

# colophon

Written in utf-8 text, typeset in 8 point Gill Sans, and 14 point Gill Sans BoldItallic at foam brussels and amsterdam, using a rusty photocopyer and gutenberg's neural tissue stapled to the 'on' button, with sporadic assistence from encapitulated postscript All graphics have been polyphonically generated as metafont characters readable from a moebius strip. No! exclamation marks were harmed during the production of this newsletter. Contributing authors include all the semi permeable members of the foam metamagical cult for anonymous metabolisers, along with several guest editors, a small army of ants with graphic design abilities and several random number generators. This issue would not be possible without a sense of direction, a sense of humor and a sixth sense. All corresponseence should be placed in a bottle, corked, and sent to the nearest pacific atoll

Stichting FOAM contact: FoAM vzw po box 488 po box 10868

h-1000 Brussels 1001 FW Amsterdam Belgium the Netherlands

http://f0.am

info@f0.am

FoAM core team; maia Kuzmanovic, nik Gaffney, evelina Kusaite, nat Muller, cocky Eek, veronique Daussy

Supported by: Flemish Ministry of Culture, Belgium, Culture 2000 framework of the European Commission, Netherlands Foundation for Visual Arts, Design and Architecture, The Netherlands, Mondriaan Stichting, The Netherlands, Future Physical (East England Arts/shinkansen) in association with the Arts Council of England National Touring programme and Playgarden New Audience Programme.UK

© 2003 FoAM vzw, Brussels, Belgium and Stichting FOAM, Amsterdam The Netherlands

Permission is granted to make and distribute verbatim copies of this document, in any medium, provided the copyright notice and this permission notice are preserved on all copies.



Stories within stories....

2003, The Year of Illuminating Nourished Evolutions

2002, a year in review....

Growing, decaying and stagnating wearable eco-systems

Swords of reality, strangled priests, Zipperman vs. Pipeguy. The saga continues...

The Hippodrome Spectacular

How to bake a tart-of-fima or 'It's reigning truffle-dogs!'

SM (Smart Materials) Cargo-Cult-ing in Norwich

Touches, traces and negotiations on short and long distances

Reverse engineering edge habitats

Of sake, sticky rice, orai, cohesion and adhesion

Public events \\ 2002

Upcoming public events // Jan-May 2003

#### Stories within stories....

Interdisciplinary projects are a highly praised praxis - at least in theory. In practice, the ecstasy of collaboration frequently becomes a delirium of communication between strategists sending smoke signals to the other camps from their disciplinary seats, but not actually moving their positions any closer to each other. When a small operator finds him/herself in between the camps, s/he can't help being mesmerised by the new perspectives opening in this space. In the smoke signals there is no shortage of engaging philosophy espoused both by artists and scientists. Unfortunately, these theories are only rarely translated into practice - a conclusion that all FoAM collaborators found true 3-4 years ago.

We worked alone, or in small groups of artist-friends. We became commercial designers and programmers. We worked in academia and research institutes. However, there was always something not quite satisfactory - there were many promises of interdisciplinarity, of participatory culture, of unlimited funding - but maybe next week, month, year. In 2000 we slowly devised an escape pod, a cultural research department in a private research centre, Starlab in Brussels. After Starlab's bankruptcy in 2001, we became independent, but connected to an international network of artists, scientists, business developers and time travel researchers. In order to maximise the advantages of working in multidisciplinary contexts, together with scientific and business communities, while remaining autonomous and flexible, in the past 2 years FoAM became an entity, a network of not-for-profit organisations in Belgium and the Netherlands functioning as a mediator between the different disciplines and their imposed ruling principles (or 'religions'). This entity provides a legal and financial framework for approximately 20 artists and scientists (the number changes based on project sizes) to establish partnerships with public and private research institutions, cultural organisations, educational structures and businesses, while remaining an enticing experimental territory, allowing its dwellers to grow their own worlds.

2002, the year of a continued global economic slump, was the year in which FoAM had to stabilise its pecuniary foundations...Amazing timing! In the beginning of the year we were uncertain of our economic survival as individuals, but were still determined to continue the bubbly FoAM adventure for another 12 months and assess the feasibility of continuation at the end of the year - FoAM vzw (the Belgian branch) and Stiching FOAM (the Dutch branch) alike. In the spring, several opportunities began sprouting, as the support of the Flemish Ministry of Culture for the year 2002 was confirmed, closely followed by the acceptance of the txOom project by the European Commission. Several other, smaller grants came through as well, so that we could focus on what we do best: research, develop, present and reflect upon new contexts for creative practices that involve a wide range of communities at the core of their activities.

With txOom, the main FoAM project in 2002, our informal contacts with Time's Up from Austria, Future Physical from the UK, KIBLA from Slovenia and Interactive Institute from Sweden became formalised partnerships in a contract with the EC. The project grew into an ambitious undertaking. The 5 partners have committed to trust each other to be able to develop an intricate weave of 3 public experiments in Italy, UK and Slovenia; 3 public workshops in Croatia, UK and Austria, through development workshops in Sweden, Belgium and Austria, as well as remotely, with the aid of custom assembled online collaboration tools. A witness to this endeavour are several public presentations (among others during ISEA in Japan, Evolution and RESPOND in the UK, txOom decompression in Belgium and others) and a publication in the form of a book and a dvd to be distributed from mid 2003.

The txOom partnership as well as the other FoAM projects are complemented with FoAM's open source principles, that underlie all FoAM's developments. This approach facilitates exchange of ideas, skills, knowledge and results, with universities, research centres and cultural organisations from Europe, Australia, North and South America, which proved to be a viable model for multidisciplinary research and development in the cultural sphere, even in times of uncertainty.

2003 is well worn in, with some ongoing and some new and enticing perspectives for both FoAM cells. We held a thorough end-of-the-year cleaning of the 'do's and don'ts' for the future and are more confident about the ontology, epistemology, methodology and other ologies that should steer the involved bubbles into the still quite slippery fields of our investigations. This newsletter is one of the last polishing strokes, after which we can neatly archive 2002 into the closets of the 'been-there-done-that' past.

# 2003, The Year of Illuminating Nourished Evolutions

Entering the third year of our existence, having this newsletter mark the end of a chaotic, but very productive 2002, we will attempt to publicly structure our activities by inviting artists, scientists, engineers and students to propose their ideas for projects and publications through an open call.

#### So here it comes....

- 1. The proposals can outline ideas for short term experiments workshops, public events, articles, parties... that can be incorporated in FoAM's f0amfr0th programme a bubbly insiders-view of a tech-art brewery: f0amfr0th is a series of 6-8 events in 2003 organised by FoAM and whoever happens to be visiting the organisation in Brussels or Amsterdam. The events have an open format that can range from a theoretical talk to chill out rooms, from improvised networked performances to orchestrated bio-chemical experiments, or it can be a simple stroll down an office building with our anti gravity experts. Spontaneity, improvisation and informality are keywords that will grant access to this programme to the local public and anyone interested in the process of working in the field of art and technology.
- 2. The proposals can fall into the category of FoAM's yearly thematic productions. For 2003, the 3 themes are 'evolve', 'nourish' and 'illumine'. The 'evolve' theme is already covered by the txOom project that leaked over from 2002, with a stronger focus on the 'evolutionary' aspects of the projects, finishing in April 2003 with a closing event in Brussels. The omnipresent wish of the human kind to evolve into creatures able to fly is embodied in the projects by inflatable and floating performances by Cocky Eek and Les Allumeurs the flying robots piloted by Guy van Belle. The second theme, 'nourish', is still very open to ideas. The accepted proposals will be turned into experiments conducted on several sites from May until September, under the umbrella of the floamfood programme, where process of preparation, presentation and consumption of food, its related cultural rituals, and their informal breaking will be used to achieve the synaesthesia of sensual perception in responsive environments. The programme will consist of several public experiments as well as written texts and sketches for bigger food related projects in the future. 'Illumine', our last (and at present least defined) theme of the year will be our guiding light as the months grow darker. Exercises in Colloquial Luminescence and iridescence to construct responsive environments, objects and communication conduits.
- 3. The proposals can formulate a longer term research question that needs a truly multi-disciplinary team to think of many possible answers. These questions can originate from any field of interest, or be something complimentary to FoAM's ongoing research projects:

groWorld - sym\_bio\_sys: minimizing edges | maximizing borders: an initiative that encourages multidisciplinary discussions, bringing different research topics into a common focus: 'growth processes' in all dimensions of the real. GroWorld is currently developed in three parallel trajectories: socio-cultural (sym), ecological (bio), technological (sys). The trajectories are mutually independent, but complimentary, with their results being integrated into several experiments and projects.

sutChwon - flexible system for remote collaboration: development of a theoretical framework for the construction of a flexible system for remote collaboration (CSCW/CSCD). This system should act as an interconnecting layer between several autonomous computational entities, and should allow effortless communication between platforms, protocols, data-formats and interfaces. It should also adapt to new and unknown computational environments it needs to operate within.

Play Lab on Open Grown Territories - an extension of the public workshop organised in 2002. Play and games have been our interest since the conception of the organisation, and from 2003 we will formalise it into an ongoing play research programme, with its own research trajectory and public experiments.

All proposals should be sent to maja@fo.am in plain text or pdf format and include a brief summary of the idea/project (max 500 words), a short bio or bios (max 250 words per bio) of the people/entities involved.



# [2002, a year in review....] Growing, decaying and stagnating wearable eco-systems

txOom (textures in bloom), the successor of the TGarden (FoAM's main co-production in 2001) was setup to be less ambitious, but more focused than its parent project hence its name - it cultivates only one bloom, instead of a whole garden. txOom set out as a development of conceptual frameworks and prototypes for environments having an ability to adopt behaviours and properties similar to living organisms - spaces, objects, materials and media that can be shaped by the activity happening within or around them. Its development started in February 2002 with a workshop that both analysed the TGarden successes and failures and built the foundation for the design of the future versions of the project. From the interest of its core developers (Cocky Eek, Nik Gaffney, Hiaz Gmachl, Lina Kusaite, Maja Kuzmanovic, Todor Todoroff, Yon Visell), a responsive environment would still be the direct result of the developmental phase of the project. In contrast to the TGarden, txOom would look more closely into the interfaces for visualisation and sonification of human behaviour that should result in a more coherent media environment. In addition, it should have better designed mixed reality interfaces (both in hardware and in software) and biomimetics (albeit a strangely distorted one) at the basis of all design decisions. Although these foundations were quite well defined during the first worskhop, as the year progressed and the core team expanded to include Sia Kyriakakos, Nat Muller, Steven Pickles, Rachel Wingfield and David Ullman, the definitions became suggestions that were only loosely followed. As one of the txOom premises is that the project should be open enough to allow interpretations of the concept by all involved artists and engineers - the quite organic development process produced a range of tangents that will hopefully continue to evolve past the end date on the 15th of April 2003.

http://fo.am/txoom/

# Swords of reality, strangled priests, Zipperman vs. Pipeguy. The saga continues...

Our first public txOom experiment was held in Torino, Italy, in April 2002, during the BIG Torino Festival. The design of the environment was based on the idea of an eco-system in which human behaviour is recycled into materials and media that adapt their forms and functions to the nourishment available. The edifice we were assigned was an old cavalry training building, breathing of history and decay, that provided a nice contrast to the transparent and luminescent txOom zone. Upon entrance, it did feel as if submerging into a different reality.

Several new ideas were tested on this occasion: new sensors (accelerometers) were developed, hardware was integrated in the players' costumes, the costumes were designed both as 'skins to wear' and as 'skins to inhabit', the media environment was designed to surround the players in a large circular room of the Cavallerizza Reale. The most important new addition on site in Torino was the hostess in the waiting room - Sia Kyriakakos, a Greek performer who became an essential part of the project by reading the fortunes of the visitors from Greek coffee, drunk from cups hanging off her skirt. The atmosphere in the waiting room was transformed by Sia into a social experiment that put the players in a peculiar state of mind, stripped of the formalities and conventions people hide behind when visiting an art exhibition. With her very personal contact with the visitors, Sia eased the atmosphere and prepared the players for the sometimes disorienting experience in the txOom environment.

Due to an extremely inefficient approach to dis/organising the festival by the members of the BIG staff - including a discussion on the poetic meaning of the opaque vinyl floor in the tech rider FoAM sent to the architect 3 months prior to the event, or [insert apropriate hand gestures], our experiment was reduced to 2 instead of 10 days, this to the disappointment of both the FoAM team and the festival. We frustratingly packed our bags on several occasions, but then generous deeds of Lorenzo, Gianni, Christian and his team from Euphon, the heart-warming hospitality of our friends Karmen, Giorgio and their hordes of lovely Torinesi, as well as the gastronomic delights of Café Fiorio, La Baddessa and La Spada Reale helped us stay until the very end. All in all, Torino was a harsh first txOom experience, that had nonetheless strengthened the trust of the core team in each other and the project, which ensured a strong continuation for the next major txOom installment: the 'Hippodrome spectacular'...

http://fo.am/txoom/torino/

#### The Hippodrome Spectacular

In November 2002 in the small sea-side town of Great Yarmouth, UK, txOom grew up to become as big and complex (if not bigger and more complex) than its predecessor TGarden. In the co-production with Future Physical from the UK, FoAM developed a site specific responsive environment adapted to its host structure: the Hippodrome Circus, a 100-year old edifice, built specifically for the purpose of 2 daily circus shows, complete with a sinkable floor that magically becomes a swimming pool in which the 'water spectacular' of synchronised swimmers and other liquid prima-donnas splashes the audience to a climax.

A few days prior to travelling to the UK, we designed a small experimental situation called w-orms in Brugge, Belgium, as a part of the Oorsmeer ('Earwax') Festival, in co-production with Zonzo Cie from Antwerp. We lifted about 50 children in the period of 5 hours to a height of 5 metres. They were dressed in 2 of the txOom costumes, with embedded sensors and wearable computers, producing a noisy sountrack that they only slightly influenced by their flapping, twisting and pulling each other. It was the first time all the members of the team actually realised how far away from a functioning environment we were... but the kids had the time of their lives.

Nevertheless, we set of to the West, crossing the Channel on the biggest and the fastest ferry in Europe, whose jets probably rip to shreds anything resembling marine life for about 30 metres underneath the surface. We arrived to Gt. Yarmouth, about 15 people strong, in early November 2002 with a vague plan to transform a place with so much history and a pregnant context into an ephemeral zone in which pliant, exobiological media worlds coagulate into physical existence, absorbing their dwellers in a softened, wrinkled reality -- Did I mention that the most popular sport at FoAM is thinking of 7 impossible things each morning before breakfast?

We moved all our forces to Gt. Yarmouth for a month, in which we adapted the environment and the system to the Hippodrome conditions; tested the space with artists, as well as with the local community groups; we lead a professional development workshop intended to disseminate the knowledge and results of our systems development; we attempted to indoctrinate a few apprentices; we opened the installation with a gastronomical feast of about 25 dishes in the truly entangled and blooming txOom style; we conducted open user tests; spoke at the WEAR ME Network Exchange, and last but not least - ran the installation for 10 days, with a variety of audiences - from our colleagues in the electronic arts circles to local families with children, to art theorists, BBC journalists, young offenders and project funders. Yes, it was a circus. We had perfectly adapted to its craziness, and - we remained sane and even achieved results worth mentioning on international symposia and scientific journals - but we did need a month to recover.

As in Torino, Gt. Yarmouth was essentially a public experiment, rather than a finished, polished installation. For the first time, we filled the space not only with sound and visuals, but also with human bodies, who hung on ropes and bungee cords, moving and twisting the stretchable projection screens as well as manipulating the media worlds. On the ground, the players could 'wear a part of the architecture', tangled in a web of responsive electro-luminescent filament, or play with a animal-like sphere, modelled as a hybrid between a tumble-weed and a sea-urchin. The design of the environment was based on the dynamics of a circus show - the shapes of the materials and the media were carved out of imaginary air-flows that the circus performers would generate in their acts - shapes that would encourage similar actions of the untrained players.

Systems-wise, there were many improvements to the earlier versions. A new wearable computer system was used, that proved to be very stable and robust. The sensors (accelerometers) were made smaller and stronger, the wireless transmission ran smoothly for 5 players, while the sensor data acquisition software was fast, accurate and provided a good range of data for the media systems. There were several tests done for the different data analysis mechanisms, but... the dynamics engine, the part of the system that would make the media worlds evolve was not implemented in time to be tested. The environment was there, it was active and responsive, but it didn't evolve, to the disappointment of many... However, as txOom continues until April 2003, with its last instalment as 'A Balanced Act' in Maribor, Slovenia (Time's Up/KIBLA co-production) - txOom might evolve after all!

An important part of txOom in Great Yarmouth comprised the 'creative user research' which was conducted during several stages of the design process. This on-going research strand of FoAM and Future Physical was set up to examine how we can learn more about ways in which players adapt or reject an environment (and vice versa), where the main problems of interaction on a phenomenological, technical and social level occur, how people play/participate and what this play/participation constitutes on a creative level.

Observation and the interviewing of the players constituted our main on-site research methodologies. The selection of questions we pose to the players were to address issues of interaction on several levels: contextual, HCI and HCHI, spatial/physical, and conceptual. The beautiful thing about Great Yarmouth, was that we had the opportunity to work with a very diverse range of focus groups, such as artists coming from a textile, audiovisual or movement background, and community groups such as young single mothers, young offenders, and teens with communication disabilities and a very heterogeneous audience during the public presentation.

There were a few very memorable instances. For example, I will not lightly forget how one of the young moms after a session, hugged me and exclaimed: "When I was up there, flying through the air, I could completely forget my life for a while...". Or those young kids coming out with huge eyes going: "Wow, that was brilliant, awesome, excellent, that is so cool!" We did get a nice quota of hugs and lovely smiles from people, which is always very rewarding. Nevertheless, we also got our share of "boring, I felt completely silly, it was like being in church, there was nothing to do" or "how can you design an environment without a proper interface metaphor" sort of reactions. The range of responses we recieved was as broad as the variety of awarenesses and usage of the players' own bodies - extremely challenging to categorise, or devise a single, simple conclusion from. The future of the physical body, is luckly as diverse as its past.

http://fo.am/txoom/w-orms/ http://fo.am/txoom/2002\_hippodrome/ http://futurephysical.org

# How to bake a tart-of-fima or 'It's reigning truffle-dogs!'

Under the coordination of FoAM and with the hosting of the Croatian Musical Youth, P~lot or the Play Laboratory on Open Grown Territories, brought together a motley crew of artists, designers, students, theorists and enthusiasts in the tiny Istrian village of Groznjan. Situated on a hilltop, almost scraping the clouds, Groznjan's surreal landscape is suffused with the promise of magic, ideal for conducting the p~lot experiment, which required a fair amount of suspending disbelief.

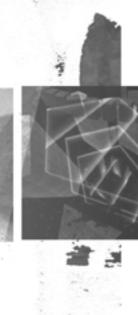
P~lot was designed to examine the notions of 'play' and 'game' as methodologies to research, develop and present results of interdisciplinary creative practices. Inspired by the idea that play is liminal, we consciously chose to work with two separate research strands - GameSpace and PlaySpace - which in due course were supposed to merge. In order to create a sense of cohesion we spun a master narrative, threading the GameSpace and the Playspace into one reality, the 01 Continuum, which - as the story goes - was ruptured by a 'reality cataclysm' that severed both worlds. It was p~lot's task to reunite the worlds and create portals so both realities could bleed into each other and slowly reform one unified 'real'. Participants of both branches walked together through the alleys and tunnels of the village, finding spots where the two worlds were the closest to each other. These convergence points became embossed in the work of both workshop strands - either by being modelled in realistic detail, or having a special magical property, they became places where a projection of the gameSpace would be visible on the walls of the village, or were destined for physical installations evoking parts of the master narrative, that continued in the modelled extension of Groznjan. However, meteorological factors, technical and time constraints, and simply being human by default prevented us from closing the workshop by re-integrating both strands into one festive worldPlay. Instead, the group occupied the town lodge and a spooky abandoned house, offering the few visitors a home made 'Brodet' and guiding them in the pouring rain through the stories and the characters of p~lot; filling the walls in between with projections of the still-to-befully-rendered gameSpace, and not to forget - a flock of Croatian Rock Climbers jumping out of highest town-gallery windows. It all ended wet from the rain, the tears and the Medovaca. The basis has been laid, and a follow-up might be in the make.

gameSpace was designed to enchance creative skills in the field of online game development, specifically looking at context based gaming environments, rooted in existing places such as the village of Groznjan. Travelling to Groznjan already felt like an adventure. The game twisted paths and inclined the hills to guide the novice players into the strangely familiar, yet somehow skewed place showing many of its physical, temporal and mythical constraints. After drifting through the streets and abandoned houses, as if walking through a MMORPG (Massive Multiplayer Online Role Playing Game) and learning how to communicate with its inhabitants in order to understands its governing principles, the players moved to another level of the game: where the world dwellers become world creators. The apprentices were lead to their world-creating lab tower by the master alchemist Julian Oliver, who patiently guided them through the opus magnum of GTK Radiant and a glut of arcane world building tools. With these tools the group transformed a pile of fragmented impressions, a few bottles of Groznjan's essences, a mountain of naive dreams and a whole bunch of protocols into a Q3A (Quake III Arena) level, based on an imaginary, geographical and mythological model of the village. At the end of the workshop, the gameSpace revealed an ethereal extension of Groznjan (currently accessible online through the FoAM site). This realm became silently magical, defying the laws of physics, temporality and reality. Traversing the world, the players wander in a replica of Groznjan that gradually shatters into the increasingly abstract planes of crystalline-blue unreality, they can be unexpectedly teleported to the spooky graveyard, wander into the inner spaces of the church, or laze in a floating boat enjoying the arial perspectives.

playSpace, the other workshop strand had a more organic, self-organising process - free play if you will - in the sense that its goals were never made explicit to the participants. Participants were to work with the physicality and the local fabric of Groznjan to create playSpaces in the broadest sense of the word. At the beginning of the workshop, a theoretical overview of a range of possible plays and games was provided by Nat Muller, while Cocky Eek encouraged the players to use the village as their raw material, or game-tool to extract the play out of the lifeless stones that surrounded the Venetian fortress. This was easier said than done: the participants had to be lured out of habitual frames of thinking and begin to articulate an alternate vocabulary grounded in action and experience; causing a shift in semantics, manners to exchange knowledge and design practice. It begged a mental switch, and readiness to explore liminal spaces, not knowing quite what to expect. What could have served this purpose better than engaging in an athletic dance hanging off ropes on the ancient fortress walls, above the Istrian vineyards? The participants wove the local substances with materials brought from their different places of origin. Legends were massaged to excrete symbolic meanings for arbitrary game rules. Giant balloons were inflated in between houses, as to prevent a too narrow alley from tightening further, and squashing the innocent passers-by. The main street was dug up to make the Earth glow blue and give the impression that the town was suspended in ether....

To populate the 01 Continuum and its two disconnected realities, playSpace participants generated an intricate bestiary of characters to form a basis for a role-playing game based on the p~lot master narrative, designed for the workshop participants' personalities and their behaviour during the week, transformed into the magical entities entangled in the local myths. The p~lot participants had transmogrified into a population of seductive but mischievous tricksters, deteriorating deities, schizophrenic inverts, helpful familiars, and storytelling guides. Each of these characters could draw back on the Istrian culturo-historical-mythological legacy, which suggested a set of identity traits governing their behaviour and actions. As an offshoot, FoAM is currently developing a card game based on the RPG and 22 p~lot characters (the magic number of the major arcana). If there is enough interest, this game will become a starting point for a new experiment, in the same or similar location.

http://fo.am/p~lot/





# SM (Smart Materials) Cargo-Cult-ing in Norwich

Held in October 2002, in the heat of the txOom production, the @ or Alive Textiles in Norwich was a professional development workshop in the field of smart/active/responsive materials, exploring the boundaries between materials and media. The workshop was designed for the students of The Norwich School of Art and Design, as well as interested local artists. Although the workshop was originally conceived to guide the students from a survey of the state-of-the-art in the field of smart materials, to conceptual exercises, a 'real life experience' with the txOom responsive environment, ending with a week long development workshop, where the students would work with several artists to develop their versions of txOom-like environments, financial constraints shrunk the workshop to a short but intensive brainstorming session. The textile students had 3 days to create, or begin creating concepts for responsive garments, in a 'cargo-cult' manner - using off the shelf 'dumb' materials, smeared with inks and films from the school's printing department, analysed for their internal, inherent 'alive' properties and augmented with ideas of what they would become if they were truly smart. This was not an optimal solution, but a good mental exercise and information gathering experience for a possible future assignment.

In the course of the workshop, the growth of the students' ideas was visibly progressing: from garments with integrated video cameras, mobile phones and colour-changing fabrics - which were their first reactions when they were asked to write about responsive garments and spaces, to a range of imaginary environments: growing forests of worms, affected by the human movement within them, empathic homes with embedded mood detectors, happiness inducing chairs, and 'cocooning' aids in the form of portable coat-chambres. Through a combination of experiments with textile, analysis of natural shapes, access to information about the industrial developments in the field of smart textiles and open discussions at the end of each day, the students released their imagination that got rid of the stereotypical Philips/Levis/France-Telecom visions of what wearable computing should become. Instead, they opened the portals to the true transformation of textile and fashion design, where the materials and patterns grow, decay and change their properties on a microscopic level, within the fibres and through special processing techniques. This methodology proved to inspire a lot of enthusiasm and desire to continue working on ideas around the alive textiles, beyond the end of the workshop.

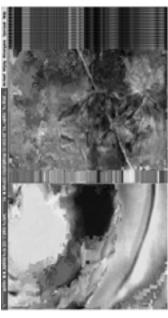
# Touches, traces and negotiations on short and long distances

lyt\_A, Distance Touch Generator is a project that we conceived in response to an invited call for proposals by the German Science Centre Phaeno in Wolfsburg. The project was accepted and commissioned as a permanent installation by this centre in 2001, and will be installed only at the end of 2004, when the challenging site designed by the architect Zaha Hadid will be ready to assimilate the scientific and artistic exhibits.

The installation is composed of two free-standing structures ("walls") - physically distant, but experientially connected, whose surfaces can be shaped by touching either of the walls. |yt\_A should become an artwork, an instrument and a translation medium in one. Its responsive structure should transmit haptic information on a distance: when the structure is touched on one site, the touch will be visible and touchable on another, and when it isn't touched by a human body, it remembers traces of past visitors, morphing them together into new shapes.

We began the research for this project in 2002, as many challenges are awaiting the development of 'the riskiest' project within the whole of Phaeno (we are still debating whether to be really thrilled or really scared of this title!) - the two-way transmission of haptic information in real time, the robustness to withstand thousands of children per day hanging off its fragile components, the flexibility and toughness of the surfaces, the resolution needed to achieve the realism of the haptic image...We held the first workshop to discuss different ideas for the force feedback system in February 2002, and came up with several options ranging from the far-fetched but exciting artificial muscle technologies, to pneumatic and hydraulic machinery, to fibre-optic filaments embedded in fabric. Before deciding on any of the technological solutions, we agreed to develop a first 'unplugged' prototype to test our hypothesis about the human-responsive material-human interaction through touch.

For the 'paramount basics' exhibition in the Antwerp Contemporary Art Museum (MUHKA) Lina Kusaite and Joris Bois built a 300x200x30 centimetres curved wall out of insulation foam tubes, that proved to withstand violent attacks of several high-school students, as well as be playful enough for the visitors to engage them for longer than 5 minutes at a time. In the context of the museum, where touch is still somewhat a taboo, to encourage the visitors to touch the installation, we asked them to leave traces of themselves in the work by touching everything in the room (after washing their hands!). On one side of the curved wall, the room was wall-papered with thermo-chromatic foam that would change its colour when touched with a warm object (it reacted to temperature change above 25 degrees Celsius). The other smaller room, created by the curvature in the wall, used the phosphorescent canvas and a strong randomly pulsing stroboscope to capture the traces of the visitors, without the need to actually touch the material. The surface of the curved wall resembled a blown up pixel-based image, where one pixel was about 10 centimetres wide. For a week the visitors touched, traced and played with the surfaces, proving our interaction assumptions valid - touch is an ultimately interactive communication method: the one who touches is simultaneously being touched; there is no subject-object relationship, no distance, no control, but a direct dialogue - and in the age of disembodied media, this gets people of all ages extremely excited....



The ultimately symmetric year 2002 began for FoAM with an exploration of the asymmetries involved in natural and electronic systems. The Oslo based organisation Motherboard invited us to perform a glitch02 extravaganza, based on our first theory+media jamming-session designed for the Digital Arts and Culture Conference (Bergen, Norway, 2000). The 'Glitch' festival took place in Oslo, Norway in January 2002 and was one of the few media festivals in Europe that still felt alive with enthusiasm from both the organisers, the presenters and performers. It consisted of a 2-day symposium, a tiny exhibition and a series of interesting performances, that culminated in the show of the Japanese 'Toast Girl'. Toast Girl is a phenomenon not to be missed. She is all singing, all dancing, while toasting bread on her head and balancing on two functioning vacuum cleaners. To contrast, or complement this performance, the Norwegian pianist and electronic musician Jørgen Larsson fought a duel with his glitchy Max/MSP patches by mimicking a centipede playing a master piano, with such physicality that we were sweating just by watching him in the audience.

The symposium was less physically intense, generally speaking, but did involve a true star of Glitch Art: Tony Scott, a mathematician who works by day for a DSP company in Cambridge, UK, getting rid of glitches in audio files. De-glitching. All day, every day. His work led him to the conclusion that Glitch Art is only interesting in the visual arena. Clicking and buzzing sounds remind him too much of work, but 'unclean' images remind him of his childhood in the 80's, in which the combination of green and black, yellow and black (resembling anti-nuclear posters), or red and black were considered 'scary'. Tony's presentation showed a plethora of 70's and 80's systems' emulators that he corrupts, using the results as artworks. These artworks come to existence through a set of very rigid rules: only static images of certain size allowed, the only manipulation of the images is changing the colour and increasing the contrast, only black and white with addition of I colour allowed. Tony's work is continually developing on his website http://www.beflix.com

Our contribution to the symposium, "Introduction to Advanced Error Engineering: On Growth and Form of Ix starter organism" opened the festival in chaos. We wrote a story that we wanted to tell the audience through the 'Chinese Whispers' game. However, immediately after the first whisper, Amanda, one of the organisers stood up and started whispering the story to several people around the room, that caused everyone else to do the same. In no time, there were little groups looping parts of the story, others running around contaminating other loops with new sentences, others again sitting still, wondering what was going on. We were quite puzzled by the whole event, but it did prove one of the points that we wanted to make in the more structured presentation that followed the game: if a system is adaptive enough, a glitch can cause an interesting transformation. The presentation had several layers - the visual layer involved Maja Kuzmanovic sitting in a big green armchair stretched between the audience, her theory papers and her laptop, which was used to steer the projection of an erratically corrupted nature documentary. Her voice was complimenting and competing with Nik Gaffney's torn up and rebuilt soundtrack. This contributed to a perfect setting for the content of the presentation: a comparison of the perception, the role, the deliberate construction and the adaptation of glitches in digital and organic systems. We gave an overview of several techniques for glitch engineering, but also a proposition for developing better 'edge habitats', complex adaptive software systems, which can incorporate the glitches in their structure and evolve accordingly.

# Reverse engineering edge habitats

Ix starter organism: [pro\_teus || abstract expression [tailed amphibian] in the lab some were given hormone injections and developed to the final stage]

www.liveart.org/glitch/ fo.am/publications/2002 glitch/

# Of sake, sticky rice, orai, cohesion and adhesion

ISEA 2002, the biennial International Symposium for Electronic Arts, was held in Nagoya, Japan from October 27th to October 31st Its overriding theme addressed the notion of [orai], which in Japanese refers to a myriad of meanings, such as comings and goings; communication, and contact; streets and traffic. This semantic confusion and the lure of practicing our chopstick skills was reason enough for us foamies (Guy Van Belle, Maja Kuzmanovic, Nat Muller) to ponder the rationale of it all, and submit a panel proposal GLUE: Case Studies on How Things Stick.

It may be coincidence, but the concept of [orai] seemed to loosely govern our first Japanese impressions: a weird mixture of recognition and incomprehension, of the sanitised and the ordered coupled with a touch of the perverse (the heated toiled seats in the subway were the best!). It must be said, noone like the Japanese know how to blend the futuristic and hi-tech so seamlessly with the traditional and a heritage of centuries. Hell, it all seemed so natural when a Shinto priest stopped the ceremony to answer his mobile phone. And sure why wouldn't you have cab doors open automatically for you, and traffic lights emitting animal sounds? Yet, ISEA failed in establishing a platform for trans-cultural communication. The Japanese events were almost segregated from the main ISEA program (which was English-speaking topics from the previous symposia, several papers presented blatantly incorrect arguments, or the presentation slots were used as marketing stunts. ISEA was a floating plastic cocoon, placed out of context, and well-protected from any kind of local penetration. Definitely not the idea of trans-local collaboration we subscribe to.

In any event, GLUE: Case Studies on How Things Stick was an attempt to re-appropriate the notion of [glue] and its action [gluing], and spill it. That is, we wanted to highlight the messy working process practitioners within the realm of new media and art utilise, in order to create a cohesive whole out of the various heterogeneous elements of their practice. These elements involve a.o. [collaboration] [playfulness] [systems] [knowledge] [research] [theory] [practice] [active participation] [new public contexts] [audience] [environment] [perception] [cohesion] [culture]. It is precisely the interplay of breaking apart and sticking back together again that allows for the creation of new meanings and multi-level understandings, which lie at the heart of innovative and critical practice. In other words, which adhesive strategies and methods are being used to make things stick? Perhaps our hidden agenda was that we were looking for that one magic formula, which would provide us with that one methodology we were all waiting for. Of course, this never happened. The panellists (Michelle Teran, Sharon Daniel, Maja Kuzmanovic, Guy Van Belle, Nat Muller) all seemed to be using different kinds of glues, variant in consistency and in effectiveness. In retrospect, GLUE turned out to be an exercise in trying to grasp and articulate our own working methodology. A contemplation and dissection of our self-literacy, if you will.

What we did discover through our travel guide, while struggling to wrap our nori seaweed around our sticky rice, and slurp our udon noodles with bravura, was that the glue keeping Japanese society together was alcohol. We decided to test the merit of that particular glue... Our intent was to create an informal atmosphere for the panel by providing food and drink. Instead of advising us on sake, our friend, guide and translator (Professor Akihiro Kubota, who also performed "The Society of Algorithm" with Guy Van Belle) bought us shochu, a Japanese vodka-like spirit made from sweet potatoes. Let's say that the sticky trail we left, was one of a happy intoxication.

http://www.isea.jp http://fo.am/events/2002\_glue/

#### Public events \\ 2002



WEAR ME, txOom presentation, Future Physical Network Exchange, 05 - 08 December 2002, Norwich, UK http://www.futurephysical.org txOom, responsive environment, 30 November - 08 December 2002, Great Yarmouth, UK http://fo.am/txoom/ txOom public education project, txOom audience research, 25-29 November 2002, Great Yarmouth, UK http://fo.am/txoom/ txOom process lab, txOom professional development workshop, 22-23 November 2002, Great Yarmouth, UK http://fo.am/txoom/ w-orms, Oorsmeer Festival, 03 November 2002, Brugge, Belgium http://www.brugge2002.be/index flashed.htm GLUE: case studies on how things stick, panel presentations, ISEA, 27-31 October 2002, Nagoya, Japan http://isea.jp Presentation p~lot workshop, Jan van Eyck Academy, 17 October 2002, Maastricht, The Netherlands http://www.janvaneyck.nl @ [ Alive Textiles ], txOom public workshop, 11-16 October 2002, Norwich, UK http://fo.am/txoom Free your Mind and Your Wardrobe will follow. lecture for symposium Lookalike Live: Barbie, Lolita en Lara, I 1 October 2002, NFI, Rotterdam, The Netherlands http://www.nfi.nl Jyt A. Remote Touch Generator. Version 0.5, MUKHA, 01-07 October 2002, Antwerp, Belgium http://fo.am/lyt A/ p~lot, txOom public workshop, 15-22 September 2002, Groznjan, Croatia http://fo.am/p~lot zeiljurk, Open Haven Festival, 16-18 August 2002, Amsterdam, the Netherlands FoAM: on growth and form, media mediterranea 4- festival of expressive culture, 12-18 August 2002 Pula, Croatia http://www.metamedia.hr wings 03, Oerol Festival, 23 June 2002, Terschelling, the Netherlands http://www.oerol.nl/ ultroneous ubiquitous unsinew u, Interface theory, culture and design, 13 June 2002, Universiteit van Utrecht, Utrecht, the Netherlands Aloni, by Sia Kyriakakos, State Museum of Contemporary Art in Thessaloniki in conjunction with the Contemporary Art Center of Thessaloniki, 06 June - Greece TransCodecExpress, 06 June 2002, OK Centrum, Linz, Austria + Internet http://www.timesup.org/closing/tce.html wings 02. Vliegercircus, 17-20 May 2002, Ilmuiden aan Zee, the Netherlands http://www.theateraanzee.nl/ weedy sociality | distributed wilderness, Directions and Implications of Advanced Computing, 16-20 May 2002, Seattle, USA http://www.cpsr.org/conferences/diac02/ Les Friandises Digitales, Dak'Art 2002, Dakar African Art Biennial, 13 May 2002, Dakar, Senegal on slipping between cracks and the growing of worlds in them. Digital Media Lecture Series, 13 May 2002, Santa Barbara, CA, USA http://www.mat.ucsb.edu/matWeb/lectures/lectures02.html slip/stick. an excercise tightrope balancing above the sludge of creative practices Critical Upgrade, Reality Check for Cyber Utopias 04-05 May 2002, Zagreb, Croatia http://www.mi2.hr tx0om, Biennale Internazionale Arte Giovane 2002, 19-27 April 2002, Torino, Italy http://www.bigtorino.net/ Founding of **Stichting FOAM**, 04 April 2002, Amsterdam, The Netherlands inleiding in het groeien van werelden. We meet no Stranger but Ourself, 27 March 2002, Den Bosch, the Netherlands http://www.kunstbos.nl/ Introduction to Advanced Error Engineering, Glitch Festival and Symposium, January 2002, Oslo, Norway http://www.liveart.org/glitch/

up to date agenda of public events: http://f0.am/events.html

# Upcoming public events // Jan-May 2003

..., Beauty of Collaboration summit, 21-22 May 2003, Banff, Canada http://www.banffcentre.ca/programs/bnmi beauty of collab/

txOom: de c o m p res s io n, final presentation of the txOom project, 11/12 April 2003, Brussels, Belgium http://fo.am/txoom/

txOom user research, presentation of the user research results on the Future Physical RESPOND network exchange, 6 April 2003, Cambridge, UK http://www.futurephysical.org/pages/content/resp\_env/nex.html

Swings on a Bungee Cord: Proposals for an Elastic Methodology for user Research in Responsive Environments, lecture for Digifest, 29 March 2003, Toronto, Canada http://www.dxnet.net/digifest

FoAM: New Public Contexts?, presentation at the Society for Arts and Technology, 25 March 2003, Montreal, Canada http://www.sat.gc.ca

txOom: Data Ecology, public workshop as a part of the txOom project by Time's Up, 27 - 29 March 2003, Time's Up, Linz, Austria http://www.timesup.org/prop/winter03/index.html

txOom: A Balanced Act, experiment as a part of the txOom project by Time's Up, 28 February - 8 March 2003, KIBLA, Maribor, Slovenia http://www.timesup.org/prop/winter03/index.html

Data Quilting, lecture and concept for program at Dutch Electronic Art Festival, 2 March 2003, Rotterdam, The Netherlands http://www.v2.nl/deaf

formant of apparent morphology, history, present and future of FoAM activities, dorkbot, 22 February 2003, Ghent, Belgium http://dorkbot.org/dorkbotgent/

embriology of evolving spaces, short presentation on the Genderdemicratisch Labyrinth, 14 February 2003, Maastricht, The Netherlands http://www.genderdiversiteit.unimaas.nl/labyrinth.htm

Bubbles of Knowledge or Empty Balloons: Dips into thin Air, Opening Week Jan van Eyck Academy, 12 January 2002, Maastricht, The Netherlands http://www.janvaneyck.nl

