

Immersion, experience and understanding: virtual theatres in drama teaching

Abstract

In current teaching of drama and theatre history knowledge about physical theatres and spatial aspects of theatre are presented through lectures, slideshows and textbooks. This is particularly true about historical theatres. Active student participation is limited to seminars where old drama texts are analyzed. No useful material exists that allow experimental work with the theatre environments that these texts were written for. In this project, based on the program-platform Active Worlds, virtual tools and working methods will be created that enable students to build their own theatres, historical or others, in their PC: s. The virtual arena will be a laboratory where students can learn actively through building, experiencing and reflecting. The aim is to reduce one-way communication between teachers and students and to promote student-centred learning. The teacher role will change from lecturing to supervising, discussing and guiding. Students will have increased possibilities to draw their own conclusions and reach understanding through their own work in the virtual world.

An important aspect of the project is to reduce computer thresholds. Active Worlds is an easy to learn, fast and effective platform for the creation of reasonably detailed 3D virtual worlds, where you can walk around and let yourself be represented by a so called avatar (a 3D human-looking figure). During the project working methods will be developed, that enable students to work in Active Worlds with a minimum of previous computer-knowledge and a minimum of computer training time. Continuous student participation in, and monitoring of, the development process will ascertain this.

Läs mer på <http://www.humlab.umu.se/>

Keywords

“Higher education”, “Classroom research”, “Instructional innovation”, “Theatre arts”, “Theatre”, “Drama”, “Virtual”.

Immersion, Experience and Understanding
Virtual Theatres in Drama Teaching

Claes Rosenqvist

Department of Comparative Literature and Scandinavian Languages
Umeå University
SE-901 87 Umeå
SWEDEN

HUMLab
Umeå University
SE-901 87 Umeå
SWEDEN

Abstract

In academic teaching on drama and theatre history knowledge about theatre rooms and spatial aspects of the theatre has traditionally been conveyed through lectures, slide-shows and books. Communication tends to be one-way. The active participation of students is limited.

In this project we developed virtual tools and working methods to give students the opportunity to try stage solutions in historical theatres and to build their own three-dimensional theatres. The virtual world in the computers becomes a laboratory where students learn actively by experimenting and building themselves and by reflecting on processes and results.

A general aim of the project is to reduce one-way communication from teacher to student and to promote a student-centred learning process.

Keywords

higher education, classroom research, instructional innovation, theatre arts, theatre, drama, virtual

In Drama-theatre-film courses at Umeå university teaching has predominantly been of the traditionally academic kind. Teachers have given lectures and headed seminars on drama-texts and films. In drama and theatre history students have had opportunities for active participation in drama seminars. Texts are preserved and printed in books. The historical theatres that these old texts originally were written for are either extinct or, from a location in northern Sweden, very far away. When it comes to conveying knowledge about historical theatres and to link analyses of these theatres to contemporary dramas, the only tools available to teachers have been lectures and slide-shows. Students have had to learn by listening, watching and reading books, not by self-activity.

When it has come to general knowledge of the creative process in theatre different paths have been tried. Visiting theatres, watching performances, meetings with directors, stage designers and actors have been one, again more or less one-way communication with students rather passive at the receiving end. Letting students build their own designs on a model stage has been another possibility. Focus have, however, tended to be too much on handy-craft, the work with cardboard, wood-sticks and paint. The analytical part of the process has not been prominent. And the end-result could only be watched from the outside in a crouched position, never actually entered into. Students could not immerse themselves into their own designs; never experience them from the inside.

The most self-evident way is, of course, to have students produce a play, or part of it, and act it themselves. There is, however, no tradition of campus theatres at Swedish universities. Finding proper premises for extended use is simply not possible. We have had to rent from active theatres in the city and adapt to the few days when one of them have had its stage free between productions. Work has had to be rushed, and again there has been another drawback. When students are asked to function as actors a high tension around the personal performance on the stage is generated. It is difficult to concentrate on analysis and understanding when at the end you are going to expose yourself in front of an audience in a totally new and highly prestigious capacity, even if that audience is only your course mates and your teachers.

In Sweden training of professional theatre people does not take place at universities but at special institutes. All drama and theatre teaching at universities is of a predominantly academic kind aiming at theoretical and historical matters. What is said above about Drama-theatre-film at Umeå University is applicable to the situation at other Swedish universities. Finding the means, the place and the time to study and understand the creative processes of the theatre is a common headache. The closest of our neighbours with other possibilities is the department for Drama, film and theatre at the Norwegian University of Science and Technology in Trondheim, Norway, where they have an excellent campus theatre on the departments own premises. We look at their circumstances with unashamed envy.

Almost from the moment that computers became powerful enough the thought has been there to construct three-dimensional theatre spaces in the cyber world. Stage designers were

fast to incorporate CAD programmes in their work, but the academic world has been slow to find ways to use computers for the *study* of theatre. The idea to reconstruct historical theatres in virtual environments was self-evident, but finding the right combination of funding, technical resources, programming skills, level of ambition and usability was far from self-evident. From a Swedish perspective it was an obvious idea to construct a virtual version of the unique 18th century theatre at Drottningholm, an avenue I followed for some years. That was, however, only a few years ago a kind of project that would have had to incorporate highly powerful graphic computers, months and months of efforts from professional programmers and, at the end, would have resulted in something to *show* students, not something they could *do* things with. An international example is the multi-million Theatron project, supported by the EU, the practical use of which in academic studies is most likely on a show level, not a tool for far-reaching student activity: “By allowing the user to explore the virtual reality model of a performance site, users are able to ‘experience’ elements of the theatre, such as space, acoustics, sightlines and the relationship between these, which are difficult to convey using conventional teaching materials; This in turn prompts the user to ask questions and serves as a standing point for discussion and discovery.” (www.theatron.org)

In recent years personal computers have become powerful enough to run reasonably realistic three-dimensional virtual worlds. As we all know the game industry has been fast to exploit this new capacity. At about the same time the Faculty of Arts at Umeå University founded HUMlab, its own computer laboratory for the advanced usage new technology in humanistic studies (www.humlab.umu.se). HUMlab immediately became a creative environment for the concurrence of academic teaching and computer technology. Its director Patrik Svensson found usage for the internet-based programme platform Active Worlds to facilitate student centred learning in a project where third semester student created virtual sites and hypertext instead of a traditional third-term C papers. This three-year project was financed by the Council and lives on after the funding (www.hgur.se/activities/projects/financed_projects/q-s/svensson_patrik_98_slut.pdf). Svensson became a co-founder of my project.

Here, then, things fell into place. We had in-house technical facilities, suitable power in ordinary PCs, an easy to learn programme of satisfactory but not overwhelming sophistication. And as an extra bonus, with the establishment of the internet, what we did would be immediately distributed world-wide. Finally the old dream of virtual theatres could be realised in such a fashion that students could work with these theatres themselves.

Now the key questions were how to integrate work with virtual theatres into our courses on theatre and drama in a productive manner and to harbour that work within the normal curriculum. The aims were two-fold. It was first a matter of promoting deeper and wider insight into spatial aspects of historical theatres and how they facilitated the performance of the dramas of the day. Secondly, we wanted to promote insight into the creative processes of

the theatre. What sort of exercises and activities could students be involved in for these purposes?

Even though our courses are fundamentally academic and the training for theatre professions take place elsewhere in Sweden, many of our students have artistic ambitions. We have always claimed that theoretical and historical knowledge is beneficial for creativity and we still believe in this maxim. There have been frequent discussions between teachers and students on this topic, and after having taken our courses students generally tend to acknowledge our view. Still there is no denying the fact that many students have expressed the wish for more elements of a creative nature. There are two advantages with granting these students their wish. The first touches the question of student activity and student-centred learning. Traditionally an important aim of university training has been to foster self-dependent and critical thinking. Over the last decades our experience is, however, that this has become more and more difficult to achieve. Students arrive from high school with a high aptitude for reproduction of the knowledge they are given by listening to lectures and by reading books. They are hesitant to take active parts in seminars and voice their own opinions and interpretations. The introduction of creative elements in the study necessitates student activity.

The second advantage is the possibility to further penetrate the analytical process by reversing it. In academic studies on aesthetic subjects, such as arts and literature, even film and theatre, we normally start with a work of art, a painting, a novel or a written drama, then analyse it and try to reach an interpretation. Students tend to skip several of the steps and, at best, come up with a critical opinion of a general kind. The analytical process can be clarified by going the other way, by letting students decide on an “interpretation”, something they want to express artistically, then form suitable elements and construct a form that would be experienced as an expression of their intention.

Method

The project has been integrated in Drama-theatre-film-courses on the A and B levels. As with most other humanistic subjects in Swedish universities the students are predominantly female. The proportion of male students is, however, somewhat higher than in other courses, about one third. Interviews with students reveal that it is often the film part of the course that attracts male students. Over the years students have become younger. Nowadays most of them come directly from high school or with a background of one or two semesters at university. Most years there are one or two middle-aged participants, which is beneficial due to their wider range of previous experiences.

As stated above, Drama-theatre-film is primarily a traditionally academic subject but that many students come to our courses to increase their competence for artistic purposes. Former students can be found in advanced actors- or stage-design schools, in theatres, and in the film or media industry. They work as journalists, as drama teachers in public schools, function as amateur theatre leaders and instructors. Many take Drama-theatre-film out of personal interest and as a secondary subject in their university degree. At best a handful each year takes it as their main subject in a BA or MA, and very few aim at an academic career and a Ph D.

At the beginning of the fall semester 2004 and our fourth sub-project Pia Johnsson, one of our alumni (more on alumni below), undertook to interview a selection of the new students. The backgrounds and ambitions of the interviewed students fell in line with what is said above. Pia Johnsson's main task was, however, to establish the level of awareness as regards factors in focus of our project, in particular on spatial aspects of the theatre. It was obvious that students came to our course without previous reflection on the fact that how actors position, group and move themselves on the stage can produce meaning, something that is more or less subconsciously decoded by the audience and that is open to analysis. Reflections on scenery were easier to put into words but mostly as something being there, as a not much noted background. An obvious result of Pia Johnsson's interviews was also that young students of today have their dramatic experiences from film and television. Even those who want to work with theatre have seen quite little live theatre.

Our project was broken down into two types of sub-projects, one to work with spatial aspects and dramatic analysis on historical theatres, the second to work with the creation of theatre rooms and stage designs. For fiscal reasons the first sub-project, which also functioned as a pilot project, was of the second kind and conducted during a B-term (i.e. the second semester of studies). I will, however, describe the project in the order that students have worked with it during the normal run of a university year, beginning in fall and ended in spring.

The study-year in Drama-theatre-film begins with a four to five-week introduction, including the different modes of expression that can be found in a theatre performance. In recent years the introduction has normally been held by project member Christina Svens, Ph D. While my function as leader of the project has been of a general and organizing nature, Christina Svens, as their tutor, has for most of the time worked closer with students on a day-to-day basis. She has therefore internally been labelled as our project coach. During the introductory weeks the project has been introduced to the students by Christina Svens and me, and Magnus Nordström, the project's computer support function, has given a three hour introduction in HUMlab on the programme Active Worlds. This programme can be downloaded for free from the internet (www.activeworlds.com). It forms something of a virtual universe with many "worlds", which everyone is free to visit as a "tourist". From the American designers and owners of the programme you can rent your own "world" and build

whatever you want in it. In Active Worlds Educational version you can find our world, which is labelled *vdrama*, and when this is written in May 2005 contains two historical theatres, an ancient Greek and an Elizabethan, and five student-built modern theatres. Magnus Nordström's first introduction teaches students how to find their way in Active Worlds and how to operate avatars (three-dimensional human-looking representations of oneself in the "world").

After the weeks of introduction follows a course on older drama and theatre, beginning in ancient Greece and ending with Ibsen (20th Century drama and theatre is a separate course). In this course students work on the historical theatres. My first idea was to let students build the theatres from historical documents, but this ambition was soon abandoned due to the time factor. Our two historical theatres were instead constructed by professional 3D-designer Anton Hultdin, in cooperation with the students and faculty involved. Students got to stage parts of antique tragedies and Shakespearean plays in them. Originally my plan was to have students work only with theatre structures in the first project year and add work with avatars in the second year. This was a misconception, as avatars are integral in the way Active Worlds work. In the ready-made historical theatres working with avatars was also the obvious thing to do.

Christina Svens and I have co-worked with the course in older drama and theatre. We give lectures on the ancient Greek and the Elizabethan stage. When reading Aeschylus' *Agamemnon* students then are asked to find a stage solution for the unique part where the twelve-headed choir breaks up into individuals, each with his line to say. Experimenting with this textual passage has proven to be an effective first introduction into the meaning of how actors position, group and move themselves on the stage. In practice this is done by seating twelve students at a PC each in HUMlab, having them log into Active Worlds and letting their avatars walk onto the orchestra (the circular stage) of the Greek theatre and form a tight group, a choir, somewhere. At the same time the image from a teacher-PC is projected onto a large wall-screen, giving an audience-view of the theatre with all twelve avatars visible on the orchestra. As all thirteen PC:s is linked together via the internet all movements of any of the avatars are immediately visible on all twelve PC-screens as well as on the large wall-screen. Students who do not, for the moment, operate a PC are seated in chairs in front of the wall-screen, which is also clearly visible to those at the PC:s. The large screen is used as the focal point for the seminar-like discussion that accompanies the attempts to find a suitable movements and speaking positions for each avatar. By moving the teacher avatar the orchestra and the choir can be watched from different positions in the theatron (the semi-circular auditorium). The solutions presented must work from all angles. In theory the students operating the avatars could be in twelve different places anywhere in the world. To have the seminar discussions run smoothly its best to have everyone in the same room.

For the next exercise the students are divided into groups of three. Each group is asked to choose a section from some other Greek tragedy where only the three actors are active (there were never more than three actors). The task is to establish a dramaturgical interpretation of that section, create patterns of movements and positions for the actors that support the interpretation and “act” it in the same way as in the former exercise, all other students watching the wall-screen and giving comments after the “performance”. Thirdly a similar exercise is carried out by somewhat larger groups choosing parts from a Shakespearean play.

The second type of sub-project has taken place in B-terms during a course named Drama and theatre in practice, which is there to give students an opportunity to work from decidedly artistic points of departure. In the years 2003, 2004 and 2005 our sub-project has made up the entire course. The object is now to construct a virtual theatre with an auditorium, a stage and a stage-design in it.

Before the course starts Magnus Nordström gives another three-hour instruction in Active Worlds, this time to teach students how to build virtual structures. In the course/sub-project the students are divided in groups of three or four, each group asked to select a play from one of their courses. They are then to form a common interpretation of the play, choose a section from it, establish the function of this section in the whole of the play and in their interpretation and then create a theatre room and a stage design that support their interpretation. During this process the students are supported by tutors from the active theatre world. We have had the privilege of working with actor-stage designer Ulla Karlsson, actor-director Fredrik Lindegren and actor-media personality-drama teacher Annelie Gardell. Project coach Christina Svens, with a background in practical theatre, has also taken part in the tutorship. During the construction phase Magnus Nordström has been available to the students for computer support.

At the end of the course/sub-project each group presents its dramaturgical interpretation, choices and finished virtual theatre at a seminar attended by fellow students, tutors, teachers and HUMlab employees.

Our project began in spring 2003 with a sub-project of the second type. It involved alumni Zouleikha Gruffman and Sarah Broman together with Pia Johnsson and Helen Engdahl, students of the year. This sub-project had the function of a pilot project, where students, the project group and Ulla Karlsson worked through practical, pedagogical and technical aspects. The immediate involvement of students meant that snags were found at once, and the integrated work of new and more experienced students made fast progress and offered different perspectives on the effects of the project. The planning of similar sub-projects in 2004 and 2005 was made according to student input from the pilot project. Pia Johnsson went on to follow the project for more than a year, supporting new students, helping with construction of the Greek theatre, making interviews and presenting the project at conferences in HUMlab. She also took part in the revision of the Drama-theatre-film syllabus that

followed as a result of our project. The entire project has been run within courses with constant student participation as described above.

As this is a project that makes much use of computers and digital technology making a project webpage on the internet was an obvious thing to do (www2.humlab.umu.se/vdrama/default2.htm). On the webpage there is a project diary (in Swedish), where all information from the project is gathered, including reflections, evaluations and student diaries.

Results

In the historical type of sub-projects the students were fast to come up with solutions on how actors could position, group and move themselves on the stage. They were able to argue how their solutions interrelated with their interpretations of the drama texts. Student evaluations stressed the fact that the exercises with avatars on the historic stages aided them in their analysis and understanding of the dramas. The ability to argue why a certain character would be positioned on precisely the chosen spot or moved in a certain way was more limited. Stage patterns suggested by the students were practicable, but in the first year the reasoning why seemed difficult to verbalise. In the second year of the project, with new students, we allotted more time and attention to the seminars accompanying student presentations. Extensive verbal discussions with fellow students and teachers proved effective to enhance the level of intellectual awareness as to the reason for and meaning of the stage choices made.

A peculiar characteristic of student presentations so far on the historical stages is the tendency to group avatars/actors close to the back wall (the 'skene' in the Greek theatre, the tiring-house in the Elizabethan theatre). In the beginning student awareness of the three-dimensional spatial aspects of a stage was low. There seemed to be a need to relate characters to some physical object. They were grouped beside each other and, especially in Shakespearian plays, the back part of the stage got very crowded. When asked questions about this the students were unable to come up with a rational answer. But the very questions were enough to spur them to try solutions using both the width and the depth of the stages, and immediately arguments for the rationale of this seemed available without further prompting. All that we, as teachers, did was asking a simple question and then the students produced their insight through their own laboratory activity.

When the students had become more aware of the three-dimensional aspect of the stage, productive discussions and experiments with sight lines and perspectives followed. Our students reached this phase from another angle than that proposed by the Theatron project.

Student evaluations of the historical sub-projects show that, while the majority took to it immediately, the student-active way of learning met with initial resistance from some

individuals. They argued that the same knowledge could be acquired faster and easier through lectures. Over time this aspect evaporated. Our project can serve as a way of challenging expectations of a being-told learning in favour of learning by doing.

In the creative theatre rooms and stage designs type of sub-projects students so far have added five different theatres to our “world”. They have chosen to base their work on interpretations of Swedish and international dramas. Theatre rooms and stage designs have been created for Caryl Churchill’s *Top Girls*, Shakespeare’s *Hamlet*, Gustavus III: s dark 18th Century drama *Den svartsjuka neapolitarn* (The jealous Lord of Naples), Rudolf Värnlund’s working class play *Den heliga familjen* (The holy Family) and Eric Uddenberg’s psychological *Fadermordet* (The killing of Father). The two older plays have been set in modern interpretations, but we have been happy to note the wide variation in plays. Student choices give no support for the idea that young people of today have stereotyped interests and modes of thinking.

The theatre rooms and the stage designs have been created through a process of analyzing and arguing. Groups of three or four individuals have had to come up with common solutions that must be visualised in virtual designs. Verbal presentations of common group tasks leave ample room for ambiguity, for a prevailing difference of opinions in the group. This is not possible when the result is to be shown in Active Worlds. There can be no two locations of the same wall in the theatre or alternative shapes of the stage. This necessitates a precision in discussions that otherwise is seldom achieved in arts studies. The creative process thus contributes to the development of academic qualities.

The second sub-project/course immediately precedes the B-essay, the big final examination of the first study year in Drama-theatre-film. Students are to write a 10–12-page essay on a chosen subject/problem on a basic scholarly level. In the project group we had an initial hypothesis of the mutual advantage of creative and theoretical studies. Our supposition has been confirmed by students going directly from creative work in Active Worlds to writing academic essays. The essays have been successful, and after a slump of several years we can now see a rising interest for taking a third term of Drama-theatre-film, a term that is entirely devoted to theoretical studies. There is no doubt that creativity and theory cross-fertilize each other.

Students with a wide experience of computer games are not all that common in Drama-theatre-film groups but the ones that are can show a bit of disappointment over the relatively low rendering of details in Active Worlds. We are, however, happy with this. The programme has the right level of detail to give a reasonably realistic impression together with fast learning and easy usage. Time is crucial. Student work with tasks developed during our project must be housed within normal terms without sacrificing much of former contents. This has proved to be possible. Young people of today learn to handle a programme like Active Worlds

effortlessly and very fast. By letting students decide what training they need we have been able to minimise it.

Even though young people now generally have a high degree of general computer literacy it is probably fair to say that this literacy is rarely extended in a far-reaching way in arts education. The work our students do with new technology is channelled through their interest in the subject matter and them working with the project and spending a great deal of time in a collaborative, multidisciplinary humanities-technology space such as HUMlab clearly also fosters interest in the intersection between technology, culture and the Humanities. People who have seen our students “in action” also point out the fact they seem to be having fun. While this certainly is a subjective statement it seems that students have taken to the collaborative, constructive and explorative learning model and that there is a high degree of motivation.

Discussion

Due to what we have learned during the project the syllabus of Drama-theatre-film has been revised. We have allotted more time to the introductory course. It is to include training in Active Worlds and discussions on how different elements of a theatre production cooperate to produce an interpretable meaning. Exercises on our virtual historical theatres are included as a normal part of the course in older drama and theatre. The course Drama and theatre in practice has also been given more time – interestingly this practically oriented work will take place in virtual environments to a large extent. One way to use the extra weeks would be to let students develop patterns of positions and movements for avatars in their own stage designs.

Initially a selected number of colleagues in the Nordic countries were informed when the project was started. During the project period it has been presented in a number of HUMlab conferences and activities, and every step of our work has been done in the open, on the internet. Also, HUMlab director Svensson has presented the project at many international universities, including Cornell, Stanford and King’s College, London. Now that the project is completed we are going to distribute extensive practicable instructions to a wide circle of colleagues, encouraging them to enter our “world” and make use of our results. Due to the structure of our project the advantages of the internet can be used in full.

Dr John Austin of St Louis, USA, formerly head of theatre courses and productions at Illinois College, was brought in as external evaluator of the project. His written evaluation (www2.humlab.umu.se/vdrama/john_austin.pdf) points to highly interesting theoretical implications of our project. When it comes to immersing oneself into, experiencing and understanding the theatrical process there is, in Austin’s view, no substitute for live theatre. In virtual reality not being real, in avatars not being humans that can give you a feed-back of

bodily experiences Austin sees the shortcomings of our project. On the other hand young people today have the majority of their dramatic experiences from film and TV, and rather few from live theatre. In view of this Austin sees the possibility that our project could function as a step towards understanding live theatre and making it a normal component of one's awareness. This supposition is validated by the fact that our students spontaneously grouped their avatars side by side in what looked like a two dimensional manner close to the back walls, like if the stage was seen as the flat screen of a cinema or a TV set. Only with the aid of seminar discussions and experimenting in the virtual world did they take use of the full three-dimensional possibilities that are self-evident on a real stage. In this respect our project seems to be well adapted to present day circumstances. As live theatre continuously loses terrain to screen-based dramaturgy Austin finally suggests that our project might be on the forefront of the future, whether it is a future he is comfortable with or not.

References

Activeworlds Inc. Retrieved May 20 2005, from its' Web Site: www.activeworlds.com

Austin, John (2005). *Virtual mimesis?* Retrieved May 20 2005, from HUMlab, Projekt Web Site: www2.humlab.umu.se/vdrama/john_austin.pdf

HUMlab. Retrieved May 20 2005, from its' Web Site: www.humlab.umu.se

Immersion, Experience and Understanding: Virtual Theatres in Drama Teaching. Retrieved May 20 2005, from its' Web Site: www2.humlab.umu.se/vdrama/default2.htm

Svensson, Patrik (2002). *Virtual Weddings and a real wedding of linguistics, literature and cultural studies*. Project report retrieved May 20 2005 from The Council of the Renewal of higher Education Web Site:
www.hgur.se/activities/projects/financed_projects/q-s/svensson_patrik_98_slut.pdf

Theatron Project, The. Retrieved May 20 2005, from its' Web Site: www.theatron.org

Author Note

Claes Rosenqvist, Department of Comparative Literature and Scandinavian Languages, Umeå University.

Project financed by the Swedish Council for the Renewal of higher Education.

Thanks to:

Project members Christina Svens, Magnus Nordström and Patrik Svensson.

All Drama-theatre-film students of 2002–03, 2003–04 and 2004–05.

Alumni Sarah Broman, Zouleikha Gruffman and Pia Johnson.

Theatre professionals Annelie Gardell, Ulla Karlsson and Fredrik Lindegren.

Graphic designer Anton Huldin.

The staff of HUMlab

Special thanks to:

Dr John Austin, who flew in from St Louis to review our project.

Contact addresses:

Claes Rosenqvist

Dept. of Comp. Literature and Scandinavian Languages

Umeå University

SE-901 87 Umeå

SWEDEN

Phone: +46 (0)90-7866262

E-mail: claes.rosenqvist@littvet.umu.se