

DISCOURSE & SPACE: A DIGITAL INTERACTIVE CREATION

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Introduction

The contemporary communicative policy of exhibitions lays emphasis on the transition of the visitor from a passive receiver of messages to an active vehicle of knowledge and experiences. Multimedia applications afford places invested with synaesthetic and representational potentials that evoke intellectual and emotional involvement, "with the visual reinforcing the tactile, the physical reinforcing the intellectual"¹. In this way, the content is shown in an environment with narrative structure. The regulation of the flow of the experience provides interactive facilities that surpass the limits of the physical world.

A multimedia environment offers a variety of interactive potentials that encourage the creation of places beyond the limits of reality. It is essential to

evoke perceptions from the users commensurate with the messages that derive from the content. A space without physical or rational restrictions liberates the mind and the imagination and provides a schema² where the personality of the participants and their objective way of conceptualizing are indicated.

The digital interactive creation "Discourse and Space" was initially conceived and developed within the framework of the Postgraduate Program in Cultural Technology and Communication of the University of the Aegean. It concerns a virtual space with temperamental narrative structure and activity; a contemporary attempt aiming at the exchange of visual perceptions among the participants on the occasion of the play "Tongues" by Sam Shepard and Joseph Chaikin.

Visualization and Structure

The dialogue is initiated with the visualization of the interpretation of the creator's gaze on first phrase of the text "Tongues". Further on, the user moves to the basic core of the application, called central place. As represented by its structure, the objective of this virtual space concerns the relevant position between the creator (and consequently each user) and the surrounding elements. Their relationship is implied as all the participants are represented as autonomous spatial entities and are located around the creator. The conversational dimension among the creator/user and each participant that is active, at the present form of the application, sustain and share common pursuits exchanging emotions and ideas.

The functional role of each autonomous entity is to facilitate the approach to each participant while entering the corresponding personal place. These spaces form the visualization of the objective, artistic view of the creator about each member that takes part in the dialogue. The differentiation of the character of each participant is a motivation of

¹ Dodd, J., "Interactivity and Social Inclusion", Research Center for Museums and Galleries, University of Leicester, Interactive Learning in Museums of Art and Design, 2002, in: http://www.vam.ac.uk/files/file_upload/5761_file.pdf, accessed on: 10-02-2007

² Bryant, R., "What kind of space is Cyberspace?", *Minerva – An internet Journal of Philosophy* 5, 138-155, 2001, in: <http://cgi.uni-kassel.de/~dbupress/download.cgi?frei=978-3-89958-107-2>, accessed on: 10-02-2007

inspiration and expression. According to personal perception, the notion of uniqueness of each participant is reflected through the composition of a virtual place.

The dialogue started when each participant selected a piece of the text "Tongues" that affects him/her the most. At the next step a picture or a story corresponding to that choice was imagined, impelled by his/her own character and expressive dynamics. Additionally, audiovisual material was collected (like pictures, sounds and poems) he/she considered suitable to contribute to the visualization of the specific idea. Afterwards, these places were described to the creator who was instructed by their instigator to create his place. All the selected materials are integrated into the place that comprises the interpretation of each participant to the text named "Tongues". These interpretations form 2-dimensional or 3-dimensional virtual places and comprise the section of the interpretive places.

Essentially, a network of personal and interpretive places is configured equal to the number of the participants. A text is the inspiration to develop a conversational dimension and encourage contact among people who participate and use this implementation. A virtual world is invented that instigates "the random approach of two realities in distance, an approach that will arise from the mediation of the objective coincidence that will enable the meeting, evoking surprise...³"

Interactive Ways of Transition

The particular creation is a proposal for an alternative use of multimedia applications. It concerns the structure of an environment that offers contingencies for contact and dialogue based on the conversational and expressive role of the systems of space and language. Initially, the content is arranged in a way that the narrative plot forms a linear navigation, which reveals the mutual influence of the participants with the creator and consequently the interaction with the user (Fig. 1).

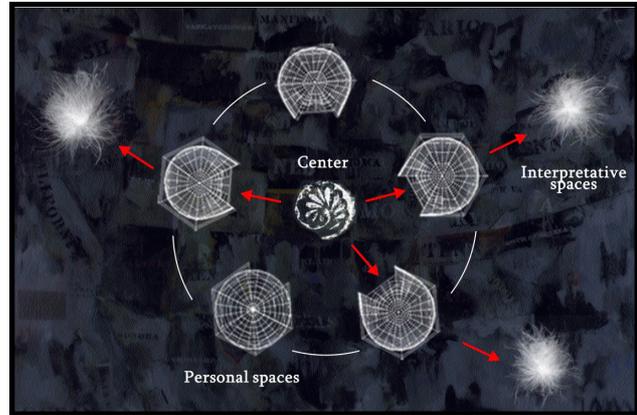


Fig. 1

On account of the available signs of activity and orientation, there are two different ways to navigate through the spatial unities. On one hand, the main menu is presenting the structure and provides access to all the places. On the other hand, the user may come up with an amount of interactive signs, integrated inside each place, that are transitions to the next spatial section. A sensitive balance is created between the representative and the abstract methodology of association and interaction with the content of the implementation.

The potentials of multimedia environments in matters of navigation and interaction – the affordances of the space - can be enhanced through a creative perspective to new standards of exploration and contact. A personal experience is configured according to each user's gaze depending on his/her character, his/her way of perceiving, and the decisions he/she has made concerning his/her route inside the application.

Space and Place

The basic task given to each participant is the creation of a place that tells a story or describes a picture, a narrative that corresponds to the stimulus of the specific text. The expressive systems of space and discourse are the constitutive elements of communication on account of their ability to describe and at the same time create a world with new potentials and perspectives.

³ Tsatsoulis, D., Image language. Surrealistic plays and social-semiotic readings (greek edition), Greek Letters, Athens, 2000

Each place is connected with the memories of at least one story⁴. The creation of spaces aims at the co-presence and social interaction among groups and specialties of people. The main achievement is the development of the sense of presence in a realistic or virtual environment enriched by structural elements and signs in order to evoke mutual participation and influence.

The sense of place is differentiated from the sense of space⁵ as the first is invested with cultural conventions and social meanings that are related to certain behavioral expectations. It concerns predetermined spatially organised systems of action that arrange appropriate behavioural framing. The spatial dimension concerns the shape and the material of the environment that sets the location for the occurrence of events. The set of characteristics that are related to the role of the place is called placeness. This factor cannot be constructed in a way similar to the specifications of space but involves interpersonal involvement, whereas place refers to the relevant position of the objects focusing to the co-presence and social interaction. In conclusion, a place is consisted of a space infused with social role and behavioral expectations.

People with certain personalities and particular needs, adapt a space without any role, to a place that is appropriate to their expressive preferences and reflects their style and desires. As for adaptation, it is a dynamic procedure that strikes a balance between connectedness and distinctiveness⁶. The first term is significant to the degree that a place composes a structural and semantic unity with its surroundings, and the second term detects, the degree again, the characteristics and the content are integrated to the space and organize a place.

The text of Sam Shepard is the occasion for the creation of a world beyond the restrictions of reality

that interact and provoke new interpretations. On account of the contingencies of a multimedia environment, a place liberates both the mind and the imagination and sets the schema that reveals the character and the perception of the participants.

Aims and Speculations

A virtual world facilitates the freedom of expressing thoughts and emotions and the communication of messages. The way people handle their freedom – actually a form of power and control – illustrates their vision and attitude. Specifically, the subjective expressive way of each participant defines the content and the aesthetic issues of the interface of the application. His personal style and messages create a unique place, a spatial entity that refers to his way of conceiving life.

The basic intention is to put emphasis on the uniqueness of each interpretation. Each person is constantly creating his/her own reality depending on his/her experiences. Self-consciousness, along with the perception of the world around, is an evolutionary process, expressed in every attitude and vision. A special way of seeing derives from a special and magical part of the soul. According to this belief, this particular implementation is invested with an artistic intent as it distinguishes the uniqueness of each character in relation to the person's environment and his/her own evolution as time passes by. It emphasizes on moments and thoughts that may be revealed by facilitating people to express their own reality.

Communication Code and Symbols in a Virtual World

Creation of virtual spaces aims at regulation of interpersonal interactions among people of different social and scientific backgrounds. Exchanging messages at emotional and intellectual level is accomplished on account of the recognition of a common communicative code and appropriate

⁴ Chalmers, M., "Place, Media and Activity", Position paper for the ECSCW 2001 Work/Place" Workshop, 2001, in: <http://www.equator.ac.uk/var/uploads/2001-chalmers-4.pdf>, accessed on: 10-02-2007

⁵ Harrison, S., Dourish, P., "Re-Place-ing Space: The roles of Place and Space in Collaborative Systems", Computer Supported Cooperative Work 11: 299-316, 1996, in: <http://www.ics.uci.edu/~jpd/publications/place-paper.html>, accessed on: 10-02-2007

⁶ Harrison, S., Dourish, P., "Re-Place-ing Space: The roles of Place and Space in Collaborative Systems", Computer Supported Cooperative Work 11: 299-316, 1996, in: <http://www.ics.uci.edu/~jpd/publications/place-paper.html>, accessed on: 10-02-2007

symbols that reflects the social, scientific and cultural disciplines of those participating. Choosing semantic and computational equivalents of information and constructing messages, contributes to the effectiveness of the communication as rise is given to relevant interpretations from the users.

The spheres of art and technology are mainly based on symbolic systems and constantly contemplate new methods of representation and communication. Besides the substantiated rules of functionalism and currency of the multimedia applications, the necessity for a more creative level of expression and contact is signified. The process of forming and encoding emotions and thoughts of people of different social and psychical background is challenging at a symbolic level. On this occasion, symbols do not accurately represent the idea of each participant, but refer to his reality. All the elements are available to an open interpretive process, determined by the creative prospective of the creator and the perceptive ability of each user.

During the narrative unfolding of multimedia applications, the concept that derives from the semantic unities of space and discourse is not substantive. It is attributed in relation to the necessities of the communication procedure, the context, the purpose of its use and the particular preferences of the receiver of the information. The anticipated user activities contribute to establish his/her personal aspect, reflected by social and cultural conventions. Meanwhile, according to the involvement of the user, interpretive figures are shaped promoting the subjective or artistic values of the interactive procedure. Such figures are conceived as either "open" or "closed" to further interpretations.

Additionally, another factor that conduces to the structure and conception of the message is the choice of the medium. The materialization of interpretations with 2-D and 3-D graphics generates a field enriched with points of association with the content. The mediums of sound, video and image are

integrated in a multimedia application and maintain a prominent communicative and expressive role. What the participants have been asked is to create places in conformity to the potentials and the restrictions of a virtual environment.

Each place develops a bi-directional relationship with its content. A space, with its specific structural elements, ascribes meaning to everything it includes and at the same time it is affected by the interpretations evoked by the contained objects. A place is depended schematically on a space and functions as a symbol to a purpose of development. The message derived from a place refers to its role as the factors of navigation, interactivity and content are functioning according to this purpose.

Aesthetic Dimension

Virtual environments allocate the space and the appropriate tools for the creation of a world that refers to reality without being a copy of it⁷. It concerns a new actuality beyond the facts of physical and realistic specifications.

In the spheres of the arts, the reality presented comprises the concept of the creator and is related to his/her personal style and perception. All the elements and mediums (subjectively considered as suitable) are correlated together in order to structure a specific encoded message that would suitably contact with the audience. Each creation, feeling or thought that accomplishes to surpass a personal level of expression and appeal to a broader human entirety may be considered as "a window open to our inner self"⁸

The dialogue is set on condition that there will be no rules in the expression of thoughts and feelings apart from the restrictions determined from the medium used. The dynamics and visions of each person are revealed in the way he/she handles his/her freedom. Virtual reality offers the motivation of approaching and getting inspired by a special part of mentality: dreams. In virtual worlds the limits of reality are

⁷ Heidegger, __, Der Ursprung des Kunstwerkes (greek translation), Dodoni, Giannena, 1986

⁸ Tsatsoulis, D., Image language. Surrealistic plays and social-semiotic readings (greek edition), Greek Letters, Athens, 2000

exceeded while creative combinations are made with transcendent dreaming.

Dream has retained a substantial role in artistic configuration during the 20th century. It is essential to abandon the predetermined way people encounter with the world and find more creative forms of perceiving and communicating. Such an attempt was initially performed by the Surrealists. The rupture of the tradition at any kind of tension or authority is among the basic principles of the dadaistic or surrealist idealism. A mainstream bourgeois perception that neutralized the message and rendered it to an insignificant achievement has always existed in art. Anything characterized as "surrealistic" through time, in other words as dreamlike and subconscious has always been opposed to all mainstream ways of expression. What we believe is that the artistic dimension of reality is always governed by the Manifests of Surrealism.

A dream-like representation has always been a significant expressive implement of Surrealism, canceling any predestined way of seeing and conceiving and expressing ideas beyond all reason. In this particular creation we have tried to approach and represent a part of the reality of each creator and participant. It is an artistic script, a poetic attempt in the realms of fancy and dreams, similar to a surrealist work.

The world of dreams and the unconscious, like any communicative process, make use of symbols. Two types of symbolic systems are discerned, the dream-like and the aesthetic⁹. In case of the dream-like symbolism, a subconscious approach of the world is accomplished through a more intuitive than the logical conception. The aesthetic approach is relevant to the commonly and objectively accepted image and identity of the environment and its content. The two kinds of symbolism are based on the correspondence of the signifier and the signified, differentiated on one hand to the subjective truth, and

on the other hand, to the social, cultural and scientific framing of cognition.

On the occasion of the surrealist aesthetics and especially the surpass of the behavioral and cognitive framing, the dream-like visualization seems to designify the elements of space and discourse. It refers to the reconsideration of the signs that compose the communication codes in order to create an experience beyond the bounds of reality. Consequently, the correspondence of the signifier and the signified is broken, on account of a creative and intuitive conception of information. As the sign is liberated from a fixed meaning, the concept is expanded in the realms of inspiration, consenting to a personal interpretive approach on behalf of both the creator and the audience. An alternative, creative attitude enables the discovery of a world with references to reality. As Socrates contended "we discover things not through their names but from themselves"¹⁰

Interactive Design

The design of a virtual world concerns the composition and arrangement of elements in an interactive environment in order to stir social association. Grounded on substantiated principles of functionalism and manageability, a variety of media are connected into one application in order to create a non-linear scenario¹¹. The structure of a multimedia environment essentially generates a spatial layout with boundaries and transitions that conduct potential movements. A personal narration is created according to the decisions each user makes in matters of navigation and interaction.

The impact of the surrealist aesthetic has been substantial to the creation of a dream-like ambience, and on the intuitive navigation and approach to the content of the application; a world where reality and dreams collide. The content and the aesthetic decisions of this creation generate a setting with a rather enigmatic and unrealistic ambience. The

⁹ Read, G., Art Now: an introduction to the theory of modern painting and sculpture (greek translation), Kalvos, Athens, 1960

¹⁰ Plato, Polity, Book 10 (greek edition), Kaktos, Athens, 1992

¹¹ Sperka, M., "Graphic Design in the Age of Interactive Media", ISIMD - 3rd International Symposium of Interactive Media Design, Yeditepe University, Istanbul, 5-7 January 2005

approach of virtual places is accomplished through the aspect of quick time vr with a spherical cover of the optical field. A sense of presence emerges from the ability of the user to make complete rotation around the vertical and horizontal axis. Therefore, a sensation of dematerialization is proposed as the invisible figure of the user makes a stand against the power of gravity.

Design decisions, aiming at the flow of the user's experience through time, actually emphasize on the emotional and cognitive involvement of the user with the participants and the creator. In that case, each spatial entity proposes a schema with certain specifications and narrative expediency in order to create an alternative place invested with new interactive contingencies. The intuitive approach of the content is a cognitive and constitutional surrealistic "attitude", based on the preferences and the sensations of the user. The representational and spatial layouts are abstractive processes that are reliant on impression and instinct provoking an active participation. The main tension is an unbidden navigation and orientation that would allow random and unforeseen events to affect the flow and the perception of each personal scenario.

The way each participant expresses himself/herself determines and brings into action new potentials of interpretation and contact. The enchanter's factor is the phenomenon of entropy in communications. In spite of the act that every action is predetermined, the aggregate route and activity is substantiated to shape a personal experience. In the realms of the subconscious and the visualization of interpretations, new worlds are created that impel to be discovered through distinct signs of orientation and unexpected transitions.

Future Directions

The future goals include following this implementation to a point of completion and further consideration of new perceptive and ideas of evolvement. The number of the people participating will increase, as their correspondence seems to be

positive and rather creative. Volunteers could take part in the role of both the creator and the participant, in this dialogic network. The creators may increase numerically and moreover become the center of their communicative net with new participants. Each center fixes a stimulus (instead of the work of Sam Shepard) and receives a feedback of interpretations of its participants. Furthermore, all nets communicate with each other as participants may correspond to more than one stimulus and a creator can become a participant to another center at the same time.

Moreover, the size of the creation is the basic factor for its distribution through the storage medium of a cd/dvd. The disposition of the application can also be achieved through the Internet aiming at the contact with a bigger amount of people. On that occasion, we need to try a new balance between the size of the information and the quality of the result.

More distant aims involve the means of expression used for the visualization of the interpretations. Contemporary necessities and preferences are constantly extending the dialogic process to new fields of research. Worlds are embodied with contingencies for emotional and cognitive association. For instance, a theatre performance or a sculpture occupies space and interacts semantically with the environment. New means of representation and expression are related to "space", invested with messages that induce interpretations.

Conclusion

The digital interactive creation "Space and Discourse" provides the place for the communication of visualized thoughts and feelings as autonomous spatial entities. The expressive dimension of a text becomes the stimulus of contact among the participants through a dialogic process of inspiration. As Breton asserted in the first Surrealistic Manifest, the objective coincidence is "... the meeting of an external cause and an internal intention, a form of display of the external necessity...¹²". It composes instigation to the solitude of modern life and to an attitude predetermined by authorities of our social

¹² Breton, __, Surrealistic Manifest (greek translation), Dodoni, Athens, 1983

and personal lives. Our vision and dreams seek for new communicative contingencies that result to the achievement of gaining more freedom of expression. The quality of our choices and the way we deal with our freedom is what finally defines our quality of life. An active attitude is inspired from the necessity of creation, expression, evolution and cognition. It comprises an attempt initially emerging from a creator that might touch a broader level and reveal all its qualities. Space and discourse are two substantial systems that describe and create the spiritual as well as the material world. One can struggle for his/ her dreams, being at the same time creative while dreaming.

Bibliography

- Arnheim, R., *Art and Visual Perception. A psychology of the creative eye* (greek translation), Themelio, Athens, 2004
- Barthes, R., *Image–Music–Text* (greek translation), Plethron, Athens, 2001
- Baudrillard, J., *La société de consommation* (greek translation), Nissides, Thessaloniki, 2005
- Baudrillard, J., *Fatal Strategies*, Semiotext(e)/Pluto, New York, 1990
- Baudrillard, J., *Selected Writings*, (Mark Poster, ed.), Polity Press, Oxford, 2001
- Beardsley, M. C., *The Aesthetic Point of View: Selected Essays* (greek translation), Nefeli, Athens, 1989
- Bergson, H., *Laughter* (greek translation), Anagnostidis, Athens
- Breton, __., *Surrealistic Manifest* (greek translation), Dodoni, Athens, 1983
- Foucault, __., *Order of Things: An Archaeology of the Human Sciences* (greek translation), Gnosi, Athens, 1986
- Heidegger, __., *Der Ursprung des Kunstwerkes* (greek translation), Dodoni, Giannena, 1986
- Hein, H., *The Museum in Transition*, Smithsonian Institution Press, Washington and London, 2000
- Levy, P., *Qu' est-ce que le virtuel?* (greek translation), Kritiki, Athens, 2001
- Langer, S., *Problems of Art*, Scribner' s, New York, 1957
- McLuhan, M., *The medium is the message: an inventory of effects*, Hardwired, San Fransisco, 1996
- Merleau-Ponty, __., *L' Oeil et l' Esprit. Sens et non-sens* (greek translation), Nefeli, Athens, 1991
- Mouriki, __., *Transformations of the Aesthetics* (greek edition), Nefeli, Athens, 2003
- Plato, *Polity*, Book 10 (greek edition), Kaktos, Athens, 1992
- Read, __., *Art Now: an introduction to the theory of modern painting and sculpture* (greek translation), Kalvos, Athens, 1960
- Rush, __., *New Media in Art*, Thames & Hudson Ltd, London, 2005
- Saussure, F. de, *Course in general linguistics*, Duckworth, London, 1983
- Saussure, F. de, *Ecrits de lingstique generale*, Paris, Gallimard, 2002
- Sontag, S., *On photography* (greek translation), magazine Photographer, Athens, 1993
- Tsatsoulis, D., *Image language. Surrealistic plays and social-semiotic readings* (greek edition), Greek Letters, Athens, 2000
- Bryant, R., "What kind of Space is Cyberspace?", *Minerva - An Internet Journal of Philosophy* 5 (2001): 138-155, in: <http://www.mic.ul.ie/stephen/cyberspace.pdf>, last accessed on: 10-02-2007
- Chalmers, M., "Awareness, representation and interpretation", 2002, in:

<http://www.dcs.gla.ac.uk/publications/paperdetails.cfm?id=6967>, last accessed on: 10-02-2007

Chalmers, M., "Place, Media and Activity", Position paper for the ECSCW 2001 Work/Place Workshop, 2001, in: <http://www.equator.ac.uk/var/uploads/2001-chalmers-4.pdf>, accessed on: 10-02-2007

Cid, R., "Group interaction and VR storytelling in Museums", 2003, in: <http://www.springerlink.com/content/cjkk75cthnwf3hvf/fulltext.pdf>, accessed on: 10-02-2007

Cristodoulou, V., "3d digital Artifacts: Photorealistic rendering or Immersion in Virtual Environments?", 3rd International Symposium of Museology: Audiovisual Media as Cultural Heritage and their application in museums, University of the Aegean, Mytilini, 5-9 June 2006

Dodd, J., "Interactivity and Social Inclusion", Research Center for Museums and Galleries, University of Leicester, Interactive Learning in Museums of Art and Design, 2002, in: http://www.vam.ac.uk/files/file_upload/5761_file.pdf, accessed on: 10-02-2007

Haans, A., Ijsselsteijn, W., "Mediated social touch: a review of current research and future directions", Springer-Verlag London Limited, 2005, in: <http://www.antalhaans.nl/files/HaansIjsselsteijn2006mst.pdf>, last accessed on: 10-02-2007

Heeter, C., "Interactivity in the Context of Designed Experiences", Journal of Interactive Advertising, Volume 1, Number 1, 2000, in: <http://jiad.org/vol1/no1/heeter/>, accessed on: 10-02-2007

Robertson, T., "The public availability of actions and artifacts", Computer Supported Cooperative Work 11: 299-316, 2002, in: <http://research.it.uts.edu.au/idwop/downloads/RobertsonJCSCW2002.pdf>, accessed on: 10-02-2007

Sampanikou, E., Kawa, A., "The Digital Environment in Visual and Audiovisual Arts: A Theoretical Approach", ISIMD - 4th International Symposium of

Interactive Media Design, Yeditepe University, Istanbul, 28-30 April 2006, in: <http://newmedia.yeditepe.edu.tr/proceedings.html>, accessed on: 10-02-2007

Sampanikou, E., "Virtuality and the Realistic Image. A Theoretical Approach to Contemporary Visual Arts", I-Society 2006, International Conference of Information Society, 7-10 August, Miami, Florida, USA, in: <http://www.i-society.org>, accessed on: 10-02-2007

Schafer, L., Bokan, B., Pankoke-Babatz, U., Prinz, W., Scieck, A. F., Oldroyd, A., Sutton, J., "Symbolic Activities in Virtual Spaces", In: COSIGN 2003: 3rd Conference on Computational Semiotics for Games and New Media, University of Teesside, 2003, in: http://eprints.ucl.ac.uk/archive/00000329/01/Symbolic_Activities_in_Virtual_Spaces_2003.pdf, accessed on: 10-02-2007

Schnadelbach, H., Penn, A., Benford, S., Koleva, B., "Mixed Reality Architecture: Concept, Construction, Use", Mixed Reality Laboratory, University College London, 2003, in: <http://eprints.ucl.ac.uk/archive/00001021/01/2003-schnadelbach.pdf>, accessed on: 10-02-2007

Sperka, M., "Graphic Design in the Age of Interactive Media", ISIMD - 3rd International Symposium of Interactive Media Design, Yeditepe University, Istanbul, 5-7 January 2005

Williams, A., Kabisch, E., Dourish, P., "From interaction to participation: Configuring space through embodied interaction", 2005, in: <http://www.ics.uci.edu/~jpd/publications/2005/WilliamsKabischDourish-InteractionParticipation-Ubicomp2005.pdf>, accessed on: 10-02-2007