Serious Play at Hand: Is Gaming Serious Research in the Humanities?

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Abstract

Games are used to teach the humanities not for research. We are not even comfortable studying games seriously, let alone proposing that games could be a form of research. It is only recently that computer games have become the subject of serious humanities inquiry. [Note 1] At the same time there is a tradition that proposes that what we do in the humanities is a form of play, even if it is serious play. In theorists like Huizinga, Bakhtin, and Gadamer play is presented as a component of humanities practice. The playful dimension of the dialogue of the humanities is that which distinguishes our (hermeneutical) methods from those in the social and natural sciences. If we want to resist becoming a (human) science we need to reassert the playfulness of representation and interpretation. That means acknowledging the place of games and game theory in our practice.

In this component of the panel Geoffrey Rockwell will make the case for building games and playing them as a way of modeling and then reflecting on our activities that is in the spirit of the humanities. Geoffrey Rockwell was invited to sit in on the design of the Game and will provide a concluding presentation that reflects on the witnessed process of developing Ivanhoe as itself a recognizable form of research that combines the play of the symposium with the implementation demands of digital practice.

Introduction

> Do Adelheid and the Bishop play a *real* game of chess?--Of course. They are not merely pretending--which would also be possible as part of a play.--But, for example, the game has no beginning!--Of course it has; otherwise it would not be a game of chess.—(Wittgenstein, *Philosophical Investigations,* section 365)

In section 365 of the *Philosophical Investigations*, Wittgenstein presents

a short exchange between voices (of which the second seems to stand for Wittgenstein) about a game of chess that is finished at the beginning of the second act of *Goethe's Götz von Berlichingen mit der eisernen Hand. (Gottfried of the Iron Hand)* This exchange raises questions about the beginning of a game that may or may not really be a game. When I asked the Ivanhoe team what they thought of this passage Worthy Martin made the interesting observation that this dramatic game had potentially an infinite number of beginnings – an observation Wittgenstein probably would have appreciated.

Like you I came to the Ivanhoe game after it had started and have spent the months since I was invited to sit in wondering how it got started, and more importantly what were its *principii*, or research principles. Like Worthy I have concluded that, in a collaborative project like Ivanhoe, there are many principled-beginnings and charting them is a way to answer the question about the seriousness of gaming research and Ivanhoe. It is in the nature of messy research that you pause at some point, like now, and looking back, try to justify a research trajectory by imagining beginnings or principles, which is what I am going to do today.

What is a game?

The obvious place to start philosophically is to try to define games and then ask what sort of game Ivanhoe is, and how it may be research. The exchange quoted at the start of this paper is at the end of the *Investigations* where Wittgenstein introduced "language-games" as a tool for understanding and critiquing formal descriptions of language and thought. In fact, he turns to "games" as a paradigm for one of the central expressions of the Investigations – namely "family resemblance". In sections 66 and 67 he presents another exchange, one which leads to family resemblance:

> Section 66.
> Consider for example the proceedings that we call "games". I mean board-games, card-games, ball-games, Olympic games, and so on. What is common to them all?--Don't say: "There *must* be something common, or they would not be called 'games'"--but *look and see* whether there is anything common to *all.*--For if you look at them you will not see something that is common to all, but similarities, relationships, and a whole series

of them at that. To repeat: don't think, but look!--Look for example at board-games, with their multifarious relationships. Now pass to card-games; here you find many correspondences with the first group, but many common features drop out, and others appear. When we pass next to ball-games, much that is common is retained, but much is lost.--Are they all 'amusing'? Compare chess with noughts and crosses. Or is there always winning and losing, or competition between players? Think of patience. In ball games there is winning and losing; but when a child throws his ball at the wall and catches it again, this feature has disappeared. Look at the parts played by skill and luck; and at the difference between skill in chess and skill in tennis. Think now of games like ring-a-ring-a-roses; here is the element of amusement, but how many other characteristic features have disappeared! And we can go through the many, many other groups of games in the same way; can see how similarities crop up and disappear.

And the result of this examination is: we see a complicated network of similarities overlapping and criss-crossing: sometimes overall similarities, sometimes similarities of detail.

67.
I can think of no better expression to characterize these similarities than "family resemblances"; for the various resemblances between members of a family: build, features, colour of eyes, gait, temperament, etc. etc. overlap and criss-cross in the same way.--And I shall say: 'games' form a family. (Wittgenstein, *Philosophical Investigations,* sections 66-67) < I need to cut this down for reading or paraphrase it.>

There are a number of points to be made about Wittgenstein's challenge from which to survey the principles of Ivanhoe.

1. First, he resists the temptation to start with definitions and calls us instead to look at actual games. He calls us, his philosophical interlocutors, with a doubled optical challenge by asking us to "look" and "see".

This looking is opposed to thinking – in other words we should start with the observation of games, not with the Cartesian isolation of thinking about them. The looking is also sequential – we are asked to start with a class of games – board games and then to move through other classes, card games, ball games, and on to chess, patience and tossing a ball and finally to ring-a-ring-a-roses. What he describes is a heuristic for philosophical investigation that he believes results in "a complicated network of similarities and overlapping and criss-crossing" an image that should be suggestive to us in the age of the Web.

Such a sequential investigation, while not the sole pursuit of the Ivanhoe team, has been one of its research practices – a way it begins. Again and again we looked out and asked about games and toys, especially those that seemed similar in functionality to Ivanhoe. And that perhaps is one beginning for Ivanhoe and what Bethany has called "game criticism". It starts with a looking – and in particular a looking at a class of artifacts that have not been seriously considered in academic circles until recently – namely games. As such Ivanhoe is one of many ways we in the Humanities are starting to expand beyond literary, historical, and philosophical texts to treat the texts of popular culture like games.

2. Second, Wittgenstein elsewhere provides a different example of looking. While in section 66 he calls us to look at the games that are played, starting in section 6 and 7 he introduces the first of a series of hypothetical games that he calls "language-games" for the purpose of understanding language, the "actions into which it is woven" and then critiquing theories of language. In effect he turns theories with their definitions into dramatic games or imagined simulations of what language use would be like if limited to those actions defined as legal in a theory in order to show how no theory is capable of defining the "language-game". These fictional games have no beginning nor end, they are not played, just imagined, but they are none the less games and as such Wittgenstein would say, of course they have a beginning.

Ivanhoe as a project, in this spirit imagines games, though it is interested not in games that imagine theories about language so much as implementing intuitions about interpretation and discourse. While we talk about the Ivanhoe game, in practice there is as yet no single game, (except perhaps the game of games) but a number of prototypes designed to test intuitions about the play of criticism and writing. Just as Wittgenstein through the *Investigations* tries out different language-games, the project of developing a game has forced the team to repeatedly try to articulate

what it is that we are modeling and to imagine models that would reflect these intuitions about criticism. While Ivanhoe has as a preliminary goal the development of at least a first generation of implemented game, Ivanhoe as a project continually cycles around questions about how to model in rules different beliefs about what criticism should and could be in the context of learning and collaborative research.

There is a danger, however, to pushing the similarities between the trajectory of the *Investigations* and that of the Ivanhoe team. One thing that has always constrained the Ivanhoe project is the challenge of actually implementing a game that others could play. Wittgenstein's language-games were thought experiments that to my knowledge never left the page while Ivanhoe has set itself the challenge of trying to imagine something that could not only be implemented but which people would play, have fun playing and reflect back on after playing. And here we see another beginning in the form of a constraint – the constraint of implementation (within a modest budget) and the associated constraint of playability. This has taken Ivanhoe into the realm of software design and game design, something Bethany in particular has researched, though most of us hold the strong opinions of wanna-be game-players without the leisure to play. This constraint has, in turn, opened possibilities for game-design as playful research. Ivanhoe has undertaken a more active form of looking where we examine criticism through modeling.

In this way Ivanhoe could become not one game, but a framework for the implementation and playing of a class of text based games of deformance. A framework or toy with which we can play games of learning and collaboration. A framework that would provide another starting point for games of criticism.

3. Returning to Wittgenstein - after calling us to look Wittgenstein goes on to use games as a paradigmatic example of a network that while it cannot be defined can be discussed as a "family" of instances which share resemblances. These resemblances are features that are shared by two or more members of the family and form the links that build the semantic web of games. In the attempt to define games we are tempted to pick up and follow these linking features, hoping to find one which can serve as a defining or essential feature. The failure to find a satisfactory essential feature, is for Wittgenstein another beginning, the beginning of a cure for essentialist thinking. Therapy for the habit of definition that leads to a more domestic view of the phenomenon.

And here is another beginning for Ivanhoe – the search for family

resemblances, an investigation of the linking features that connect games to other forms of rhetoric and entertainment. For Ivanhoe this investigation has, as noted above, been constrained by the promise of implementation – in the Ivanhoe project as we search for features that connect games and other forms we start to recover a philosophy of play. These features can be found in Huizinga, Gadamer and other philosophers who have dealt with sport and play. They are worth recapitulating if only to show the pragmatic research in game design.

1. Playful Purpose. Most games have no purpose other than their play and for that reason games are played voluntarily for their own sake. The point of playing a game is not some extrinsic end, but the absorbing interest of the play. This is what makes games fun and not purposeful activity.

Funding agencies, however, discourage such "pure" research and development, for which reason Ivanhoe has had to articulate educational goals for the game – extrinsic goals that are at odds with the playful purpose of games. One might ask whether Ivanhoe is a game or a toy. A toy, like a ball, can be voluntarily used as a prop for a game, like soccer, but can also be used for extrinsic purposes, like filling a closet or learning about gravity.

Tests of Ivanhoe have and will be run where the game is played in an educational context where students have no choice but to play (if they want a decent grade.) The hope is that they will become absorbed as if it is a game, but the truth is that Ivanhoe in these cases is being used as a toy – a toy that while it can be used for a game is in an educational context being used for other purposes with the hope that the players will leave absorbed to the point of forgetting.

2. **Isolation from the Real.** Games are played in isolation from the life of real work. Certain games formally isolate a pocket of activities, time, and place from the real world of serious pursuits and incidentally also from other games. This isolation is what frees games from instrumental purposes. As such a game resembles a simulation that tries to model a phenomenon by isolating the essential features of that phenomenon and playing them out in a way that does not affect the phenomenon. The difference is that a simulation is not meant to be fun, but tries to model as efficiently as possible the phenomenon. A game builds on the pretence of the real, mimicking it in ways, but ultimately sacrifices verisimilitude to play. When we play games of imitation like Doctors and Nurses we use the real as a guide from which to play, but constantly negotiate the relation-

ship between fun and faithful simulation. In so far as Ivanhoe is a game, and therefore should be fun, there is at issue the degree to which it should model or play with interpretation.

3. Goals and Rules. Certain games are defined by limitations in the form of goals, especially competitive games. Goals include goals for the players like winning conditions, but also include playful goals that may not be formally described in the rules (of the sort "remember you just want to have fun" or "be a good sport"). The challenge of implementation is to take project goals and to formalize them into goals that can be articulated as winning conditions and therefore be programmed in. The process of rearticulating hermeneutical goals into programmable features in turn defines the playful goals that may not be programmed but can be discussed. The challenge of mirroring goals in code is part of the speculation.

Like goals, certain games are defined by their rules. In fact, most goals can be articulated as rules and vice versa. Rules are particularly important to computer implementation as they are the feature of games that can most easily be implemented in algorithms. As Bethany has pointed out in an unpublished paper "Ludic Algorithms" the rules that constrain a game also provide the isolated space for playful and creative freedom. The trick, however, is what rules and how to implement rules that encourage appropriate game play – in other words encourage appropriate activity.

Pragmatically, if we return to beginnings, a crucial start to theorizing implementation was made by Worthy Martin with the proposal that the game be thought of as a series of game-states with programmed rules that constrain the transition between states. Thus you can think of game design as a process of first specifying the parameters of the game-states (what does the computer know about a state) which define the characteristics of the isolated world in play, and then specifying the rules that govern how a move (made by a human or the computer) can transform a game-state (which could include specifications as to termination state or goals).

4. Props. A fifth feature of many classes of games like card games and board games is that they use specific props like boards, pieces and dice. It is possible in some cases to define the props in terms of rules (the game of chess is played on a board of 8 by 8 black and which alternating squares…), but in most games the props are too complex and rich to conveniently describe in rules and in practice they are usually developed independently. (My colleague Andrew Mactavish has pointed out that the success of some computer games like Half-Life is the provision for users

to create their own props – to use the game engine to make new games.) For this reason I treat props as a distinct feature. There are genres of props like cards that link families of games to each other. In the Ivanhoe game there is one privileged prop – the source text which starts the game and from which the game gets its name "Ivanhoe" – though few may ever play it with "Ivanhoe" as the source.

5. Repetition and Rapture. Repetition is the final feature that shows up in the literature to gather those games of rapture or physical exhilaration that don't have rules, like rolling down a hill or leap-frog. Even games with goals and rules often have repetitive patterns called turns and guidelines formalized into rules that specify what is repeated in order to define the play.

Gaming as Hermeneutical Play

To approach this from another angle, I close by stepping back from this list of features and returning to the way in which the project is itself characterized by game design that is in play. Johanna Drucker has placed the Ivanhoe project on the Web among the projects of the Spec lab or Speculative Computing Laboratory. The project is not an investigation, but a speculation which tries to mirror that which we try to understand in order to look at it. While we pretend the goal is to mirror interpretation I doubt any of us believe we will succeed the way engineers in AI hope to succeed at simulating intelligence, but, like all humanities computing projects, in the failure to model we believe we can learn by looking. We learn not by thinking in isolation but by building and looking and rebuilding and looking again – the iteration makes of speculation a game of sorts (repetition being one of the features of certain games of rapture) a game which is interpretation and about interpretation – a variant on the hermeneutic circle – a variation which we hope is not, as the joke goes, hermetically sealed, but which leaks news.

This places Ivanhoe in a tradition of thought after the announced fall of metaphysics – a tradition that does not aim to engineer human science from the ground up, but to constantly rebuild from what is at hand – bricolage. As Derrida puts it in "Structure, Sign, and Play"

> There are thus two interpretations of interpretation … The one seeks to decipher, dreams of deciphering a truth or an

> origin which escapes play and the order of the sign, and
> lives the necessity of interpretation as an exile. The other,
> which is no longer turned toward the origin, affirms play
> and tries to pass beyond man and humanism … (p. 292)

In this case, as Computing Humanists, we are assembling and disassembling the toys of computing that are at hand. This is a serious play that iterates over a tradition of thinkers like Gadamer, Wittgenstein and Derrida – an iteration that they may not have imagined, let alone approved of, though both Derrida and Wittgenstein seem to strain against the rhetorical forms of philosophy as they speculate.

Gaming, in the broader sense that includes game criticism and game speculation, but is not necessarily game theory (which is still in the engineering tradition of economic efficiency) is research in the humanities in that it is a return to play as one of our subjects and methods, play with the defining technology of this age, the computer as a toy at hand. We can adapt some of the characteristics of play mentioned above and compare them in a chart to similar features in research.

Play	Research
Iteration Repetition Rapture	Revisiting Reformulation Recapitulation Reconcetualization Re-search
Rules Metarules Constraints Algorithms	Research Ethics Methods Procedures Heuristics Practices Conventions
Goals Winning Conditions	Peer Review Publication
Props Boards Pieces	Symbols Models Jargon and Terminology
Playful Purpose	Pure Research (as self determined activity)

Conclusion

This is not a discussion of research simply tailored to include the practices of the Ivanhoe project, as tempting as such a sophistical approach would be. Rather, in the repeated beginnings of Ivanhoe, this panel, and this paper, a familiar pattern emerges that has a family resemblance to research. A pattern of starting to search over and over when you know not what the end will be. That is research at play.

But is it serious? Is there a danger that such gaming is what we should do as children – a beginning we are supposed to have left behind when we got down to real work. Listen to what Callicles pointedly says to Socrates in one of Plato's dialogues on rhetoric, the *Gorgias*,

> It is a good thing to engage in philosophy in so far as it is an aid to education, and it is no disgrace for a youth to study it; but when a man who is now growing older still studies philosophy, Socrates, the situation becomes ridiculous. I feel towards philosophers very much as I do towards those who talk baby-talk and play the child. … when one hears a grown man lisping, or sees him playing the child, it looks absurd, unmanly, and worthy of a good beating. (484c-485c)

Of course, we all know what happened to Socrates!

Notes

[1] Espen Aarseth in his editorial "Computer Game Studies, Year 1", which introduces the newly launched journal Game Studies, writes that "2001 can be seen as the Year One of Computer Game Studies as an emerging, viable, international, academic field." <http://www.gamestudies.org/0101/editorial.html>.

[2] See the section "Play as the clue to ontological explanation" in Truth and Method, page 101 and following.

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