulf* fitted the oral-formulaic pattern, suggesting oral composition and development over time, and only eventual transcription. Others disagreed: Benson, for example, argues that "we should assume literate production of those poems, such as *Beowulf*, with qualities contrary to what

oral composition might lead us to expect, and I refer here not to its cyclic character but to the sophistication of its diction and structure" (Benson, 1962: 340). However, somewhat confusingly, he concedes that "this poetry is obviously formulaic even when lettered, and the study of its formulas and themes need not be based on an assumption of oral composition. Because Old English poetry is formulaic, our study of it must begin with the exciting and useful techniques developed by students of oral verse" (Benson, 1962: 340).

Meanwhile, Tolkien's influential 1936 lecture 'The Monsters and the Critics' had already effectively shifted the ground of *Beowulf* scholarship from philological study of the text as an interesting piece of linguistic history to literary study of its qualities as a poem (1936/2006).

I'll return in the next chapter to the implications of these debates for literature students in Higher Education. What, however, are the implications for teachers in secondary, even primary education?

One point worth salvaging from the debate over the oral tradition may be to note the agreement over Beowulf's formulaic qualities, a feature quite distinct from the poetics of modern literature, where the very idea of 'formula' seems to fly in the face of notions of creativity, particularly those of the Romantic period. These modern preconceptions surface regularly in debates about creativity in education (c.f. Banaji et al, 2007), where originality (seemingly the opposite of formula) is often prized.

Whether *Beowulf* conforms to the oral-formulaic or to Benson's 'written-formulaic', to include it as such in the school curriculum is to admit a productive counter-example to these ideologies of creativity and literary value. Perhaps a useful way to look at it is to see *Beowulf* as occupying the middle ground between orality and literacy, the ground described memorably by Walter Ong in *Orality and Literacy: the Technologizing of the Word*. In many ways, *Beowulf* exhibits Ong's 'psychodynamics' of oral narrative (Ong, 1982). In particular, the figure of Beowulf himself is what Ong called a 'heavy hero': characterised by simple, memorable qualities; and *agonistic*, solving problems through physical action rather than psychological effort. I note in passing that Caillois's typology of games includes an agonistic category, representing games of combat (Caillois, 1958/2001). As I have argued in Chapter 1, this literature is *already* playful.

It is true that the poem is considerably more complex than many appreciate, and that the lengthy segments of apparent diversion into quasi-historical passages, tribal feuds and episodic flashbacks are markedly different from the main episodes which modern media transformations almost exclusively focus on. Tom Shippey refers to these as the A and B parts of the poem (Shippey, 2016). The A parts are complex, involved, heavy with names of characters who play little or no part in the poem's narrative, creating 'the Beowulfian impression of depth' (Shippey, 2012: 260). The B parts are simple, consisting of the three battles with Grendel, Grendel's Mother, and the Dragon, with no names other than Beowulf, Grendel, Hrothgar, and Beowulf's friend and successor Wiglaf (Shippey, 2016). However, history has, in effect, made its choice: these dramatic battles with the monsters are the feature of the poem which Tolkien promoted, and adapted in his own fantasy

writing; they are the parts which excite the imagination of modern audiences. As such, they are the parts which schools will focus on; and which even the university students of Anglo-Saxon literature choose, as the next chapter will show.

The B sections particularly illustrate that *Beowulf* is in many ways what we now think of as a popular cultural text. This strong, formulaic narrative in which a mighty hero battles fantasy monsters may be the earliest jewel in the crown of English literature, performed in the mead-halls of kings as well as for the common folk; but it resembles the adventures of Spiderman, Superman and Batman more than it resembles the tortured protagonists of Renaissance drama or the modern novel. This is not to dismiss the psychological insights, descriptive power, social critique and aesthetic innovation that the prose and poetry of the modern era produce; nor indeed the literary merit of Beowulf. It is not necessary to prefer the archaic and fantastic over the modern and naturalistic, or the reverse, when both are available.

The association with popular culture grows stronger with the media transformations of *Beowulf*. After a number of other film versions, it was produced as an animated film in 2007 (Zemeckis, 2007). In comic-book style, scripted by the graphic novelist Neil Gaiman, it represented Beowulf as a muscled super-hero (voiced with Cockney bravado by Ray Winstone), and Grendel's mother as a naked temptress (Angelina Jolie); though it also included excerpts from the poem in the original Old English and detailed attention to other characters in the narrative, such as Hrothgar's queen, Wealhtheow, and the envious thane, Unferth.

The *Beowulf* movie is valuable for the English and Media teacher as an example of the continuity of popular narrative, of how its tropes, structures, values and affective charge descend in a discernible line from the archaic worlds of Achilles and Beowulf to the superheroes of Marvel comics. It is the line of descent that can be traced through the transformative threads which take Arthur and the Matter of Britain from early mediaeval verse, both English and French, through Malory's great prose epic, to Tennyson's mournful idylls, T.H. White's comic genius, and the profusion of film and television of the twentieth and early twenty-first centuries, the most recent being the 2020 Netflix series *Cursed*, based on the story of Merlin's nemesis Nimue, and co-curated by the celebrated comics author Frank Miller.

Let's move on, however, and look at the relatively new medium of computer games. The animated film of *Beowulf* was further adapted into a computer game version (Ubisoft, 2007), in which the player takes the role of Beowulf, facing a series of challenges mostly based on the narrative in the poem, and including, of course, Beowulf's three great battles against Grendel, Grendel's Mother, and the Dragon. In each case, the combat sequence is managed through programmed game mechanics in which the vulnerability of both protagonist and antagonist is registered on-screen as a health bar.

An argument for English teachers to consider is that computer games are particularly well-suited to adapt the ancient narratives of oral (or quasi-oral) tradition I have described above. This is partly because they share the popular cultural milieu of their sister media

forms. But it is also because they are, literally, formulaic texts, made up of computer code. Suppose you want to describe the death of a warrior in battle. The sensibility of modern literature requires variety and originality – cliché and formula are the enemies. We need different words to describe the warrior's fall each time; different words to describe the sounds of battle; novel ways to render the agony of death. For Homeric texts, the opposite was true. The oral poet, performer and audience needed the repetition of the same words for these familiar scenarios: words that could be easily remembered, easily re-ordered if the performer needed to alter the narrative, and easily recognised by an audience which required variations on a familiar theme. The battlefield slaughter of The Iliad follows a wellrehearsed formula of weapon use, disembowelling and the ringing of armour about the fallen warrior. The computer game is not dissimilar. The character is a bundle of audiovisual resources, constant through the game. The actions of killing an enemy will involve triggering the same animation cycle, the same soundtrack, the same range of player options each time. As in the oral performance, significant variations on the theme are possible, such as the way in which these options can be exercised by the player. Although computer games are very different from traditional oral narratives in many ways, both employ formulaic narrative techniques, integral components of the popular aesthetic.

An 'oral-ludic sensibility', then, might have much to offer the cultural work of the English and Media classroom, offering a recuperation of ancient stories, styles and values; a dramatic engagement for students with the protagonists of these narratives; a goal-oriented approach to the problems of everyday life; and a reminder of the importance of pleasure and play. In this respect, I have used the compound figure of the *rhetor-rhapsode* in Chapter 4 as an image of how young people may engage with literature, but also construct their own creative expressive work, in writing certainly, but also in drama, in image, in moving image, and in game design. Though the rhapsode is the classical Greek figure who 'stitches poetry', the Anglo-Saxon scop performs the same task. The case studies presented in this chapter will explore how young people might (re)stitch digital poetry through game design.

The Beowulf project

The aim of this project was to develop a bespoke game-authoring tool for *Beowulf*, based on Missionmaker, and to research its use with a range of groups using it for different purposes. The questions posed by the project were: what kind of engagement with the poem are in evidence in the game design process? What kinds of transformation of the poem are evident in the game? What kinds of creativity are involved?

The project was a collaboration with The British Library, which holds the only manuscript of *Beowulf*, part of the Nowell Codex, one of two manuscripts within the collection designated as Cotton Vitellius A, xv. Digital Curator Stella Wisdom worked with the project team to develop the game-authoring software, and to find ways to integrate into it digital pages from the manuscript, which was one of the major early digitisation projects of the Library. It led to a further project we also made use of, the Electronic Beowulf project at the University of Kentucky, which makes publicly available high-resolution images of the manuscript

leaves, alongside a digital version of the text in Old English, with a range of interactive resources enabling, for example, translation of individual words (Prescott, 1997).

This chapter will consider a series of examples of games designed during the project. These strands were led by my colleagues in the project team, and I draw substantially on their work in providing these accounts. I'll first briefly describe the software tool.

Missionmaker

The origins of this software lie in the first Missionmaker, developed in 2007 by Immersive Education, as described in Chapter 1. For the *Beowulf* project, the tool was completely redesigned in the game engine Unity (www.unity.com) by developers Abel Drew and Bruno de Paula. In this version, the tool provides a design interface (Figure 7.1) allowing for rapid design of the game world by placing 2D tiles representing chambers. In Missionmaker Beowulf, these include medieval-themed locations, including the mead-hall, Heorot, the mere where Grendel and Grendel's Mother live, and the cave in the cliff-face where the Dragon's lair is found. A subsequent interface displays this world in 3D, allowing users to place assets (characters, props, pickups, media objects) directly into the world. These include generic mediaeval characters, armed warriors, a King and Queen, two monstrous characters, and a Dragon. A further interface allows the creation of rules, with the possibility of multiple conditions with Boolean operators (e.g. "If | Rune-spear clicked/ OR Rune-spear | state | owned by player") and multiple actions consequent on those conditions (e.g. "Door State Open True / AND Warrior character State Aggressive True").

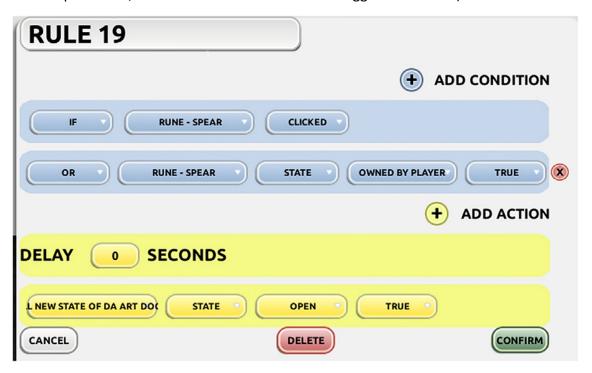


FIGURE 7.1: Missionmaker Beowulf: coding interface.

De Paula explains how this coding interface provides a simple, 'high-level' programming language:

One important aspect regarding "coding" in Missionmaker is the programming language: ... producers use a constrained form (context-sensitive lists) of natural language to design their games. This approach [provides] an easier means to grasp how to organise and communicate commands to the computer than regular programming language; moreover, the constriction of natural language avoids syntax errors (e.g. typos or use of words not recognised by compilers). Due to this easier approach to game design, MissionMaker can be considered a "low floor" [Burke and Kafai, 2014] tool, meaning that beginners can start producing their own games without having to resort to complex knowledge.

(De Paula et al., 2017: 43)

The projects described in this chapter, and in Chapters 8-11, all use a version of this software. It enables us to look closely at the multimodal toolkit of visual, auditory and procedural resources are used by the young people in their game designs, and how these uses transform the literary texts around which the projects are based: *Beowulf* and *Macbeth*.

Australian Theatre for Young People in Sydney, Australia.

This project was organised by project partners Professor Michael Anderson of the University of Sydney, and Dr David Cameron of the University of Newcastle, Australia, building on their work over many years on the relationship between educational drama and game design. Accordingly, the workshop participants devised a piece of theatre based on the poem, using giant puppets which they constructed with a local puppeteer, Phil Relf. At the same time, they designed their own games using Missionmaker, and then incorporated selections from the games into the drama through large-scale projection. The work explored how narrative, combat, heroic quest and monster figures can be realised in the cognate forms of drama and game.

The game used in the performance was captured as a video sequence, onto which a green-screen superimposition of the giant puppet hand of Grendel represented the player's point-of-view as Grendel, moving through the virtual mead-hall of the videogame (Figure 7.2). This is one example of the ingenious mash-ups of drama and game achieved during the week. The lessons derived from the project about how game-worlds and drama-worlds can be integrated, along with the cultural traditions, technologies and pedagogies associated with them, is elaborated by Anderson and Cameron in a chapter for an edited book themed around play in different social contexts (Anderson & Cameron, 2017).

Here, then, the processes of transformation of the poem are subject to the poetics of drama and media arts, and exploit the overlap between the two. They both involve the creation of imagined worlds and the characters which inhabit them, with point-of-view differently constructed in the drama and the game. They both involve role-play, as Carroll anticipated

in his early essay on this subject (2002); though again, differently experienced, embodied, voiced, in game and drama. They both exhibit forms of 'literacy' which emphasise improvisatory, agile forms of making, which are performative in the very act of designing performance – which are, in short, *dynamic* in the sense described by Potter and McDougall (2017). Finally, the stylistic toolkit drawn on here is, as I've described it in Chapter 3, multimodal, merging the rather different multimodal ensembles of digital game (animated objects and characters, 3D graphics, first person avatar); and devised theatre (papier-maché puppets, bodies, dramatic action, voice, music, dramatised space).



FIGURE 7.2: The giant puppet hand of Grendel in the Beowulf game-world, from the Australian Beowulf workshop.

British Library Young Researchers

At Regent High School, a group of Year 9 students worked with the British Library's Young Researchers programme, which works with young people at risk of exclusion in London. In this case, programme coordinator Abi Barber from the British Library organised eight afterschool workshops, working with Head of ICT Rob Conway and English teacher Diana de Bortoli, and with UCL IOE researchers: myself and Bruno de Paula.

The group began by looking at extracts from *Beowulf* in translation, and by visiting the British Library to see the manuscript. They went on to design their own videogame versions of the poem, using Missionmaker.

A challenge for all the school workshops was to forestall perceptions of the story as male-dominated sequences of combat, especially for boys. While this may seem a stereotypical consequence of gendered gaming cultures, it is more complex. Interpretations of *Beowulf* have always been dogged by the question of gender. The commentary offered by Tolkien in his series of lectures on the poem, published alongside his translation (Tolkien, 2015) pays very little attention to important female figures such as Hrothgar's queen, Wealhtheow. Our colleagues in UCL English, by contrast, had emphasised to us the significance of Wealhtheow

in the politics of the court, and in the question of Hrothgar's successor, complicated by Beowulf's arrival in Heorot. Accordingly, we suggested to the group that they consider the role of the queen, and her anxiety that Beowulf might supplant her son as heir to the throne.

One pair of boys developed the role of the Queen in this regard, effectively telling the story through their programming of the game. Bruno de Paula explains how the boys manage this by developing a series of 'secrets' in their design, apparently innocent objects such as barrels, which the player needs to discover and click to activate the next sequence which enabled this:

It is also interesting to notice how, in their speech, this mechanic becomes a kind of abstraction. In different occasions, both pupils called this click-outcome dynamic a "secret". The following excerpt is an example of this process:

Student 1: By giving rewards on the kind of places you'd have to click... So, there's one secret where, in the beginning, you have to make the king spawn in order to pass through the door, or else the guards will attack you, 'cause you're trying to go through them. We made it so you're supposed to click a barrel, but no person will just click a barrel at random, so we made that, so, there's a sword there, so, if you miss the sword, you'll click the barrel, and when you pick up the sword and you turn around, the king will be there.

(De Paula et al, 2018: 43)

These 'secrets' are a feature of the game mechanics designed by the boys, and, as de Paula argues, their conception of them as an abstracted category is a computational concept. However, it works in the service of the narrative structure of their game, and particularly the function of the Queen (Figure 7.3):

One clear example was the introduction of the Queen as a hidden character: she was only accessible through another "secret" (opening a hidden door through a click and clicking in a specific floor mat). ...

This change in their game's dynamics can also be connected to narrative elements: in this case, these ludic changes were related to a supposed ambiguous position of the Queen, jealous about Beowulf's success but also fearful about the fate of her Kingdom, which was being attacked. This narratological justification for the Queen's position is found in the students' explanation about their game:

Student 2: It's kind of the beginning of the Beowulf poem where she kind of doesn't like Beowulf, because she wants her son to be king, and not Beowulf...

(De Paula et al, 2018: 44)

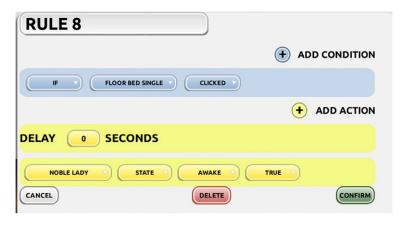


FIGURE 7.3: The final rule in the sequence which produces the Queen's narrative function in the Regent High game.

In this case, then, the boys transform a particular rhetoric of gender and power in the poem into a procedural sequence in which the 'secrets' have a number of functions. They expand the character of the Queen into a function of threat balanced against reward (a balance that also operates in the *Beowulf* poem). They allow the player a choice which offers an easier or harder 'reading path' or traversal through the game's narrative (Lemke, 2002). In this respect, they also anticipate different levels of player expertise, considering how to draw attention to the 'secrets' – but not too much attention, making the game too easy. They draw, therefore, on gaming culture, not only in this but in the roles they assign themselves, with one of them responsible for the story, and one for the 'mechanics'. These protodesigner roles show an awareness of the industry design process, and of the need to integrate narrative and ludic elements of the design.

De Paula et al make a general proposal of how literature and games connect in this instance through the creation of rules, and how these are evidence of both procedural narrative and of computational thinking:

Beowulf, through its "algorithmical loops" — e.g. Beowulf fighting different monsters — can be understood as a good example of how non-digital environments can embody procedural aspects. We can argue, then, that literature and games are closely-related cultural forms, not just because of narrative content such as mediaeval fantasy, but because the very grammar of these narratives and game programming are similar in certain ways: procedurality and the computational thinking it involves — problem-solving, working backwards from projected outcome to cause and condition, designing rules to govern the logic of the imaginary world, its characters and events.

(de Paula et al, 2017: 41).

PGCE English and Drama students, UCL Institute of Education

A two-day workshop with a group of PGCE (Postgraduate Certificate of Education) students specialising in English and Drama was conducted by project partners and education lecturers Jane Coles, Theo Bryer and Morlette Lindsay. Coles and Bryer describe how the first day of the workshop involved exploring a section of the poem in Seamus Heaney's translation (Heaney, 2000) through 'ways of story-telling through drama, filmmaking, Old English language-based activities and analyses of visual representations' (Coles and Bryer, 2018: 57). These approaches encouraged the students to probe the poem's ambiguous representations of monstrosity, femininity, and male heroic status.

They move on to the second day, which involved making games using Missionmaker. They describe how one student makes a game from the point of view of Grendel's mother, affording her a voice she does not possess in the poem:

However, one student made the bold choice of framing the action from the point of view of Grendel's mother. From the palette of "rooms" provided, Arthur chose a cave and then a river-bed joined by a tunnel lit by torches as the context for the action. Nevertheless, he became frustrated in his attempts at signalling to putative players how they were being positioned as the monster at the bottom of the mere. In the end he compensated by providing a "live" commentary while a fellow student played his completed game. As researchers, we provided an audience as Arthur and Adam shifted in and out of role:

Adam: [Trying to activate a rune to open a door on screen] Now that doesn't like me, that door.

Arthur: You don't want to go there.

Adam: It's not even a door, it's a window really ...

Arthur: Exactly! Into yourself.

Adam: [Giggles] I wonder if Beowulf thought that, as he stared into the eyes of my child as he killed him.

Adam's significant gaming experience was a factor in his recognition of the possibilities that a rune and a door on screen might represent. He compares images from Beowulf in an earlier conversation to Dungeons and Dragons, World of Warcraft and Skyrim (Bryer, 2020, 195). The ironic and witty tone that both students assume is suggestive of how conscious they are of manipulating aspects of the medium, enabling them to simultaneously inhabit and narrate the story of the poem, relating the symbolic aspects of the game to the poem. It is noticeable in this transcript that Adam playfully assumes the voice of Grendel's mother as he moves closer to battle in the on-screen game – reminiscent of the way in which Morlette had deftly shifted her narrative perspective (in her case, partly through physical movement). Adam's identification with the role reaches a climax later on in the game play when a ghastly figure (representing Beowulf) suddenly appears out of the gloom on screen [Figure 7.4]:

Adam: Oh god, oh No.. Jesus! Oh Mr. Beowulf, please, I don't want to hurt you, I'm really sorry about what my son ... [The figure appears to run out of the frame towards the player and the red bar icon representing Grendel's mother's strength suddenly drops to zero, so that it is clear she is finished.]

Adam: [He spreads his hands and drops his head] Oooh.

On screen a text appears, signalling the end of the game:

Grendel's Mother suffered her inexorable fate at the hands of her tormenter ... Beowulf went back to Heorot with tales of valour. Tales that he himself would tell.

(ibid: 61-2).



FIGURE 7.4 – The appearance of Beowulf in Arthur's game.

As in the case of the Anglo-Saxon students described in the next chapter, then, these students use the game to explore perspective, challenge representations of monstrosity and gender, and to do this through a virtual dramatic experience constructed partly of intrinsic textual features (first person avatar, tunnels, lighting, images, health economy); and partly through amplification by player engagement and in-role commentary. Theo Bryer notes how the design of the game is completed, for its author, by the engagement of the audience in the affective charge of the narrative:

For Arthur, Adam's response is a triumph. The panic that Adam expresses through the rapid movement on screen, heightened by the voicing of his character, particularly the pleading that precedes his character's extinction, is indicative of a satisfying degree of surrender to the game-play. I express shock at the sudden appearance of Beowulf. Adam may have known it was coming but he also responds with an appropriate degree of surprise, 'Oh god. Oh no, no, no.'

(Bryer, 2020: 259).

The focus here, as in the Australian drama project, is on dramatic aspects of the transformation. The group had spent a good deal of time on the previous day exploring how Grendel's Mother is constructed. As in the case of the Anglo-Saxon students described in the next chapter, they had noted the oddities of the character – how she is never described, never speaks, and the instability of the linguistic translations, in particular the odd word aglæca and its compound aglæcwif, translated by Heaney as 'Monstrous hell-bride', though aglæca means something closer to heroic opponent when applied to Beowulf or Sigemund. These re-imaginings of a narrative entity whose physical appearance is never described, and whose character is described by ambiguous terms also applied in the poem to warrior-heroes like Beowulf and Sigemund, are part of the history of transformations of the poem, a question of the historical construction of monstrous femininity, as Alfano argues (1992). They indicate the profound instability of an imaginary being who is a compound of the feminine, the cursed (the references to Cain in the ancestry of the Grendelkin), and the alien other – any creature from outside the known world of the author.

These transformations are echoed in visualisations of the poem in cinema – and indeed challenged in the Zemeckis film, which memorably produced a motion-captured animation of Angelina Jolie in the role, the visual polar opposite of a monstrous hell-bride, presumably. In the case of Arthur's game, the reversal of point-of-view in the first person avatar has a different effect: it renders her invisible, while placing the player in her position, in much the same way as one of the student games described in the next chapter locates the player as Grendel. Meanwhile, the role is effectively expanded in Arthur's game in the act of playing, through Adam's improvised commentary, which has the effect of lending Grendel's Mother the voice which she lacks in the poem, moving from playful humour, through quite stark dramatic speech ('I wonder if Beowulf thought that, as he stared into the eyes of my child as he killed him'), to the exclamatory climax of the battle with Beowulf.

In this strand of the project, then, the rhetorics of gender in the poem – its ambiguities and silences as well as its depictions of monstrosity and warrior virtue – are grappled with through the poetic modes and media characteristic of the English classroom: poetry, drama, film, and videogame design. These teachers-in-training rehearse the literacies they will go on to develop with their own pupils; they assume the role of the ludic rhapsode by proxy, ostensibly, though their investment in the role is no less than that of the young game-designers in other strands of the project.

Bishop Challoner's School, London

At Bishop Challoner's School, English teacher Alison Croasdale organised an after-school *Beowulf* Club of Year 8 students (12-13 year-olds). She introduced them to the story of *Beowulf*, and their game designs gave a vivid impression of how the story connected with their wider cultural interests. In some cases, these were the range of fantasy media narratives which are in some ways the descendants of *Beowulf*: *The Lord of the Rings*, Harry Potter, and the videogame *The Elder Scrolls V: Skyrim* (Bethesda, 2017), with its Nordic

characters, narrative and setting. They chose music to accompany their games, equally diverse in its cultural reach: *Dr Who*, Icelandic and Swedish folk music, *Super Mario Bros*, Norwegian pirate music, Irish folksong, *The Hunger Games*, and music from *Skyrim*. Figures 7.5.1-4 show screen grabs from the group's games.









FIGURES 7.5.1-4: Battling enemies: Game designs in the Beowulf Club.

Croasdale's own research explored how the students' games constructed gender roles, emphasised the importance of monsters in the narrative, and drew on their own experiences of *Assassin's Creed*, *Minecraft*, *Pokémon* and others. In discussing one girl's game, she observes how the narrative is structured around generic game elements: providing weapons in a rack of swords; puzzles, in the form of scrolls containing clues to unlock doors; a final 'boss battle'; rewards in the form of health points (Croasdale, 2016: 38-9). She also observes how this girl shared a common affiliation to 'geek' culture with the rest of the group, with an explicit interest in games and digital technologies. She cites Elizabeth's PowerPoint presentation about her use of Missionmaker:

Missionmaker's rule system is easy to understand and if used correctly can preform [sic] complex equations. For example, we programmed our game so that, if the player did not own a certain object as they had not picked it up, they could not enter certain zones. A few of us were able to add values to the game, as the creatures we spawned in were able to take away points from our health (Game Value 1). ... Missionmaker also made it possible for us to add music into our games and to create end screens for when the character died.

(Croasdale, 2016: 40).

Croasdale notes how the hybrid discourse in this piece indicates a mix of school computing, game culture, and terminology learnt from the software itself. Elizabeth observes in some detail the workings of the ludic poetics, its multimodal equivalents of literary characters and actions, and their properties and destinies.

Croasdale's research is unusual in its success in following the transformations of the literary text beyond the game design, into other modes and media. She presents examples from the

students' work in animation, for example the use by one boy of *Minecraft* Mini-figures to play the roles of Grendel and Beowulf, inspiring a group discussion about 'how to make the figure playing Grendel lose his arm' (Croasdale, 2016: 47). She goes on to analyse pieces of creative writing by the group, which build on their experiences of the game design and animation. These include a piece in the style of a newspaper report by one boy, who, inspired by the research processes undertaken for the game design by a girl in the group, decides to write partly in Danish using Google Translate. Another piece by a girl in the group who was a Dr Who fan situates the battle against Grendel in the framework of a Dr Who time-travel to mediaeval Denmark:

"Hello!" The Doctor smiled. "I'm the Doctor, and this is Donna, my ... companion". Before anyone could answer, a terrifying roar shook the ground and the people in the hall scattered and someone shouted "Grendel".

The Doctor's eyes widened. "This isn't ... it can't be ..."

"Beowulf, help!!" shouted someone as a large scaly green creature that looked like a cucumber crocodile burst through the doors. Donna screamed, of course having absolutely no knowledge of English literature, and ran.

(Croasdale, 2016: 52-3)

Croasdale points out the incorporation of the Beowulf legend into the fan fiction genre here, as well as the indebtedness of the piece to the jokey culture of the group. She also notes how the writing emerges from the series of transformations the students have undertaken: its deft management of the alternation between melodrama and humour grows out of the pleasure the group had taken in playing with the assets of the software, in this case the Dragon. It took time to play, mess around, enjoy each other's experiments.

Croasdale's work charts very effectively how an engagement with a literary text such as *Beowulf* involves transformation through a series of modes and media; how it can be culturally situated in a hybrid set of discourses, affiliations and pleasures (literature, games, music, TV drama, technology); and how its creative practices relate to individual and peer group identities. There is a very strong sense of the students in control of the cultural resources and processes here; and also of development of design practices, although it's a kind of development which the 'official' curriculum is largely incapable of recognising or rewarding. She provides further compelling examples of writing from members of the group, integrating details and patterns from the game designs with elements from popular cultural investment from manga to Middle-Earth.

The National Videogame Arcade workshop

Aaron was a 10-year-old boy who attended our workshop at the National Videogame Arcade in Nottingham, along with a small group of others. We introduced Missionmaker through a brief demonstration, and were prepared also to introduce the poem, assuming

that this group would be unfamiliar with it. In fact, Aaron had met the poem in school, as his class project for the previous year (2014) had been based on it. He was able to recount the episodes in some detail. The question with him, then, was not so much how making a game might familiarise him with the text, but what kinds of transformation he might achieve, and what they could tell us about literature, games and literacy.

Over the course of approximately two hours, he made a simple three-stage game. In stage 1, the player (as Beowulf) meets the figure of a king, who gives him a mission to get past a guard to reach the Dragon. In stage 2, he meets and defeats the guard. In stage 3, he finds the dragon, defeating it also. Between the stages, he constructs a network of tunnels to impede the player's direct progress from one chamber to the next.

He describes progress through his game, walking the researcher through it:

So basically, you come through here, and there should be somebody who tells you that you have to kill the knight and –

Interviewer: Who tells you that?

Aaron: the king

...

Then you go ... here ... then he'll try and attack you and you've got to kill him and then he should say something .. and then you've got to go through here and open this door, and the dragon's there and you've got to fight him. And the game's – over (shrugs).

Two features of his account are immediately evident. The first is the second person pronoun and address, characteristic of games and game walkthroughs. The second is the imperative mood: the triple repetition of "you've got to". I'll return to these features and how they are echoed in his game design.

Five aspects of the design process gave particular clues about the kinds of creative work involved, and its relation to literacy and literature.

The game world

The first of these was the creation of his game world. He quickly mapped it out, as the kind of cellular narrative space described in Chapter 2, with the three main chambers containing the King, the Guard and the Dragon, and the tunnels between them. The tunnels, with their dead ends and choices of left, right or straight ahead, represent perhaps the oldest kind of spatial game, the maze, used here by Aaron to provide additional challenge for the player, in the spirit of many contemporary digital games, as well as the oldest maze of all, the Minoan maze of Daedalus (Gazzard, 2012). The *Beowulf* poem has something of this introduction of distance between Beowulf's point of departure in Heorot and his arrival in Grendel's

Mother's lair, in his journey through the fens and his descent through the lake, and the spatial confusion it introduces.

To use Hutcheon's notion of the heterocosm (2013: 14), then, Aaron's game fuses spaces which reference the poem, such as the mead-hall and the Dragon's lair, with the gamespace of the maze: spaces replete with narrative potential, which also indicate the temporal progress of his game, and which offer a degree of player choice while directing the narrative towards its dénouement.

The mission command

The second feature of his game to note was the addition of media objects. He wanted the King and the Guard to speak, so recorded their speeches himself on the i-phone of one of the research team members. The speech of the King was:

Hello Beowulf. You will have to kill the guard to get to the Dragon. Then, once he has been defeated, you have victory.

The dramatic qualities of this performance are noteworthy: the elevated diction, especially in the final section, with its embedded clause, its use of quasi-poetic lexis (defeated; victory); and the nominalisation of winning as *victory*. Matching this formal style is the voice he adopts for the performance: a dramatic, husky timbre, slow tempo, deliberate, exaggerated pronunciation, and no trace of his own Nottingham accent. These are features of oral performance; and since they are derived from the *Beowulf* story Aaron has heard in school, they can be seen as a continuation, in miniature form, of the oral tradition in which the poem may have originated. Its transformations, as we have seen, have taken it through written form in the original manuscript, through countless successive print versions and translations, to Aaron's small transformation back into oral performance, improvised, felt, born in the moment.

So far, such a transformation might characterise a dramatic version of the poem, as it does in the dramatic improvisations generated by the trainee teachers who worked on this project with us. However, there are four related grammatical features which signal that it is specifically a transformation into videogame. The governing feature is that Aaron's improvised mission speech is in the second person, which generates the second person pronoun, what Ensslin calls 'the textual "you" (Ensslin, 2014: 96). To be sure, there are comparable "mission statements" in the poem, such as the words of Hrothgar as he charges Beowulf to defeat Grendel's Mother:

Sec gif þu dyrre.

Ic þe þa fæhðe feo leanige,
ealdgestreonum, swa ic ær dyde
wundungolde, gyf þu on weg cymest.

(Electronic Beowulf, lines 1381-1384)

Seek if you dare

I for that feud a fee will repay,

Ancient treasure, as I did before,

Winding gold, if you come away.

Aaron's King issues a similar mission statement here, echoing the poem; while the poem seems to anticipate the second person address of the videogame. We can imagine the Anglo-Saxon scop performing the poem, leaning towards his audience with these words, effectively positioning them temporarily as Beowulf, much as Aaron's King does here.

The second person also allows Aaron to name the player. This is an important convention in videogames: while we may know who our player-character is, we may also not know, as we spring to life in a game ("spawn" in player parlance) in a state of complete amnesia, requiring clues about our character's history and function, which may arrive as on-screen written text carrying backstory, or (as in this case) a non-player character speaking to us.

Because the speech is programmed by Aaron to play two seconds after the game is started, it also has an introductory function, launching us into the narrative. This is the function performed in *Beowulf* by the well-known first lines, and especially the first word "Hwæt", which is either an introduction to an exclamative clause, or more commonly seen as a standalone interjection (Walkden, 2013). In Aaron's King's speech, the "Hello" carries something of this function.

Finally, it is significant that the mission statement is couched in the imperative mood. While literary narratives are typically presented as *offers*, in the indicative mood, effectively making a narrative statement, games are typically couched as *demands*, either asking questions of giving commands, in either case requiring a player action. Aaron's "You will have to kill the guard" conforms to this convention. Once again, it echoes the grammar of Hrothgar's challenge, which is also a demand: "Seek if you dare".

I imagine what these features of poem and game might provide for an activity in the English classroom: how the transformation of Old English poem into videogame might reveal that 21st century students might be, albeit unknowingly, treading in the foosteps of their ancestral performers of narrative, whether oral or written-formulaic; and how it comes to be that a thousand year old poem contains features so like those of a quest-based videogame. I imagine how such questions might lead to an investigation of the history of *Beowulf*; of Tolkien's own transformation of the text in *The Hobbit* and *The Lord of the Rings*; and how his Middle-Earth creations gave rise to the vast, sprawling genre of role-playing games, at first table-top, then digital (Carr et al, 2006). These kinds of activities might represent the equivalent of the philological strand of English studies in the school context; and I have explored such approaches in a workshop with London teachers as part of the Anglo-Saxon Kingdoms exhibition at the British Library.

Object design

What, however, of the visual modes of Aaron's game? And the code he creates to construct the ludic action? We have seen how he builds his game-world from available units to make the action's spaces, connected by the tunnel maze. He peoples these with his three characters: the King, the Guard and the Dragon. These are selected and placed appropriately in what is effectively a simple form of coding based on objects, whose locational properties are managed through the 3D gizmo which allows sizing, rotation and movement in any direction (figure 7.6).



FIGURE 7.6: The gizmo positioning Aaron's Dragon.

This design process is similar in some ways to set-dressing and actor blocking in theatre; and it transforms those sections of the poem which delineate character and space: in effect, a descriptive passage which tell us about Beowulf's boar's head helmet, or the dank surroundings of Grendel's Mother's lair. It's true of course that in the design of Missionmaker we had to make a choice to pre-design the assets. This was largely practical — we realised that if students were going to design their own characters, spaces and objects the project would be impossible, requiring expertise in 3D modelling beyond younger students, and extending the time required for the project, already a concern of many teachers.

However, as we have noted, a feature of the formulaic process of composition in archaic epic narrative poetry is the use and re-use of building-blocks of text, whether these be Homeric epithets or Old English kennings. For Aaron to employ characters from a generic set (known as the Barbarian Horde) is not too far away from this tradition. When this point is raised by educators in relation to the question of creativity, we have four answers. The first

two are those already presented. The third is to say that, in terms of multimodal design, the possibilities for the deployment of these visual assets is limitless – even with the use of the tunnel corridors, no two students would make the same maze. The fourth is to emphasise the importance of aural modes: spoken and language, music, sound effects. The use of these is unlimited, of course. In principle, the game could contain the entire spoken version of *Beowulf*. The final point is the significance of the code and the game rules, which are again unlimited in their formulation, their relation to game objects, and their number.

Coding the game

To turn to this element in Aaron's game, we find that in his two hour session he has made five rules.

In the order he made them, these are:

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RULE 1
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IF | DRAGON DOOR | CLICKED

DRAGON DOOR | STATE | OPEN | TRUE

RULE 2

IF | DRAGON DOOR | CLICKED

DELAY 5 SECONDS

REPTILE CREATURE | STATE | AGGRESSIVE | TRUE

AND

MEDIA OBJECT | STATE | PLAY | TRUE

RULE 3

IF | PLAYER | TRIGGER | KNIGHT TRIGGER | ENTER

KNIT [sic] SPEECH | STATE | PLAY | TRUE

RULE 4

IF | KNIT [sic] SPEECH | STATE | PLAY | TRUE

BARBARIAN MALE 3 | STATE | AGGRESSIVE | TRUE

RULE 5

IF | GAME | STATE | AWAKE | TRUE KING SPEECH | STATE | PLAY | TRUE

The three functions of this simple algorithm are to allow access to spaces, to trigger speech, and to instigate combat, or at least an invitation to combat. In Beowulf, these are important narrative functions. Access to spaces, whether Grendel's mother's lair or the cliff cave of the Dragon, organises the world of the poem. Direct speech occupies a substantial part of the poem, conveying backstory, politics, ritual boasting, formal lament, and the commissioning of the quests, among others. And finally, combat of course provides the pivotal moments of Beowulf's life and death. In Aaron's game, it is programmed into the non-player characters, the Guard and the Dragon, so that the player has the option to fight or to run.

Interestingly, the order of composition of the rules show that Aaron has begun at the end of his narrative, with the final confrontation with the Dragon (rules 1 and 2). He then works his way backwards through the Guard (who he calls the Knight), arriving at last at the introductory speech of the King, programmed to play two seconds after the game begins. This order of composition makes sense in game design, as the algorithm needs to know its eventual goal in order to set up the rules which will execute the necessary steps towards it. As we have seen however, Aaron's design of the game-world in the cellular units of the 2D tile editor has created the spatial logic for his game narrative, so that there is a visual narrative structure in place as he creates the rules and places the assets and characters.

The wider design plan

The two-hour length of this workshop prohibited further development of Aaron's game. However, he made it clear to us that is plan was more ambitious; and his ideas for the extended version provide more clues about literacy in relation both to the literary text and the game design. He suggested the idea, based on his prior knowledge of the *Beowulf* story, that Beowulf might die at the end:

I: What was your idea for the king dying at the end?

A: Yeah, basically Beowulf is meant to die at the end and then the other player who helped Beowulf is going to become king.

I: OK, so how does that fit with the story?

A: Um, cos Beowulf is the king, and then Beowulf goes to fight, and all the other men were wimpy and don't come, and then that man, his name's Wiglaf, he goes and he helps Beowulf, and then Beowulf dies, but kills the dragon at the same time, and then, um, um, Wiglaf gets the crown for helping him.

The hybrid discourse here, rehearsing the events of the poem both in formal poetic diction (Wiglaf gets the crown) and in contemporary vernacular idiom (all the other men were wimpy) indicates how Aaron is not simply recalling the poem, but that this in itself is a form of textual transformation. Furthermore, the representation of Wiglaf at first as "the other player" indicates his intention to incorporate him, not as a non-player character, but as an additional player-character in a multi-player game set-up (a feature which this software does not in fact provide).

He also suggests an additional level in which, surprisingly, we might meet the Dragon's Mother, extending the narrative structure of Grendel and his Mother by applying it to the Dragon:

I: And what else do you want to add?

A: I dunno – like an extra level? Like, the Dragons' Mother? Or something? Yeh, like Grendel's Mother.

Unlike the multi-player accommodation of Wiglaf and Beowulf's death, which has clearly been part of his plan from the outset, this novel extension is a spur-of-the-moment improvisation, inventively reworking a structure from the text.

Ludic Rhapsodies

The rhetorics of the poem - its warrior sensibilities and their expression in heroic combat; its representation of evil in monstrous form, modified by the contradictory image of the monstrous-feminine; its elevated heroic style – are recalled, transformed and re-imagined by the young game-makers in these different strands of the project. The analogies with the oral-formulaic process have been noted; or more properly perhaps with the "writtenformulaic", which Benson describes as the written composition of Old English poetry displaying formulaic structures similar to those of oral composition (Benson, 1966).

This intermediate position between oral and written expression is, from a different viewpoint, what Walter Ong captures in his concept of secondary orality (1982). Ong proposes that something or the oral mindset – not a residue of primary orality, but a new phenomenon – exists in the media age, in mediated utterance which takes the form of written language but exhibits something of the fluidity of oral expression.

If the classical rhapsode, with her lyre and staff, or the Anglo-Saxon scop with his lyre, performed their poetry and song in the multimodal mix of music, voice and gesture; and if these performances were transformed into the different modes of manuscripts, illuminated or plain; then what poetics appear in Aaron's ludic version of *Beowulf*? What counts, here, as the rod, the lyre, the pen and parchment of the digital age and the literacies it generates?

The etymology of rhapsode is significant (as noted in Chapter 2), deriving from the ancient Greek words 'to stitch' (raptein) and the word for 'song' (ode) (OED). The oral poet is,

literally, the stitcher of songs. However, the classical rhapsode was an ambiguous figure. In the early stages, the performance of poetry – in effect, the Homeric tradition – arose out of the composition of poetry, through oral improvisation, by the *aioidoi*, the storytellers, antecedents of the rhapsodes (Enos, 1978: 137). In the later stages of the history of the rhapsodes, they had become something rather different: preservers and professional performers and interpreters of the Homeric corpus, while the *kithara*, or lyre, gave way to the staff (ibid: 138). The rhapsodes, then, were transitional figures in many ways, poised between creation and interpretation, between oral and literate cultures, between music and speech. These ambiguities are similar in many ways to those facing the pedagogies of digital literacies today. How do educators balance the requirements for print literacy with, on the one hand, the persistence of an oral mindset in the improvisatory communication of online culture; and on the other, with the increasingly multimodal nature of communication and creative expression? How, in the context specifically of literary study, do they balance the act of critical interpretation against the act of creative re-making?

In the case of the last example explored in this chapter, what kinds of rhapsodic practice appear in Aaron's work? On the one hand, the improvisation of the dramatic speeches he records, 'written' into the i-phone, exhibit the characteristics of an oral sensibility in a digital age. On the other hand, the modes of 3D visual design allow him to stitch together a cellular world, connecting up its portals, configuring its corridors, barring its doors, planting its *dramatis personae*. And finally, the orchestrating mode of the game code stitches these elements together in the procedural logic of his narrative algorithm.

This kind of literacy, even in this apparently simple game, rapidly composed over two hours, may be seen as the 21st century descendant of the rhapsode, or at least one of thousands of possible candidates. Rhetorics of combat, power, ambition and comradeship are reworked in the imagination of a 10-year-old primary school student, expressed through the poetics of dramatic performance, both voice acting and virtual bodies, and through the ludo-narrative poetics of a rule-set which codes the story, determines the action, triggers the speeches, creates the choices for the player-protagonist.

Beyond the classical image of the rhapsode, however, this poetics of videogame design can be seen in the light of the sociocultural models of literacy reviewed in Chapter 4. These are fluid practices, contingent upon particular historical moments, social motivations, cultural values. The PGCE students making their game of Grendel's Mother; the East London teenagers working from videogame design to fan fiction; the Australian teenagers mashing up their giant puppets with virtual game-worlds; Aaron with his three boss compression of Beowulf – all these users draw on different sets of cultural resources; produce different pleasures, performances, readings; play different roles for different audiences. If the common factors are the Beowulf story and the videogame format, these young ludic Rhapsodes have to be sufficiently agile to negotiate these contexts and resources, and work meaning from them. It's a process which can't afford to be locked in single modes of expression, or in stratified models of learning, or in textual forms which refuse to budge. That may be the lesson we learn from Beowulf and its history of bewildering

transformations; and from the poetics of videogames, with their dizzying balance of mechanics and story, language and animation, world-building and code-making.

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