

GANGPLANK VADEMECUM

Foreword

1. Introduction to this Vademecum

1. INTRODUCTION TO THIS VADEMECUM

A Vademecum is something that you can carry around with you to travel, work, learn and play with. This little guide is to welcome you, to give you inspiration and explain you the possibilities and tools developed by a group of artists, technicians and designers in a spirit of collaboration, openness and non-hierarchical expertise sharing.

This *Vademecum* is a collective handbook basically aimed at Gangplankers, as well as people joining our meetings for the first time. On the other hand, it's also aimed at anyone interested in the relationship between living art, technology, artists, technicians and all that could lie in between.

The readers should be aware of the status and nature of the content of this Vademecum. It has been written during the two Gangplank sessions held in Aubervilliers and Essen in June and July 2011. The technical documentation chapters were written both by developers and beginners when learning how to use the tools. Those chapters do not pretend to be neither comprehensive nor fixed in time. They will be edited soon with new developpement and anyway, we encourage one to one or direct communication to learn about those tools. The Methodological and Reflexives chapters are also not to be taken as any fixed or collectively assumed position, but more as deliberations and ideas, that could be of use, or reformulated in a better form later on.

The chapters concerning more specifically the use we make of the lanbox are describing CONVENTIONS AND HABITS we have in working with this tool rather than RULES. That means that there are many other valid ways to use the Lanbox than those described in this document.

Presenting Gangplank

2. What's Gangplank ?

3. Statements about Gangplank

4. Interview with Les Labos d'Aubervilliers // May 2011

2. WHAT'S GANGPLANK ?

It is a group of European light/sound/video designers, musicians, choreographers that once or twice a year meet up in residencies to discuss the interactions of technology and dramaturgy in the practice of making stage work. Gangplank is also very much concerned by free culture, open source technology, fostering non-hierarchic ways of collaborations and sharing knowledge.

What started in 2009 as a casual meeting of people already closely related by links of collaboration and friendship has since evolved into a wider circle, reaching a point where the intensities of exchanges within a small circle bump into the question of knowledge sharing. Hence this Booki.

3. STATEMENTS ABOUT GANGPLANK

ABOUT INTERDISCIPLINARY CREATION PROCESSES AND SOME RELATED ISSUES

The idea of a series of meetings and project realization about interdisciplinary cooperation and artistic networks comes from the emergence of common concerns that can be observed in several working processes and discussions amongst colleagues.

The notion of interdisciplinary work has become in the last years far more than a word often used in project descriptions, but a principle applied increasingly more often to the very process of creation. Interdisciplinary works are not any more understood, for instance, as a video projected on stage as a wallpaper, but more and more as interactions in real time between different media and different practices that create the dramaturgy of a performance. This development is largely influenced by the evolution of technologies applied to stage and by the spreading practice of collaborative working methods. Three examples of projects created in the years 2006 and 2007 can help to understand how much interdisciplinary cooperation is a very concrete issue when creating stage work:

Still Lives (Anderson, Gies, Pelmus, Pocheron, Schad): *Still Lives* is essentially an interdisciplinary project in that it has originally been initiated by an architect, three choreographers and a light designer. Furthermore, it is a choreographic project that starts from the words of the inhabitants of a specific city (interviews) and translates into a stage work involving non professional participants, also from the city, as dancers. The interdisciplinary cooperation carries on down the line through the realisation of a digital system allowing interactions between sound, video and lights, in close relation to the interviews and the choreographic elements, allowing a dramaturgic approach that includes and binds together all the elements at play. *Still Lives*, by the strong concordance of its themes and of its shape, both activates all the elements at stakes in a theatrical performance and offers a strong relation to the specificity of each city where it is performed, thus allowing each spectator to engage into the piece on multiple levels.

Le Sacre du Printemps (Le Roy): In *Le Sacre*, the core of the performance is constituted of the relation between different practices and their displacement: choreographer Le Roy dances a classical orchestra conductor score on stage, conductor Berno Polzer and dramaturge Bojana Cvejic work with the choreographer on the musicality of his dance and the realism of his conducting, sound designer Peter Boehm reconstitutes a classical orchestra in the audience space through a complex system of sound spatialization, placing the spectator in the position of the musician facing the conductor. This interdisciplinary cooperation, in the confrontation of different fields of experience, is in the end the piece, as experienced by the spectators.

Vous en Rêvez (Youri l' a fait) (Depaule): This piece is a very advanced attempt to activate the whole theatre apparatus through a computer network allowing the different media involved to influence each other in real time. This activation appears as a strong dramaturgic statement devoid of superfluous effects. In 'Vous en rêvez', live music, sound, video, set and lights are melting into one another, affecting one another, triggering one another, including the actors whose voices are treated in real time. The fusion of the different media is there achieved and one can't really speak any more about designs applied to the piece but only about a global dramaturgic approach that is the piece.

This actual cooperation between disciplines affects of course the relation between artists and technology, between artists and technicians. We are less and less confronted to situations of hyper-specialization and industry-like division of the work, such as, for instance a choreographer hiring a light designer in the last week of the creation process to apply an aesthetic treatment on the choreography. Interdisciplinary work leads to a simultaneous and interrelated development of all the elements that make a stage piece on a conceptual and on a practical level. It also induces to a fusion of the roles in creative processes (to simplify, artists start to develop more and more technical skills and desires, and technicians are more and more involved in the artistic discourse). From this fusion of roles, we can see new dramaturgical writings appear as well as new necessities.

A situation that has been latent since arts and so-called new technologies began to really operate together takes an important dimension right now, when the practice of interdisciplinary cooperation reaches a large scale of projects, from big to small, from alternative to institutionally supported. This practice affects drastically working methods, time frames necessary to do work and the economy of performance making in many different ways. On the other hand, the structural frames in which we currently do work are far from being adapted to these emerging ways of working and still favour a model of division of the work: long studio rehearsal times without technique and very reduced stage time to finalize the performance, for instance, are still common practice.

Therefore it seems important to start gathering together a number of professionals coming from different backgrounds (choreography, spoken theatre, light, sound, music, visual arts, network development etc.) to address together, through practice and discussions, the following issues:

- discovering the possibilities opened by interactivity and networks
- finding common languages
- defining strategy for the development of common tools
- reflecting upon the circulation and sharing of knowledge
- better understanding the principle of open source
- publicizing our practices and the tools we develop
- exploring the place of technology in performance-making
- analyzing how to include the notion of formation / education in our interdisciplinary practices
- discussing in which contexts, which time frames and which spaces we want to work
- activating the theatre space versus fitting in the theatre space
- thinking again the relation between money and production
- framing the way we want to reshape authorship and credits
- being more conscience of our structural independence
- choosing if gangplank is to a continuous work, project-based work or both

GANGPLANK AS A MOBILE BRIDGE BETWEEN PEOPLE, PRACTICES AND PROJECTS

Gangplank is thought as a collaborative multi-tool operating and appearing on several levels. Its main aims are:

Opening spaces for reflection, exchange and debate on interdisciplinary creation processes

This can happen through:

- questioning and confronting ways of doing art and relations to technology in doing art
- developing and documenting dramaturgical, technological and communicative tools for network-based collaborative processes
- developing strategies of communication within network-based collaborative processes
- developing strategies of communication towards other cultural actors

Creating cross-project platforms

As a way to make things concrete and to initiate cooperative work, Gangplank invites each participant to share questions, desires, practical riddles he / she is dealing with in his / her current productions. The group will give feedback and collectively or in smaller working groups provide support to each participant's work. This support can take different shapes: dramaturgic advice, technical advice, development of a piece of software for show control etc.

Developing and publishing open show control tools

Open source software (like for instance Pure Data) that allows actual communication between computer controlled items (light interfaces, sound interfaces, video players for instance) through the development of common IT protocols are nowadays more widely used. More and more low cost / high power personal interfaces tend to challenge the classical equipment dedicated to show control in the theatres (like for instance the Lanbox DMX controller for lights). We could thus say that the practice of interdisciplinary creation goes together with a greater independence from the venues in terms of show control. Gangplank aims to promote and develop further such tools for the possibilities they open in creative processes and to make them publicly accessible. The development of hardware / software tool-kits for show control is planned.

Providing a data-base for interdisciplinary artistic processes

Gangplank aims to provide organized and rationalized documentation of cooperative artistic processes as well as libraries of downloadable material related to these.

4. INTERVIEW WITH LES LABOS D'AUBERVILLIERS //

MAY 2011

Alice Chauchat: How are Gangplank sessions organised?

Bruno Pocheron: refusing the idea of a collection of experts in one domain. seeing who wants to engage in that sort of gathering, and then just making it happen - thanks to people / structures like you / yours. That's where for me the horizontality comes into play: gangplank is in no way result-oriented, gangplank allows itself to take time, and creates time-frames for working on the many different concerns of the different persons involved. It does try to equally give time to development, and to the construction of premises for development.

AC: How is the political aspect of this mode of organisation linked to a wider political project for knowledge production and distribution?

BP: No retention of information. Transparency. Knowing your colleagues and understanding their tools, collaborating, being conscious of the context we work in. Prior to politics, I would speak there about an ethical position: seeing how competitive the art world becomes and how consumerist many structures dedicated to present art act, the only ethical stand I can take is one of sharing: sharing knowledge and tools with my colleagues (artists, technicians etc.) and sharing / publicizing my opinions and concerns with the institutions and the venues that are our counterparts. We still do work in infrastructures fueled by public, tax-payer's money. The actual tendency to apply free-market notions and strategies to these infrastructures is in my opinion highly dangerous for the arts and for the notion of culture as being part of a social mutuality system. On a very human scale, I see gangplank as an attempt to speak against competition in making arts, to show the importance of supporting research and transmission of knowledge rather than speculating on products, and to reinvest in a discussion between all parties involved in the making of stage work (artists / technicians, venues, institutions).

I also see gangplank as an anti-lobby, as it manages to escape both notions of common interest (singular, that's important here) and of conflicts of interests. The plurality, the differences create the ground we choose to share and work on.

Maika Knoblich: For me personally gangplank is questioning the concept of areas of expertise and is thereby acting political. In my opinion the field of the performing arts is unfortunately still defined by authorship and is dividing the creative process by defining very strict roles which are blurred far too rarely. Gangplank is trying to share knowledge, makes a creative process accessible and triggers exchange which is contrary to a hierarchy which features the idea of the expert.

Dragana Zarevska: One of the basic political superpowers of the project is actually the alternative way of cross-learning/teaching (which is not the invention of the hot water itself - it just a friendly sharing of knowledge, but still, this makes the project one of the best anarcho-scientific retreats i've been part of.

AC: What is the relationship between developing a technical tool and expanding artistic possibilities?

Nadia Ratsimandresy: from my point of view (musician's one, not involved in developing technical tool, but participating in projects including technical tool) the relationship hasn't been built yet. It has never been clear for me if either developing a technical tool leads to the expansion of artistic possibilities or the need of expanding artistic possibilities leads to the development of a technical tool. It's always a pity to see a show with an incredible set of software, hardware, tools serving an artistic concept which doesn't need such a set. Building a show needs an idea, a concept: what questions need to be solved, answered? What would we like to express, to transmit, to defend in front of an audience? These needs lead to the question of the form and the elements which will build the form: do we need video, light, actors, voices, bodies, musicians, noise, etc? Gangplank is quite interested in the relationship between these elements and how they are connected. Whether they are independent: light and sound synchronized, video and bodies synchronized, etc. Through the need of building the form, the tools and their functionality appear as the answer and solution to the questions and issues raised by the form (how are we gonna link light and sound? what system are we gonna use?). It seems that the technical tool depends on the artistic idea. Gangplank, however, defends more interaction between artistic and technics, it's not a one way relationship at all. Through communication between those who master tools and those who elaborate artistic form can be build a better relationship. It is easier to separate 2 fields that seem very far away from each other: Gangplank would like to fill this gap. Gangplank defends this interaction: tools are not developed far from the artistic needs. They answer to each other, they get inspiration from each other. A functionality has no sense without an artistic scope. Through this relationship can be in the same time widen the functionality of a tool and developed an artistic concept. It's through a better knowledge, a better communication between these two fields that Gangplank will build this relationship. Gangplank sees all the elements of a show not from the vertical point of view induced by hierarchy (firsts artistic, then technics). Each person involved in a the creation of a show should see himself as part of the process of building it. Each person should see with such an intention that his part is an essential one.

Olivier Henry: Roughly, there are two kinds of technical tools, industrial tools, which are quite standardized and invented under capital-intensive conditions, for instance a piano, a stage truss, a 10.000 lumens video-projector, a modern theater house, and craftman tools, which rely a lot less upon standards and much more upon individuals inventivity and are a lot more handwerk-intensive, let's say a DIY synthetizer, a home-made stage set, an open-source light control program... Between these two extremities, there is a wide scope of variations and interactions. One of the keys is the degree of autonomy we are looking for within this scope, be it financial or artistic.

BP: well, i think that, first of all, technical tools and artistic possibilities are intrinsically linked. the painter and canvasses, colors and brushes, the contemporary choreographer and Mac;)books or ipods ;). what i find interesting is to observe how technical tools are informing artistic ideas, and reciprocally how artistic ideas are calling for and informing the development of technical tools. to join nadia and olivier there, i am very much busy with the relationships between the hopefully permeable domains of artistic activity and technical development, and pretty convinced that the order of precedence between them is constantly shifting in the actual art-making. like some sort of nervous system. i am also totally interested in shifting, within my practice, between initiating and responding, or just sitting in the synapse ;).

Judith Depaule: Already for several years the scene is undergoing a mutation of his writing. We can't make a separation between the artistic and the technical aspect because they are so interlinked with one another. In Gangplank together we build a new language which we never know exactly the syntax and vocabulary, because that language is never static, it evolves with each new experience.

AC: You say that the technical tool depends on the artistic idea. But the question of how to relate sound and image, for example, can also be understood as an artistic question. In the Gangplank sessions, how do you decide on the questions/problems/ideas that will then be investigated? And as you work on the development of a technical tool, how do you reflect on the artistic implications of such a tool?

NR: the classical process in creation is used to organize the technics in relation to the artistic idea: it is seen as artistic first and then technics. Gangplank doesn't defend this point of view: as I say, it is all about develop a better knowledge of the different elements we have, the stakes of the creative process to see how the show can be built with the skills of each person involved in it. It's the verticality of a classical process which is questioned through Gangplank. In my case, I don't work on the development of a technical tool: I expect, as a musician, to understand the tools existing, how they function, what has been possible to be done so far, what works and doesn't and how my instrument, my sensibility on stage can be helped, reinforced, underlined with this tool. I also expect that my needs (or my ideas, or concepts) can raise new issues and questions in front of a tool so that a new function, a new relationship with this tool can be revealed or can be developed. If a light designer explains to me what a Lanbox is, how it functions and what has be done (on what show and when and why), I would like to see how I can connect through either my instrument or my ideas (or both) with the lanbox. I appreciate the idea of sharing, exchanging new ideas that would never have been popped up unless we talked about it together. Because we do agree on the non-verticality of our relationship. In our case, the technics doesn't depend on the artistic idea.

BP: All questions related to making art-work seem to me to be both artistic and technical. the development of a concept relies on some kind of technicality. writing relies on some kind of technicality. i think that what basically differs in technical development is the amount of hardware and software to be dealt with. but the relationship we choose to have to hardware and to software is anyways an important factor. in gangplank we ask our very different selves what are, for each of us, the limits of utilitarian (pre-conceived 'user friendly' stuff) use of both - technical devices and artistic concepts, and what we would wish for our work? the relationship we have to ready-made formats proposed in both hard and software - and unfortunately also in ideas - is in any case ambiguous, and limited: we always use what we can access. hence the necessity of constantly creating as many access-points as possible, in all directions, between the fields of research and the fields of development involved in making stage-work. i think that, in gangplank, we work on getting free-er from imposed / pre-formated relationships between tools and desires, and we work on inventing / accessing to other tools - consequently other relationships - that fit us better, in order to be able to do work with different people, in different contexts, in a more horizontal way.

MK: I regard the development of a technical tool as an artistic process. For me there is no difference in the creation process of a technical tool or the creation of a dance piece. And this is exactly what gangplank argues against, in my opinion. Tools are far more than just tools or devices, they shape the performance just as much as movement would do, or text or spoken word. Nowadays in contemporary performance sound, video and lights play such a big role in our perception that they become the new narrative, they actually replace what text used to do. The question is how to deal with that? Serve the narration or argue against it? To think about the question what should trigger the sound video or light is a political question. If we have the possibility that it is triggered by momevent in space so f.i. a dancer instead of me as a light designer, this could be a political descision and a very artistic one. For me the following is important personally: the role of sound/light/video shouldnt be underestimated, on the contrary, it should be handeld with care. I think it is important to avoid that the "technical" aspect of a performance becomes the placeholder for the narrative instead of becoming a mutual part of an artwork.

DZ: Maybe this is tricky word to be used, but, as far as the decision-making of what to do next is being concerned, the group works quite intuitively. I say tricky, because it seems that everything these days related to the topics of technical, artistic (and doing them by connecting them), seems able to be solved methodologically, but not intuitively. This is not the case with this project - people enjoy triggering each other technically or artistically, and then trying to build the synapse. And, to be added to the thread of answers above in relation to tools, Gangplank is also a process built up as a tool. It is tool itself. An anthropomorphic dispositif :)

Working Methods

5. Shaping gangplank
6. Collaboration
7. Transmission ?

5. SHAPING GANGPLANK

The content of this chapter is a result of many discussions in the GK meetings that all revolved around the need of giving shape to gangplank dynamics. Lots of those discussions were linked to the question of dealing with the heterogeneity of gangplankers, how we deal with the time and the needs we have. After several quite open meetings we have come to the idea, that it could be good to shape the future gangplanks more precisely.

HOW TO WORK WITH HETEROGENITY

In order to preserve the transdisciplinarity of the project, make everyone feel good in the group, to the possibility of evolving on different layer (not always repeating oneself), we have thought that we should recognise the different types of activities that could occur in Gangplank.

Gangplank types of activities

- development-oriented activities: develop GK tools, no teaching (Participants: a majority of experts)
- transmission activities: introduction, playing, applying the tools, small working groups, practice, learning by doing and learning by teaching (Participants: all GK roles)
- community building: cooking together, attending GK sessions, developing baby projects, working on the vademecum and on a common lexicon, introducing and discussing projects, finding solutions together (Participants: all GK roles)
- sharing: open doors to a wider audience, maybe presentation, crash courses, discussions (Open Public)

GK suggestions for time blocks

An other way to deal with heterogeneity of needs and interest inside gangplank is to define time blocks of different activities, as well as possibilities to work in several subgroups. Here is a list of activities that we find useful

- physical warm up
- writing time
- individual moments for study time
- analysis of case studies
- presentation of individual projects, past and future + development
- computer programming time
- living together: doing gangplank as a residency
- good food, provision of chocolate, quality wine and appropriate quantity of beer
- media block

DIFFERENT KIND OF GANGPLANK'S MEETINGS

One proposition in order to better understand what we are doing at Gangplank was to announce in advance what is the goal of a meeting, as well as defining different types of meetings. Therefore, Gangplank could take shape in different forms, according to what we want and need. For example, who would like to have

- Project centered meetings (f.ex. stage projects, sound projects, photography projects...)
- Tool development meetings
- Writing meetings (to achieve our documentation or to foster some kinds of reflexion)
- Technical knowledge sharing meetings
- Open Meetings, that focus on several of the above mentioned needs

This is an open list, which will be developed according to the needs of people who attend Gangplank.

TWO WAYS OF SHAPING A MEETING

Focused meeting

Either we define what kind of GK you want to initiate (see above or invent a new focus), and inform the gangplankers about that, so they can decide if this is something which is interesting for them at the moment and they want to attend. In that case, it becomes important not to define the who comes by knowledge/ability but by interest

Open meeting

... or we call an open GK meeting. If we do so, the focus will be defined by the background of people who come. In order to be prepared, people who want to attend should inform the others (using the the mailing list) about background, interests, questions they have etc. That will help us picture in which direction(s) the meeting will go.

CONCRETE PREPARATION

GK meetings can and should be initiated by anybody or any group who is interested. If you want to join a Gangplank meeting or initiate one, and if you're not yet part of the mailing list, please write to us: gangplank@listes.misto.servideo.org. and let's figure out together the feasibility of your proposal.

We propose the following procedure to organize Gangplank session:

- 1) Write to the mailing list, including the following informations a possible timeframe, financial conditions, place, proposition of form (open or with a special focus), potential number of participants and a realistic deadline for response
- 2) When the deadline is reached, in case of too many interested people, the first ones confirming will be invited, in case of too little interest, feel free to insist and write to the list again

GK Facilities

- a mailing list [gangplank At listes.misto.servideo.org](mailto:gangplank@listes.misto.servideo.org)
- the present Vademecum, written on a booki platform
- a wiki <http://gangplank.servideo.org/>
- Theaters (such as PactZollverein, Les Laboratoires d'Aubervilliers)
- Residency Facility (such as Club-Ausland)

GK IN BETWEEN THE SESSIONS

- introduction hint: give newcomers access to the vademecum/booki in order to get an idea about the methods GK uses and the GK tools
- give every newcomer a person to refer to
- have the mailing list as a tool for community building, with categories of prefixes for the mail titles
 - tech (mails concerning technical issues)
 - org (organization of meetings, projects, etc.)
 - ideas (context, theory, politics, mission)
 - misc(do you want to have a beer with me in zagreb. for instance)
 - name (a mail to a certain member of the list, which might interest the others as well)
- put work examples like LCedit projects, pure data patches, links to videos etc. on the wiki for people to examine.

6. COLLABORATION

This chapter needs an introduction of why the schoolbag was taken as a metaphor for collaboration, and about what it brings. Why school ? why bag ? why equipment ?

Why an non alphabetical order was chosen ? how is the order of the words making sense ?

HOMEWORK

work or study done in preparation for a certain event or situation

home is a place that shelters daydreams. homework is dreamwork that is done at home. these can take the form of various exercises. it is also acceptable to ask someone for help with your homework.

LUNCH BOX

PEN

an instrument for writing or drawing

there is a permanence to the markings of the ink on the surface. these markings can not be erased by the eraser. there is a permanentness to ink which require some negotiations like, writing over or alongside already existing markings.

PENCIL

make a provisional or tentative arrangement with or for someone

consisting of a thin stick of graphite enclosed in a long piece of wood. pencil markings can be erased by the eraser but there remain traces of the imprint on the surface. a pencil can also be used to underline or make little comments in school handbooks. the main difference between the pen and the pencil is the idea of the ink stain of the pen has a permanence and the markings of the pencil has a tentative quality.

GYM CLOTHES

APPLE

ERASER

RULER

a straight strip or other rigid material, typically marked at regular intervals, to draw straight lines or measure distances

this is about the distance between objects. the distance between the self and the other. the subject and the object. there should not be a preference to distance but just to be aware that distance influences the process and its outcomes. the greater the distance the more the echo and the closer the distance the blurring the division between subject and object. when the distance is too much isolation sets in and when distance is too close a feeling of immersion could be felt.

MAGNET

a piece of iron that has its component atoms so ordered that the material exhibits properties of magnetism, such as attracting other iron-containing objects or aligning itself in an external magnetic field

MARBLES

JUICE

PENCIL CASE

SHARPENER

sharpen, to make or become sharp

LITTLE LETTERS

BLANK PAPER

NOTEPATH

INK

LIBRARY BOOKS

absorb & bring back to the zero position, short term

HANDBOOKS

absorb & bring back to the zero position, long term

7. TRANSMISSION ?

As Gangplank, in its two-years existence, became a more and more heterogenous and polymorphic group, the question of what kind of transmission takes place in this group, and towards the outside, becomes crucial. Looking at a well known online encyclopedia (wikipedia) what does this term means, we found the following definitions.

- Transmission (mechanics) is a gear system transmitting mechanical power, as in a car
- Transmission (telecommunications), the act of transmitting messages over distances
- Transmission (medicine), the passing of a disease
- Share transmission, ownership change through other than transfer
- Electric power transmission, one process in the delivery of electricity to consumers
- Data transmission, the conveyance of information from one space to another
- Dharma transmission, the formal confirmation of a student's awakening in Zen Buddhist
- Transmission (genetics), is the passing on of genetic information

The choice of the title transmission? for this chapter, illustrated by the few examples above, seems appropriate as it stands for the conveyance of informations in a wide array of domains from technological to medical to spiritual.

The persons taking part in Gangplank represent a wide array of practices and positions related to making stage work. Finding a complementarity between these practices and positions, and defining the nature and the quality of the transmissions happening between the persons are at the very core of Gangplank.

In the 4 Gangplank meetings that happened in the past 2 years, the transmission of technical knowledge has always been a point of focus, as the following chapters concerning 'tools' will show. The goal is to provoke collaborations at different levels. During Gangplank sessions, when newcomers enter the gang, transmission of technical knowledge is always at stake.

But as Gangplank is a cluster of practitioners with very different background and level of knowledge coming from different fields of expertise, we assume that transmitting knowledge is not a one-way communication and that it happens on several levels. In our context, it would consist more specifically of a dialogue between the artistic approach to light, sound, video, toys, etc. and the technical approach to light, sound, video, toys, etc. (software, hardware). For that reason, we would like to define here the different types of transmission modes that we used until now, and list up different ones that could be interesting.

Finally, we also consider that two other kinds of transmission has to be taken into consideration: the one that concerns methodologies of work organization (production, funding, resources, collaboration) and the one that concerns our relation to the audience and the production structures. The reflexion upon methodologies taken in consideration is in the chapter untitled Working methods. The reflexion about the transmission related to audiences and productions structures is still to be analysed.

TRANSMISSION OF TECHNICAL KNOWLEDGE AND KNOW-HOW

Organizing transmission

A traditional way of looking at transmission consists at defining a hierarchy of status.

- experts (Pure Data, LcEdit, OSC, production, dramaturgy, science...)
- practitioner[user]: people who are using above mentioned tools and knowledge
- newbies or newcomers: people interested in the gangplank tools and knowledge

In this context, it is possible to play with various constellations:

- one to one
- one to group (from small working group to bigger groups)

Frontal teaching or lecture based teaching of an (active) 'expert' to a (consuming) group is a mode that we try not to enforce at Gangplank. Still, we think that it can still lead to discussion where inputs come from all directions. Also, this kind of approach to transmission can be extended by making use of forums, tutorials, manuals and network / friends. But we know that transmission happens or can be organised or approached in different ways.

Learning by re-explaining

Gangplank also experimented transmission by asking those who learn to write a tutorial. This is a way to get direct feedback. In that case, when the expert is explaining, newbie takes notes, screenshots and provides direct feedback. Another step is to ask a former begginer to try the tutorial as well as to teach what he or she learned to new beginners. This is also a good way to evaluate the transmission and to check directly what is and what is not working according to individual needs. We find out that writing a collective documentation is a good way to do this evaluation.

Learning by working

For example, learning by observing an expert who is working on a project. Taking part in each other's projects, in order to understand a certain method or tool, join in the creation process of an 'expert'. We can then learn by expressing some needs for a research or for a project. Learning can also happen by trying and erroring, experimenting through failure and success.

TRANSMISSION OF A PROJECT

Another important kind of transmission that happens to gangplankers to deal with, is a transmission of a finished work (such as a lighting set up) to a colleague, to a theatre, as backup, for feedback.

This calls for important consideration for communication issues in a technological world. Here are few lines around some approaches on the subject. Development on each argument needs to be provided and extended.

Transmitting a set up of a piece means working with a serie of terms, ways of organization, ways of doing. On a technical level, that could also mean working with various conventions (creating a translation engine) or to be able to work cross platform (Operating System or interfaces).

Defining a framework within which another person can find the artistic freedom to interpretate and work with the project. This leads to licensing issues as well as documentation issues.

TRANSMISSION OF ARTISTICS IDEAS

We are talking here about transmission of artistic ideas to collaborators, local technicians, funds, producers, or a possible audience. This could include transmitting motivation, aesthetics or aims...

Tools

8. Philosophy behind the tools
9. Gangplank's tools
10. LAN connection between computers and Lanbox
11. LC Edit Startup
12. Example of LCedit project compatible with the Matrix
13. LCeditCommandlist
14. Midi Controller to Lanbox
15. Matrix V.02
16. Matrix V0.3
17. Future

8. PHILOSOPHY BEHIND THE TOOLS

MAKING DECISIONS

When you start a project, one has to choose the tools which will be used to complete the project. Shall we pick them off the shelf, or shall we develop new tools, tailored to our needs and dreams, even though it's a longer process? Is a tool a commodity you belong to after a while, or something that belongs to you but still is shareable with your friends and colleagues? Past Gangplank haven't lead us to a definite answer, but rather experimenting ourselves with developing hackable solutions, bricks which you can choose from and/or develop.

MULTI-USER DECENTRALIZED APPROACH

Technical booth cliché: a light designer before his desk, a sound engineer before his desk, a videomaker before his laptop, all of them synchronizing to what's happening on stage or via an intercom. Building a multi-user framework allows a bunch of people to communicate over a network and drive any media from any location.

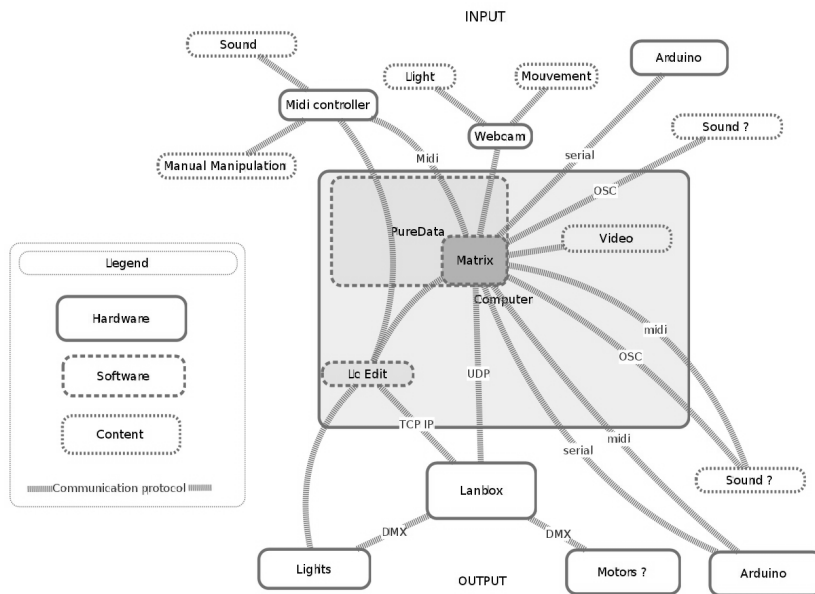
WORKING WITH MATRICES

A matrix is a two dimensions table containing numbers. In our case, it is a mathematical tool allowing to interact in real time with a light-plot controlled by a Lanbox via DMX. It allows to control lights in a different way than programming cues (light atmospheres), and to combine within one project different approaches of controlling lights. This principle can be applied to control sound (we already tested the control of volumes of sound outputs via the matrix) and potentially to the control of video, motors, etc...

The matrix allows for instance to treat light independantly from a sequence of pre-determined light atmosphere, by converting, filtering and mixing on the fly dataflows considered globally, coming from sources such as a video clip, a camera, stills, etc.

It aims at re-introducing organicity in light-control, and proposes for instance a set of tools that allow to artificially re-create the perception of behaviours and movements observed in nature (clouds in the sky, a lighter's flame...).

9. GANGPLANK'S TOOLS



HARDWARE:

Arduino:

Open-source electronic prototyping platform allowing to create interactive electronic objects.

Lanbox:

An extremely versatile digital light board that works DMX controller suited for nearly any DMX-512 lighting application. This black metal box works as a light interface with many different protocols: TCP/IP, Midi, UDP, OSC, DMX out & in, serial-, analog-, digital- I/O ports

Midi controller:

little hardware with keyboard and software which generates and transmits Midi data to MIDI-enabled devices.

Lights:

Stage lighting are flexible tools used in the production of theatre, dance, opera and other performance arts. Several different types of stage lighting instruments are used in the pursuit of the various principles or goals of lighting. Stage lighting has grown considerably in recent years partially due to improved technical equipment and a higher interest from young people. A lot of stage lights today have the ability to change colour within 0.03 seconds.

SOFTWARE

LCedit:

The software that comes with the Lanbox. It is only available in two flavors: Mac or Windows. The most convenient way to run a program made for Windows under Linux is called Wine.

Matrix:

A mathematical tool developed by Gangplankers allowing to interact in real time with a light-plot controlled by a Lanbox via DMX. It allows to control lights in a different way than programming cues (light atmospheres), and to combine within one project different approaches of controlling lights. This principle can be applied to control sound (we already tested the control of volumes of sound outputs via the matrix) and potentially to the control of video, motors, etc. The matrix allows for instance to treat light independantly from a sequence of pre-determined light atmosphere, by converting, filtering and mixing on the fly dataflows considered globally, coming from sources such as a video clip, a camera, stills, etc. It aims at re-introducing organicity in light-control, and proposes for instance a set of tools that allow to artificially re-create the perception of behaviours and movements observed in nature (clouds in the sky, a lighter's flame...).

Pure Data :

a visual programming language developed by Miller Puckette in the 1990s for the creation of interactive computer music and multimedia works. Though Puckette is the primary author of the software, Pd is an open source project and has a large developer base working on new extensions to the program. It is released under a license similar to the BSD license. It runs on GNU/Linux, Mac OS X, iPhoneOS, Android and Windows. There are older ports for FreeBSD and IRIX.

PROTOCOLS

DMX (Digital Multiplexing):

a communication protocol that is most commonly used to control stage lighting and effects.

Midi (Musical Instrument Digital Interface):

An industry-standard protocol that enables electronic musical instruments (synthesizers, drum machines), computers and other electronic equipment (MIDI controllers, sound cards, samplers) to communicate and synchronize with each other. Unlike analog devices, MIDI does not transmit an audio signal: it sends event messages about musical notation, pitch and intensity, control signals for parameters such as volume, vibrato and panning, cues, and clock signals to set the tempo.

UDP:

The User Datagram Protocol (UDP) is one of the core members of the Internet Protocol Suite, the set of network protocols used for the Internet. With UDP, computer applications can send messages, in this case referred to as datagrams, to other hosts on an Internet Protocol (IP) network without requiring prior communications to set up special transmission channels or data paths.

OSC (Open Sound Control):

is a content format for messaging among computers, sound synthesizers, and other multimedia devices that are optimized for modern networking technology. Bringing the benefits of modern networking technology to the world of electronic musical instruments, OSC's advantages include interoperability, accuracy, flexibility, and enhanced organization and documentation.

10. LAN CONNECTION BETWEEN COMPUTERS AND LANBOX

REQUIRED HARDWARE

a computer - or more than one, a lanbox

This information is general information, we are referring a lot to the Lcredit Manual, and add where we need specific information.

1 INSTALL LCEDIT 3.5

(or: the latest version you find) on your computer. You find that at <http://www.lanbox.com/downloads/downloads.html> in the folder that you download, all the user's manuals and reference documents for the Lanbox are included, and very useful.

2 CONNECT COMPUTER AND LANBOX

In that case we will chose to connect via TCP/IP to the lanbox (A UDP connection is described in the chapters: Matrix_v02 and Matrix_v03).

- through a wireless closed network: you simply have to select this network in your network settings
- directly with an ethernet cable (between computer and lanbox) or through a router (to be able to connect different computers to one lanbox: you will have to create a location with a fixed IP address for connecting via TCP/IP to the Lanbox.

For Mac: Go into Network Configuration

- edit Location

- add location (the + on the bottom of the pop-up window).

1. configure ipv4: choose manually
2. IP adress: 192.168.1.xxx
(anything between 1 and 255 except 77 which is the lanbox adress)
3. Subnet Mask: 255.255.255.0
4. apply

Attention! every time you want to connect to the lanbox, you go into Network Preferences and choose your Lanbox Location, every time you want to go back to the internet, you go back to network preferences - and choose your internet connection location ('automatic' on Mac).

For PC: still to be done

For Linux: see the dedicated chapter "LCedit Start up Recipe (Linux)".

3 OPEN LCEDIT

When you open Lcredit, a window will show up:

Configure Interface

1. choose TCP/IP
2. enter the address: 192.168.1.77
3. save the password: 777

(this address and password are the default settings, we all use the same)

11. LC EDIT STARTUP

1 BEFORE YOU START A NEW PROJECT

you want to have an empty lanbox. In order to be sure to not destroy your or somebody else's work, you go to

menu > tools > back up

Change the name which is offered to you: f.ex. project name in front of the brackets and press ok. It'll be saved to the back up folder (applications-lcedit-Backup Files).

An lcedit project consists of a doc called xxx.lcp and a back up folder.

The xxx.lcp is what you see on your computer screen and open in lcedit. The back up folder contains the information the project needs to work. If you work with an already existing lcedit project, you will load this information into the lanbox.

The back up folder has to be located in applications_lcedit_backups, lcedit can only open it from there.

Since we need an empty lanbox, when we start a new project we first

2 ERASE THE LANBOX

menu > tools > erase lanbox > erase > done (that's important, if you don't press "done" after erasing, it won't finish the process)

After erasing the Lanbox will have no more recorded data and LCedit will be set to its default settings: mixer contains 5 layers A-E, A to D will be set to Stop, E will be in edit mode. To avoid confusion, and have all layers in the same mode, it's good to put this layer in stop mode by clicking on the "Edit" Button above (little red button).

3 CREATE THE NEW PROJECT

Create your light set up following the LceditPlus_User_Manual_v3.pdf, located in Applications/LCedit/Manuals, chapter 5: Rigging your stage (the lanbox manual is working fine, so we will refer to it in the next steps)

4 SOFTPATCH

your fixtures using the Patch Editor (menu > Tools > Patch Editor). The left row in the window which appears shows the dimmer channels (called DMX#), the right row you can edit.

Select all channels (cmdA) set them to 0. Then assign the channel numbers of your project to the dimmer channels.

You can also double click on a fixture in the stage window >choose patch and write the dimmer number of each fixture.

5 SAVE LANBOX DATA

Your project is ready to use. Before you close, go to Tools > **save lanbox data!** Like this you save the data inside your lanbox (the data which we backed up and erased in the start.)

6 BACKUP

to be safe, go Tools > back up and **back up** your project. Like this, you will be able to load it to any lanbox any time.

PS:

Working through the first chapters of the LCedit User manual (mentioned above) is a very good idea - not everything is needed for what we want to do, but it gives a good understanding of Lcedit and the lanbox.

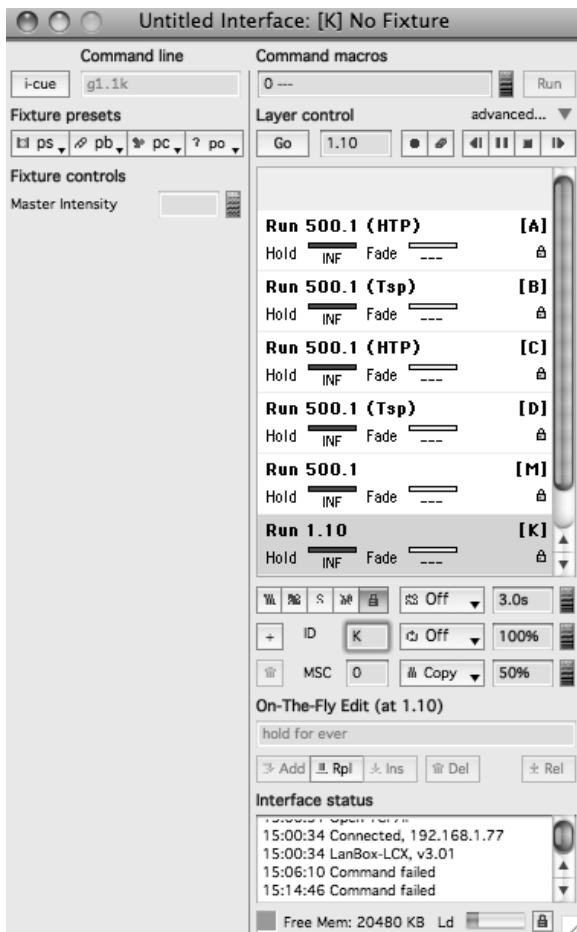
12. EXAMPLE OF LCEDIT PROJECT COMPATIBLE WITH THE MATRIX

This chapter describes a way to change the settings of the layers your Lanbox project with one keystroke. It involves the creation of a command list which can also be used in many other cases. It's one of many practical ways you can work with your project, check it out and adjust it to your needs!

an empty Lanbox will come to you with the Layers A-E. (for more information about Layers and Attributes, please refer to LcreditPlus/User_Manual_v3.pdf, page 10:What are active channels and what are layers?)

In order to work with the matrix we want f.x.:

- 2 Layers for Cuelists (A & C, in HTP)
- 2 Layers for Transparency (B & D, No Cueslists run from these!)
- 1 Layer for the matrix (M, in Copy)
- 1 command layer (K, in Copy)



- To add layers go to the Control Panel (picture above)>the small arrow right beside "advanced", then down, to + ID > type the name you want in the window (we want K) > click on the small lock above and press enter. Your layer will appear above.
- Put the layers in the order you need them (see picture above) but dragging them.
- Change the name of layer E to M in the same way as giving a name to a new layer.
- You could set all the attributes to your layers in the control window, BUT there is a much smarter way to do it with one keystroke in one step:

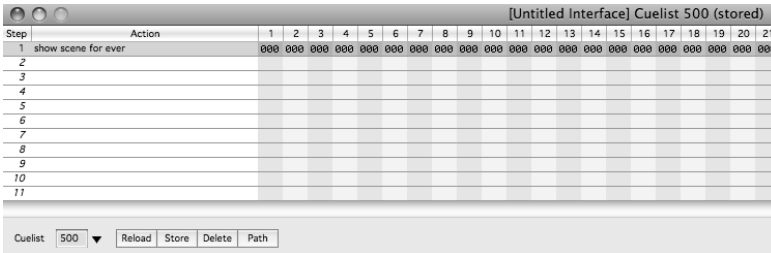
2 SET THE RIGHT ATTRIBUTES TO YOUR LAYERS WITH ONE KEYSTROKE

Prepare 2 cuelists for that:

The Kill all List:

- Mark all your lamps in the stage window
- Put Layer A into edit mode (choose layer A and press the red record button)
- write 500.1 in the window beside "Go" (under Layer control)
- take your master wheel on the left side (which is called DMX channel) and put all your lamps to 0 %
- in the cue list editor you see step one with all the channel numbers at zero
- double click step one, choose without fade instead of crossfade, click ok
- store cuelist in the cuelist editor window
- now you have cuelist 500 for a blackout.

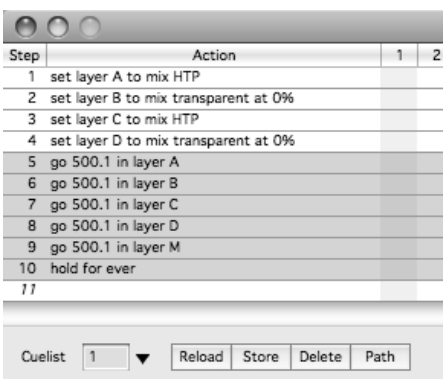
It should look like that:



The Commandlist:

- go to menu > window > new cuelist editor
- double click step 1 in the cuelist editor. The "Edit Step Action" Window appears.
- choose "Layer" in that window. Choose set mixer > Mix HTP > layer > put A. Click ok, that's the first cue list step. Go Cuelist > give the cue list the name 1 > click store.
- make a cue step for Layer B, C, D in the same way. Instead of Mix HTP you choose set Mixer to transparent at 0% for Layers B and D. For Layers M and K we don't have to do that, since the Layers are set to copy as default in Lcedit.
- double click the next free step in your command list (the one you are just about to create)
- choose "GO" in the Edit Step Action Window. Choose go to step > put 1 > of cuelist > put 500 > Layer > put A > click ok.
- go back to your cuelist editor, copy the step, paste it 4 times.
- cmd click the next step and you can write in it: exchange the names of the layers, until you have all of them (A-D, M)
- In the end you double click once more an empty step, go to "Edit Step Action Window", choose Hold > Hold step for > scroll down until you come to: ever > click OK.

Now your cuelist should look like that:



3 CREATE THE KEYSTROKE THAT WILL SET YOUR LAYERS

Select menu > tools > keystroke editor > option l > type g1.lk in the window beside Option l

With this keystroke you call cuelist number 1 in Layer K, which sets attributes to all layers and sets all Lamps in all Layers to 0 %.

4 CONNECTING TO THE MATRIX

for this refer to the articles [Matrix_v02](#) and [Matrix_v03](#)

13. LCEDITCOMMANDLIST

14. MIDI CONTROLLER TO LANBOX

this chapter is under construction!

In the gkcode folder download at https://gitorious.org/gk-code/gk-code/archive-tarball/master_controllers2lanbox_v01.pd

It is a Puredata patch that allows to use a MIDI controller as a physical interface for the Lanbox. It features:

- TCP/IP connection to the Lanbox
- a Library of abstractions implementing some essential commands to the Lanbox:

STEP BY STEP INSTALLATION

Puredata installation

- Install the latest stable version of Pd-extended (0.42.5 as of July 2011). (0.41-extended works but lacks support for mrpeach OSC lib. 0.43 hasn't been tested yet). <http://puredata.info/community/projects/software/pd-extended>
- Choose the version which fits your operating system
- If you are on a Mac, install the version which fits to your processor (Intel or Power PC)
- Ubuntu/Debian users might have to install more libraries, depends on your system

Pdmtl abstractions installation

- Download the abstractions library PdMtl (<http://gangplank.servideo.org/PdMtl>) - both versions! for 3 and earlier (don't worry about the untrusted connexion note, it is our very trusted wiki)
- Extract them - it should be 2 folders: **mtl** and **pdmtl**
- For Mac: open your finder and put the folders in: `home/library/Pd` (or in French `home/bibliothèque/Pd`)
- For Linux: put the folders in `home/pd-externals` for Linux
- If you don't find this folder in your library, open Pd once, then it should be there. If it's still not there, you can create it yourself

Gk-code download

We describe under this wording the whole code that Gangplankers wrote during the previous sessions as well as during stage creations. It is stored on a public repository named Gitorious, and published under a GNU/GPL free license. Hereafter we describe two ways to get the code, an easy one and a more complex one that allows you to contribute.

The easy way

- Download the archive from the repository at the following URL: <https://gitorious.org/gk-code/gk-code/archive-tarball/master> (anywhere in your home folder or in your documents for example)
- Uncompress the archive in your home folder (`/Users/judith/Library/Pd/gk-code` for Judith using a Macintosh, or `/anne/gk-code` for anne using Linux)

The hard way

Register to Gitorious, install the SSH keys, clone the repository, hack it and submit your merge requests

SETTING UP PD FOR MAC

set pathways

- Open Pd
- Indicate Pd which libraries to load, i.e. create pathways
- go to `Pdextended/preferences/path`
- click on New
- browse to pathway `GKCode/Matrix-V02_controllers2lanbox_V01/abstractions`
- then browse to pathway `user(your name)/library/Pd/Pdmtl`
- click Apply
- then Ok

change startup settings in pd

- go to : Pd-preferences/startup and add mrpeach and iemmatrix (New > Apply > Ok)

check your settings and pathways in pd

- to check if your setting are rights, go to file and open user/library/Pd/Pdmtl/0.info.pd
- if some component are not loaded, they appear in red boxes, that mean that you should check if every files are well downloaded and start up you settings, or ask for help. note: for users of GK-code [arraysize] is not necessary (if this box is red, it's still ok)
- RESTART Pd (if you changed startup settings, they will first be applied after restarting PD)

SETTING UP PD FOR LINUX

set pathways

- indicate Pd which libraries to load, i.e. create pathways
- go to Pdextended/file/path
- click on New then browse to GKCode/Matrix-V02_controllers2lanbox_V01/abstractions
- then browse to pathway home/pd-externals/pdmtl
- then Apply
- then ok

change startup settings in pd

- in Pure data, go to File > Startup and add the patches mrpeach and iemmatrix

(Then New > Apply, Ok)

check your settings and pathways in pd

- go to home/user/pd-external/pdmtl/0.info.pd
- if things are not loaded, boxes are red
- for users of GK code arraysize is not necessary (if this box is red, it's still ok)
- RESTART Pd (if you changed startup settings, they will first be applied after restarting PD)

CONNECT TO THE LANBOX

In order to make the controllers2lanbox_v01.pd work, you have to connect to the lanbox via an ethernet cable or via a wireless network. Note that in that case USB connexion will not work. Cf for that the chapter LAN connection between computers and Lanbox.

MAC OS X BUG

The object TCPclient of the mrpeach library in Pd-extended0.42.5 for Mac OS X seems to have a bug. To fully use controllers2lanbox_v01.pd, Mac users can install a Pd-extended0.41.4 and run the patch from it, or recompile Pd-extended0.42.5 from the source code, which turns out to be a bit sporty on OS X 10.6 .

MIDI MAPPING

In that patch the MIDI mapping is not externalized. It can be written in the sub-patches pd knobs, pd faders and pd transport.

START AND USE

Open the patch

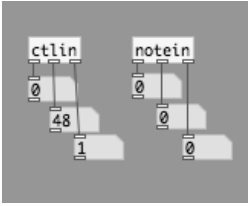
GK.Code / matrix-v02_controllers2lanbox_v01 / controllers2lanbox_v01

save as your own patch (in order to be able to get back to the original version if something fucks up)

Connect your MidiController

physically to your laptop with a cable
set it as input device in Pd:
Pdextended / Preferences / Midi Settings / input device 1
choose your controller, apply, OK

Check the controller buttons:



f.ex. press fast forward on your midi
the ctl in will show you, on/off (i.e.127/0), the CC and the channel
remember or write down the CC

for our purpose your button should be in momentary, not in toggle mode

momentary: press: 127 release: 0

toggle: press 127 press again 0

if the button is in toggle mode, then you have to change it in the editor of your midi controller

have a look at whats possible to do: all_lanbox_abstractions

screenshot patch

Customizing your Buttons

example: GoNext Button/GoPrevious

in the controllers2lanbox patch open pd transport (click on it)

strg e (means: edit mode)

change the ctl in button to the CC of your button

change the engine number (the box above lanbox.engine.next) to the engine you want to address (f.ex. you want to address layer A - change it to engine 1)

strg w (close window)

strg s (save. important: save in parent patch!)

Start show tells the lanbox to go to a certain step in a certain cue list

Activate the patch:

15. MATRIX V.02

A matrix is a two dimensions table containing numbers. In our case, it is a mathematical tool allowing to interact in real time with a light-plot controlled by a Lanbox via DMX. It allows to control lights in a different way than programming cues (light atmospheres), and to combine within one project different approaches of controlling lights. This principle can be applied to control sound (we already tested the control of volumes of sound outputs via the matrix) and potentially to the control of video, motors, etc...

The matrix allows for instance to treat light independantly from a sequence of pre-determined light atmosphere, by converting, filtering and mixing on the fly dataflows considered globally, coming from sources such as a video clip, a camera, stills, etc.

It aims at re-introducing organicity in light-control, and proposes for instance a set of tools that allow to artificially re-create the perception of behaviours and movements observed in nature (clouds in the sky, a lighter's flame...).

The following examples of use of the matrix and light setup are only indicative, it's up to you to adapt them to your needs and desires.

BRIEF DESCRIPTION OF THE MATRIX V0.2

The Matrix V0.2 is a tool that allow to send to a Lanbox's layer 48 channel values either loaded from a text file, or converted on the fly from a video file or a camera.

Features

- master level 0-255
- connects via UDP to the Lanbox using its default IP & port
- settable Lanbox engine aka layer
- turns a video file or a camera stream into a fixed-size 8x6 matrix
- pix effects such as negative, motion blur, contrast
- settable playback speed of video file, as well as loop, jump to a frame, scroll
- you can also load and move around thanks to the numpad a 8x6 pattern, edition using an external text editor
- on the fly softpatch load, edition using an external text editor
- most parameters are midi-controllable

Required hardware

- a Lanbox LCX or LCE
- one computer
- one camera (Firewire, USB or built-in)
- an Ethernet cable.
- optionally one MIDI controller in order to allow a hands-on control of the parameters.

Note: USB is only helpful in the case you want to use LCedit, not for the Matrix since it only communicates with the Lanbox via UDP, which is a network layer.

STEP BY STEP INSTALLATION

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- Uncompress the archive in your home folder (/Users/judith/Library/Pd/gk-code for Judith using a Macintosh, or /anne/gk-code for anne using Linux)

The hard way

Register to Gitorious, install the SSH keys, clone the repository, hack it and submit your merge requests

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- Indicate Pd which libraries to load, i.e. create pathways
- go to Pdextended/preferences/path
- click on New
- browse to pathway GKCode/Matrix-V02_controllers2lanbox_V01/abstractions
- then browse to pathway user(your name)/library/Pd/Pdmtl
- click Apply
- then Ok

change startup settings in pd

- go to : Pd-preferences/startup and add mrpeach and iemmatrix (New > Apply > Ok)

check your settings and pathways in pd

- to check if your setting are rights, go to file and open user/library/Pd/Pdmtl/0.info.pd
- if some component are not loaded, they appear in red boxes, that mean that you should check if every files are well downloaded and start up you settings, or ask for help. note: for users of GK-code [arraysize] is not necessary (if this box is red, it's still ok)
- RESTART Pd (if you changed startup settings, they will first be applied after restarting PD)

SETTING UP PD FOR LINUX

set pathways

- indicate Pd which libraries to load, i.e. create pathways
- go to Pdextended/file/path
- click on New then browse to GKCode/Matrix-V02_controllers2lanbox_V01/abstractions
- then browse to pathway home/pd-externals/pdmtl
- then Apply > Ok

change startup settings in pd

- in Pure data, go to File > Startup and add the patches **mrpeach** and **iemmatrix**
- Then New > Apply, Ok

check your settings and pathways in pd

- go to home/user/pd-external/pdmtl/0.info.pd
- if things are not loaded, boxes are red
- for users of GK code arraysize is not necessary (if this box is red, it's still ok)
- RESTART Pd (if you changed startup settings, they will first be applied after restarting PD)

CONNECT TO THE LANBOX

In order to make the matrix work, you have to connect to the lanbox via an ethernet cable or via a wireless network. Note that USB connexion will not work in that case. Cf for that the Lcredit startup recipe.

STARTING THE MATRIX PATCH

open file:

GKCode/Matrix-V02_controllers2lanbox_V01/matrix_v0.2.pd

- When you open the patch, two windows should appear: the matrix window and the graphical channels window.
- If the pd graphical_channels window isn't created at start-up, click on the box pd graphical_channels in the matrix main patch to create it.
- NB: Pd is a module editor, you can switch between operating mode and editing mode by using commande E (ctrl E on Linux)

The softpatch

The softpatch tells the matrix which box (vizualized in the pd graphical_channels window) speaks to which light channel (as numbered in the Lanbox).

If you want to change the softpatch you click on open softpatch (screen shot 6) , pop up window, open the folder softpatches and choose a softpatch

To make a new Softpatch:

softpatch.q (for instance default.q, which a 1 to 1 softpatch) is a text document, with the extension .q in order to modify this, you have to open it from the finder (important: with a code/plain text editor `textedit f.ex.`) - (sc 7) - you can change the numbers to the channel numbers you have in lcredit don't forget the semicolon

FIRST STEPS ON THE MATRIX

- Press on video-switch to open the function. ; Go to MASTER bar and put it up to master the general intensity of the lamps.
- If you want to play w/ the web cam, press CAM (check that the graphical channel is working by changing the values)
- Press the UDP-connect to activate this connection to the matrix. udpconnect -> david screenshot 9

EXPLORING THE FUNCTIONS AND FEATURES OF THE MATRIX

Master

Regulate the intensity of the lamps

Source : VDO / CAM

This is a way to switch the mode of reading video inputs.

- CAM connect to your webcam
- VDO connect to preexisting videos

To use videos with the matrix:

- Put videos of your choice in GKCode/Matrix-V02_controllers2lanbox_V02/videos
- Take small resolution videos because it needs processing power, not all formats work .mov f.x. does work
- Then in the matrix, you click the message box {symbol videos/} and your list of videos will appear
- Click on the name of the file

Affecting the Lamps

- **Numpad** : To treat the graphical channels (connected to lamps) by hand, with your numeric pad or the different arrows
- **VDO** : To treat the graphical channels (connected to lamps) by a video
- **Slope** (pd slope-presets-usw)
- **slope in** : the time the lamp takes to change the value given by the impute in order to come up.
- **slope out** : the time the lamps takes to change the value given to come down.

Video treatment functions

- **Vdo switch** is to switch on or off the connexion between the matrix and the webcam or the video. When the cam or the video is switched on, you can start to play for the different functions. Note that by default, videos loops back and forward.
- **Contrast**: by default, at 1. It allows you to work on the contrast on the video. Note: this is not always working with videos but not functioning with webcam for now
- **Motion blur**: it blurs and slow down the motion. It can freeze the video when put to 1.
- **Playback speed**: by default at 10, it reads the video slower or quicker.
- **Movement** : more interesting to work with the cam, it detects the movement by comparing frames.
- **Threshold** : is a function to simplify image
- **Relative frame** : (0-1) is a way to scroll in the video manually (not working for now)
- **Input min/max** : (0-1) this is a way to select some part of your video in order to create a loop. The upper bar is the min ie the starting point of the selection, and the lower bar is the ending point.
- **List mode** :
 - **0 : copy**
 - **1 : scale** : take the lowest pixel to 0 (white) and the maximal pixel to (dark). As an effect, the light scale is more contrasted.
 - **2 : reverse**
 just try what are those functions doing

TO USE THE MATRIX WITH A MIDI CONTROLLER

with Mac

- Go to : GKCode / matrix-v02_controllers2lanbox_v01 and choose the Pd Patch which fits to your Midi Controller (korg and akai are there as of July 2011)
- In Pd you go Pd extended > Preferences > MIDI Settings
- Choose your MIDI Controller as an Input, Then > apply then > ok
- Save the Patch under your name, then modify what you need
- On your midi controller choose the scene you want to work on
- Open the mapping_/_...pd which fits to your midicontroller
- Check in the ctlin number box which CC your faders/buttons have
- Check what they do in the matrix
- Change the numbers according to your needs

With Linux

- Open Pd
- Open the Matrix (in the menu, go to : File > Open then load gk-code-gk-code/matrix-v02_controllers2lanbox_v01/matrix_v0.2.pd)
- Connect toalsa Midi controller (in the menu, Media > choosealsa Midi > Apply > Ok)
- Then Midi settings > Apply > Ok
- Then test Audio and Midi
- Open the mapping patch (File > Open and choose gk-code-gk-code/matrix-v02_controllers2lanbox_v01/mapping-korg-nano.pd)
- Then test the mapping-korg-nano.pd patch by playing with the boutons.

Now lets start to play ... Look at those different little boxes and play with your midi controler bottons to see the changes happening. For your information :

- [] refers to the value .
- [] refers to channel number .
- [] ... you don't need to know what is happening in this boxe.

Note : you can change a connexion between a function and the chanel by cliking on the channel .

THE MATRIX AND LC-EDIT

- For Intel Macs install Rosetta
- For Linux, it is better not to use Wine but VirtualBox

16. MATRIX V0.3

INTRODUCTION

A matrix is a two dimensions table containing numbers. In our case, it is a mathematical tool allowing to interact in real time with a light-plot controlled by a Lanbox via DMX. It allows to control lights in a different way than programming cues (light atmospheres), and to combine within one project different approaches of controlling lights. This principle can be applied to control sound (we already tested the control of volumes of sound outputs via the matrix) and potentially to the control of video, motors, etc...

The matrix allows for instance to treat light independantly from a sequence of pre-determined light atmosphere, by converting, filtering and mixing on the fly dataflows considered globally, coming from sources such as a video clip, a camera, stills, etc.

It aims at re-introducing organicity in light-control, and proposes for instance a set of tools that allow to artificially re-create the perception of behaviours and movements observed in nature (clouds in the sky, a lighter's flame...).

The following examples of use of the matrix and light setup are only indicative, it's up to you to adapt them to your needs and desires.

REQUIRED HARDWARE

- a Lanbox LCX or LCE
- one computer
- one camera (Firewire, USB or built-in)
- an Ethernet cable.
- optionally one MIDI controller in order to allow a hands-on control of the parameters.

Note: USB is only helpful in the case of LCedit, not of the matrix since it only communicates with the Lanbox via UDP, which is a network layer.

SOFTWARE AND PATCHES

- LC+Edit (for Linux do not use Wine but [VirtualBox](#) ; for Intel Macs install Rosetta)
- [PureData](#) last stable version of Pd-extended for each of the OS
- The abstractions library [PdMtl](#)
- The library [Gridflow](#)
- [GK-code](#), the code developed by Gangplankers

LIGHT-PLOT

The most direct use of the matrix tool consists in setting up the light-plot itself as a matrix. That solution allows to visualize in a very obvious manner the relationship between the sources and the output. The lamps, whatever their amount, are setup in perpendicular rows and columns so that the beam impacts on a floor produce an homogeneous illuminated area. The maximum number of fixtures used in a matrix can go up to 256 DMX channels (16x16).

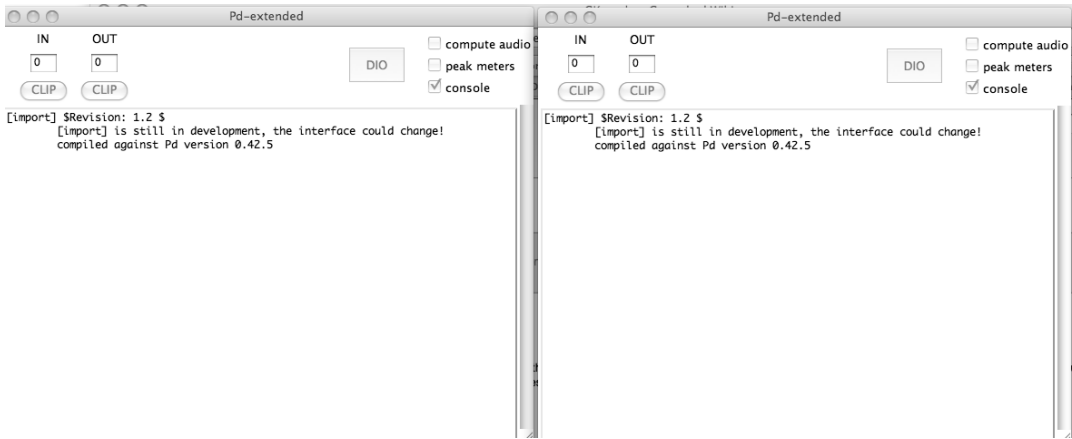
LC+EDIT PROJECT

Start a new project within LC+Edit that features at least a layer. Take note of the its letter (for instance, A, B , C and so on). While softpatching, channel numbers must be consecutive in the example we're about to use. A good practice consists in creating at list one cue list which values are all set to zero (black-out). This trick avoids in some cases the contamination of layers with one another.

For more gory details, refer to the chapter '[LCedit Start Up Recipe](#)'.

PUREDATA DOWNLOAD

Point your browser to <http://puredata.info/community/projects/software/pd-extended>, and download the latest stable version of Pd-extended (0.42.5 as of June 2011). In case your machine already runs an older version, update it. On a Mac, you can even have concurrent versions running as long as their names differ.



17. FUTURE

FREE OSC SERVER

This program, a free OSC server extensible with state-saving dedicated to digital nomadic artists working on WAN/LAN, is specifically designed to be reused by the community of artists, musicians and hobbyists, filling a void especially on the Linux platform for servers such as workstations and embedded systems, while also targeting platforms OSX and Windows.

Alexandre Quessy, Pierre-Olivier Boulant have started thinking the development behind this mapping server that will implement the OSC norm (Open Sound Control, developed by Matt Wright at Berkeley) coded in C++ with bits of Python most likely, published under the GNU/GPL license.

Specs

- a consistent mapping system that allows saving/editing/reloading the preset with storage in flat files editable by hand in case of need
- a web user interface
- on-the-fly data-formatting system (scaling, hi-pass, lo-pass, invert, offset...)
- conversion to and from the following standards: Midi, DMX, Arduino, to a lesser extent EEML (Pachube API) and Artnet
- exclusive use of open standards and publication under a free/libre licence
- Seamless network integration be it running on a localhost, on LAN and its sub-networks, on WAN through proxies and firewalls
- network subscriptions solutions that allows to store one's presets on the server, recall them at any time through authentication (login/password, SSH key and or MAC address).

Sources

Open Sound Control : <http://opensoundcontrol.org>

The Pachube network API : <http://api.pachube.com>

Schedule / development cycles

The key element is to develop as quickly as possible the OSC mapping program, this is the most ambitious project as it only exists as of today fragmented into miscellaneous libraries coded in various languages, with no consistency. The priorities are:

- 1.network + state-saving
- 2.network + state-saving + web UI
- 3.network + state-saving + web UI + mapping

The idioms haven't been chosen yet. Development might involve C++, Python or a mix between these two), the network aspect might be based upon oscgroups. XML and JSON are good candidates for state-saving . The IDMIL mapping lib looks promising, its implementation might be leveled according to the needs that emerge from the use. The Jamoma framewrok has to be looked too.

Sources

<http://www.json.org> | <http://code.google.com/p/oscgroups> | <http://www.idmil.org/software/mappingtools>

Baby projects and reflexions of dramatoolgy

18. Stage Projects related to Gangplank

19. Minutes of some dramatoolgy discussions

20. How do tools influence interactions ?

21. Fictions reader

18. STAGE PROJECTS RELATED TO GANGPLANK

Baby projects are artistic projects using tools developed at Gangplank. Following are four projects who used as examples in a presentation at LesLabos 2011. Projects in the List at the bottom of the page are to be described more in depth in the future.

CORPS DE FEMME 2 - LE BALLON OVAL

Woman's bodies 2 – the oval ball, from portraits of rugby female players, 2010-2011

Team

CONCEPTION, STAGE DIRECTION Judith Depaule STAGING ASSISTANT Maylis Laharie MUSIC Laurent Dailleau LIGHT Bruno Pocheron VIDEO Jordane Chouzenoux, Denis Gaubert ANIMATION, COMPOSITING Géraldine Cugnière, Emma Tsekas STAGE MANAGING, PROGRAMMING Olivier Henry BODY WORK Tamara COSTUMES Ultra Petita PRODUCTION Virginie Hammel PERFORMERS Johanna Korthals Altes/Cecile Musitelli/film APPEARANCE women players and cadres from the Athletic Club Bobigny 93 rugby (Top 10) and the Rugby Club Soisy Andilly Margency 95 (3rd division), and Domitille.

GK Tools

We used the first functioning version of the Matrix (reloaded) to display an organic light layer upon synthetic grass:

- to articulate repeatedly two portraits of rugbywomen.
- during the outside sequences shot on rugby fields.
- This organic layer reminds the audience of the shadows due to clouds movements.

MAGICAL

Team

Do magic and feminism go together? Anne Juren, the French choreographer living in Vienna, and Annie Dorsen, the New York based director, attempt to prove that it can: it's alchemical, it's political and it works. Expanding on Juren's solo „Magical“, they create a feature-length version, together with magician Steve Cuiffo, which premieres at this year's ImPulsTanz. The subversive potential of the illusionary trick and the reference to artists like Carolee Schneemann and Marina Abramovic underline the intention to ironically but effectively irritate and spectacularly blind the look that consumes the female body.

REALISATION: Annie Dorsen and Anne Juren, PERFORMER: Anne Juren , MAGICIAN: Steve Cuiffo, SCENOGRAPHY: Roland Rauschmeier , STAGE ASSISTANT: Sebastian Bauer , LIGHT: Bruno Pocheron, Rut Waldeyer, COSTUME: Miriam Draxl, COSTUME ASSISTANT: Ruth Ranacher, MUSIC: Christophe Demarte, PRODUCTION MANAGER: Lisa Schmidt, PRODUCER: Wiener Tanz- und Kunstbewegung

GK Tools

- live camera input for the matrix so music and performer and lights could work together live
- a time-based MIDI control in cubase to synchronize its relation to the music
- same midi controller is used to trigger effects in live and send informations to the lanbox i.e. Influencing music and light at the same time.

SOLOLALA - 64 SOLOBULB MATRIX

The Sololala light consisted of 8 x 8 light bulbs. We made an open call for light designers to create a solo for each of the bulbs. The choice of intensity, rhythm of the light and length of the solo was completely free. The solos were triggered simultaneously at the beginning of the festival and ran in loops during the whole festival period. The differing lengths of the solos caused the overall picture of the light to shift constantly. Solos were made by Peter Freeman (UK), Jan Fedinger (FI/NL), Maika Knoblich (D), Jan van Giesel (B), Holger Friese (D), Conrad Noack (D), Mona Jas (D) and us.

We fed an input into the matrix which was not controlled by us from the start: solos created by people all over the world whom we did not even know, written independently following a set of rules we provided. This project uses strongly the features of the Lanbox as layers, cuellists, transparency to construct one overall project out of the different solos.

GK Tools

- Pure Data Patch for Midi Controller in order to control different Lanbox layers

Video example from the festival online: <http://www.youtube.com/watch?v=Q73ZbDhQsb4> Alvin Lucier: Music for Solo Performer (1965)

performance & sound objects: Steffi Weismann, technical realisation and programming: Sukandar Kartadinata, lights: Florian Bach, Rut Waldeyer, Bruno Pocheron

In the second part of the show Steffi Weismanns brainwaves trigger the lights via a Max MSP Patch, Midi, and the Lanbox. This part was programmed by Sukandar Kartadinata.

MUSIK (PRATICABLE)

Musik (Praticable) is a search for the motivations and origins of moving, dancing, being there in present time and how this can relate to music, sounding, vocalizing, breathing, being there again... A space between texture and form, seeing and hearing, perception and state, vibration and composition, forgetting and discovering, pleasure of dance and pleasure of music. Comparing musical terminology and concepts with physiology, choreographic writing and compositional elements in dance, Musik (Praticable) looks into the relationships between visual and auditory rhythms, between musical terms and organizations of bodies writing themselves in space like motifs, figures, polyphonic voices or body - landscapes.

Team

CONCEPT /CHOREOGRAPHY Isabelle Schad Choreografie, INTERPRETATION Alexander Baczynski-Jenkins, Nancy Banfi, Jorge Gonçalves, Hanna Hedman, Nina Kurtela, Clément Layes, Arantxa Martinez, Sarah Menger, Sybille Müller, Eduard Mont de Palol, Ana Rocha, Lola Rubio, Nils Ulber, Marysia Zimpel LIGHT, SOUND, ARTISTIC ASSISTANCE: Bruno Pocheron SOFTWARE DEVELOPMENT Olivier Henry INTERVENTIONS IN THE CREATION PROCESS Frédéric Gies, Odile Seitz Assistenz Stefanie Knobel

GK Tools:

- The matrix is used to control lights via a video clip (parameters being controlled live via a MIDI controller are: playback speed, contrast, time in and out for the lamps).
- The data from 8 coordinates of the matrix are transmitted to the output volumes in live through osculator, creating a sound spatialization related to the movements of the lights.

SWEET DREAMS ARE MADE

In this collaborative work Simone Aughterlony and Isabelle Schad propose the theatre as being at once the space of dreaming and part of the dream itself. In their ever-evolving setting the body is capable of shifting status. The register of the performing body shifts from the quotidian and familiar to de-familiar or becoming body, from the theatrical body to the cartoon figure, the reflective body to the absent. Within this dream space they try to unravel the multiplicity of perspectives how to create a sense of the being the one observing whilst simultaneously being the subject of observation. They cultivate expressions of magical phenomena and delight in the construction of images of astonishing and uncanny coherence.

CHOREOGRAPHY, CONCEPT: Simone Aughterlony, Isabelle Schad, PERFORMANCE: Nic Lloyd, Arantxa Martinez, Lola Rubio, Isabelle Schad, Thomas Wodianka, Fiona Wright, DRAMATURGICAL COLLABORATION: Sasa Bozic, LIGHT DESIGN & TECHNICAL DIRECTION: Bruno Pocheron, COSTUME & SET DESIGN Nadia Fistarol, SOUND & SOFTWARE DEVELOPMENT: Olivier Henry, ORIGINAL MUSIC: DECOY - Laurent Dailleau, Nadia Ratsimandresy, PRODUCTION MANAGEMENT: Susanne Beyer, Verein für allgemeines Wohl – Roger Merguin, PRODUCTION: Simone Aughterlony, Isabelle Schad In CO-PRODUCTION with: Art workshop Lazareti Dubrovnik, Campo Gent, Dampfzentrale Bern, de facto Zagreb, La Bâtie-Festival de Genève, Productiehuis Rotterdam (Rotterdamse Schouwburg), Theaterhaus Gessnerallee Zürich, HAU Berlin, PACT Zollverein Essen, SUPPORTED BY: Hauptstadtkulturfonds Berlin, Pro Helvetia Schweizer Kulturstiftung, Fachstelle Kultur Kanton Zürich, Präsidiäldepartement der Stadt Zürich, The Ministry of Culture of Croatia

GK Tools:

- The matrix is used to control lights via a video clip (parameters being controlled live via a MIDI controller are: playback speed, contrast, time in and out for the lamps).
- The data from 8 coordinates of the matrix are transmitted to the output volumes in live through osculator, creating a sound spatialization related to the movements of the lights.
- a 8 in / 8 out sound matrix including a sampler and a spatialization preset system made in Puredata

GIMME SHELTER

19. MINUTES OF SOME DRAMATOLOGY DISCUSSIONS

A WORK IN PROGRESS' VERY MESSY FOR NOW,

content being widely organised by Anne

In the Aubervilliers Sessions, we had several talks about the state of dramaturgy in relation with the use of open source technologies, capitalism

WHAT IS DRAMATURGY ANYWAY ?

(Friday June 17th and 20th, 2011)

How and why (re)defining dramaturgy ?

Question: what is the triggering factor?

Maika Knoblich

(Day 2)

(Day 3)

Bruno : Dramaturgy is the conscious organisation element which are making sense in a work of art, a conscious attempt to organize things, events, happenings in order to produce sense

Aniara Rodado : More than an organisation, I see dramaturgy as a collage, a composition, the organization of different elements so that they communicate stick together, in order to create a unity.

Sasa: Dramaturgy exist even when there is no dramaturge sign up, the position of the dramaturgy was invented in order of organizing art work as a product. In that sense, dramaturgists have to organize a product that answer to a market need. Talking about the experience of the first presentation of the project, one of the conclusions is that the POSITIONING is in the heart of what we do. There for, dramaturgy has to be redefined by the personal experience of it.

Judith Depaule: I would rather consider dramaturgy as a syntax, whatever the heterogenous nature of elements. It requires to know why you want to organize things according to this syntax. It's a way to escape from the too traditional form of narrative. It is also a way to escape the attraction induced by "innovation"

Laurent Golon : Most people connect "sens making" to narrative, which makes talking about own work very hard when you have non-narrative practices .

Dramaturgy and its commodification

In the Netherlands, the ministry of culture census about "Quality". They want the message. they want to quantify the quality for example, by checking the size of the audience. They are not in search of meaning.

Margreta Anastovna : What are the contemporary arts' criteria ?

Redefinition of the dramaturgy in a sense of how do art WORKS: art as good, common ground, value and product. At certain points the position of a dramaturge is the one who does expertise and adds value. How this kind of projects can destabilize that approach ?

DRAMATURGY AND ITS METAPHORES

On Poetics and Poïétique

(Day 2)

Olivier Henry: How much does demystification come into account? More and more often, free party energy & auto-organization processes are involved in artistic production.

Dramaturgy is a Bastard !

Aniara: Bastards are derivation which are not fertiles. A degeneration, from its origin, and from its nature. This figure might be a good way to look at the kind of dramaturgy that we are doing here. It can explain the problem of understanding dramaturgy from an outsider view.

Dramaturgy is Frankenstein

An other metaphore could be the one of Frankenstein creature. We are creating something that might come into life and we don't control it anymore.

The role of the Gaze

Where do we bring the gaze.

Cf Joseph Buys.

DEFINING "DRAMATOOLGY"

Dramatugy and the machines

JudithDepaule : dramaturgy of the machines and deus ex machina: machines have something to say, the spiritualization of the machine.

the dramaturgy that makes machines appear as objects and ready-mades

the dramaturgy of the tools is connected with the idea of GANGPLANK which aim is to create as many facets between the people that are working together: how do we appropriate the informations that are given to us.

Bruno : There is no right tools. It is more about what tool is appropriate to which context.

What it this thing, dramatoology ?

Sasha : How what we use (tools), change what we do, and how we position ourself in this field? How those tools change us, our practices ?

How to write dramatoology

There is a coming back of the "text".

Judith Depaule : At the same time, multimedia specs are not easily to be written. They are not significant out of context.

What does free software means to dramaturgy ?

How to make free software visible ?

What does it give to show the software ?

For example, putting everyone on the stage is a way to show the process.

Put every one as co-authors

to present the piece as a code : not only what does it mean, but how does it work.

to enforce horizontality

POLITICS OF CONTEMPORARY DRAMATURGY

Horizontal structures as a challenge

Dramaturgy and working in horizontal structures: does contemporary art deny horizontality?

No. The work has to be addressed in both ways: from the light, sound designer to choreographer and vice versa trough negotiation and relation. How to change the context within we work applying horizontal structures? Collective processes in performing arts are by its nature temporarily and oriented towards creation of a product, which alienate the relation between the so called creators and operators.

horizontal structures put in the question the act of signing the work and the mechanisms of diffusion and promotion of the work, at those terms the horizontal structures are acting as political forces.

different examples of horizontal working structures, pointed out a problematic of relation within artists included in those structures, the importance of spreading the INFORMATIONS and gaining TRUST. It is about creating a web of trust that works by growing.

going back to the relation between dramaturgy and its relation towards horizontal structures, the experience of working within those kind of structures make us think how we can work with it and use it as a tool, not as a concept: the cooptation process which will be defined within next sessions

Bruno : processes are shortly materialized into a product (i.e. performance) this informs the process which continues then at another stage (level?)

working horizontally does not mean to share each and every step of the process, but is more of a preliminary decision and feedback (back and forth between the different departments)

Laurent: sometimes, working horizontally is difficult, when not everyone is willing to work equally. I have the experiment of this group who wanted to be "radically horizontal", when some people didn't want to create or couldn't.

Aniara: It is indeed easier to work horizontally with people who knows where they are going.

Maika : There are different ways of working horizontally. It may requires some methodology. For example, the use of feedback sheets for talks.

Olivier : There are different ways of creating a group of people we want to work with horizontally. We don't want groups to be closed but we don't want a group to be opened to unwanted participants. For example, the *Web of Trust* is a way to bring people that you trust. The web works only if it is growing. We need to reinvents modes of cooptation.

Signatures

To enforce several signatures.

I like the pirate way of signing :-)

signing as a co creation is more common in dance.

THE AUDIENCE

Aniara : The audience is defined by the dramaturgy. It seems to be a role in transformation.

Who has access to this role ?

It is a role who is artificially kept alive, a bit of a club, a bubble.

Aniara : " The lights are so strong that I cannot see you".

"Theater for each"

20. HOW DO TOOLS INFLUENCE INTERACTIONS ?

Using tools influences interaction in many dimensions.

Focusing on tools can be a risk to lose contact with other workers or with the artists. They could bring other forms of working practices, modes of collaboration.

One of the issues which are at stake is to answer the Theatre and shows requests, ie. to work with predefined set up. If discussing is not part of a technician work, where is the interest in touring with a show ? There is a difference to be made between working *for* people and working *with* people. The relation with artist is here at stake, and is made visible in the way technicians sign a piece or not. In the other hand, a good light designer could be also used as a commodity to increase the list of the participants, as a way to gain prestige.

For an artist touring or not touring with his or her piece, can bring lots of dimensions as it questions the relation between the artist and the makers. In one hand, it could also be seen as a way not to care for the technical work. Artist stays in the world of ideas, and never touch the technical reality of their work. They only consider then technicity to be a question of efficiency, not a possible exploration of creative dimensions. An other very common attitude is that the technician is left to do what ever she or he want. But her or his work will be kept invisible, with the excuse of the graphist lacking space on the poster.

On the other hand, transmission and discussion of technical dimensions of a show can happen before the show, if sufficiently taken in consideration. Some artist could just not feel so good with touring with their show when still recognizing the importance of collaboration.

21. FICTIONS READER

This idea of a fiction chapter was about a suggestion/gesture of entering the developing of technical platforms from a different direction than under the section Dramaturgy in the book. For a "newcomer" it was sometimes difficult to find a point of entry into gangplank and in one way this had to do with vocabulary or language.

It was suggested as a form of entry into the dramaturgy of a group, of a technology, of a vocabulary. This chapter was meant as a way to provoke, as a point of discourse and in order to inspire. The book is a way of informing newcomers with the practicalities and workings of gangplank.

Maybe there is a superfluosity to this chapter. Maybe to think of forms and ways that such a "chapter" already exists or could exist within gangplank. Below is a suggestion, a gesture, a reading list, to be continued, to be contributed to, to be erased, as an open archive. Where the idea of writing or inscription and reading meet in its movement like lightning in its formation of (collective) knowledge.

LIGHTING

...like photography, lighting in Benjamin names the movement of writing and inscription. Linked to the flashes of memory, the suddenness of the perception of similarity, the irruption of events or images, and even the passage into night, Benjamin's vocabulary of lightning helps register what comes to pass in the opening and closing of vision. It tells us what brings sight to writing. Related to the Hegelian lightning bolt that gives birth to the image-structure of a new world, the Holderlinian lightning that speaks the divine language of the gods, and the Nietzschean words that come in the form of lightning, the lighting that traverses Benjamin's writing also comes as language. Adorno makes this association between the force of Benjamin's writing and that of lightning when, discussing Benjamin's correspondence, he notes that "flashes of imperiousness dart through the often nebulous early letters like lightning bolts in search of tinder". Lighting signals the force and experience of an interruption that enables a sudden moment of clarification or illumination. What is illuminated or lighted by the punctual intensity of this or that strike of lightning, however - the emergence of an image, for example - can at the same time be burned, incinerated, consumed in flames. Like the "light pattern" or "fire-writing" that Johann Wilhelm Titter - whom Benjamin cites in his *Trauerspiel* book - indicates the "inner connection of word and script", the word-like character of "the whole of creation", lightning brands and stamps whatever it illuminates or destroys and the cinders it leaves behind remain as its signature.

Not only is the writing-that-lighting-is immolated at the very moment of its emergence, but the illuminated objects of its reflections go up in flames in order to make reflection itself possible. The truth-content of any given reflection can only arise, that is, with the destruction of what the reflection seeks to understand. As Benjamin writes in his discussion of the German mourning play, "truth is not a process of exposure that destroys the secret, but a revelation which does justice to it." Beauty, the content of truth, "does not emerge in an unveiling, rather it manifests itself in a process that one might call, in a simile, the flaming up of the veil that enters the circle of ideas, the burning of the work, in which its form reaches the high point of its luminosity". A luminosity that blinds as much as it enlightens, the flame tells us that truth springs forth in the burning of the work - the work that burns, that is being consumed by the flame, but also the work that burns its contents. Remaining faithful to the work's secret, truth reveals its inability to present itself, to be presented. We could even say that truth means the making of ashes. That there can be neither truth nor photography without ashes means that, like allegory, both take place only in a state of decay, in a state that moves away from itself in order to be what it is. Like the photograph that tells us what is no longer before us, truth can only be read, if it can be read at all, in the traces of what is no longer present...

LIGHT IN "WITHIN A BUDDING GROVE"

"It was high time, indeed, to leave Balbec, for the cold and damp had become too penetrating for us to stay any longer in a hotel which had neither fireplaces in the rooms nor a central furnace. Moreover, I forgot almost immediately these last weeks of our stay. What my mind's eye did almost invariably see when I thought of Balbec were the hours which, every morning during the fine weather, as I was going out in the afternoon with Albertine and her friends, my grandmother, following the doctor's orders, insisted on my spending lying down, with the room darkened. The manager gave instructions that no noise was to be made on my landing, and came up himself to see that they were obeyed. Because the light outside was so strong, I kept drawn for as long as possible the big violet curtains which had adopted so hostile an attitude towards me the first evening. But as, in spite of the pins with which, so that the light should not enter, Françoise fastened them every night, pins which she alone knew how to unfasten; as in spite of the rugs, the red cretonne table-cover, the various fabrics collected here and there which she fitted in to her defensive scheme, she never succeeded in making them meet exactly, the darkness was not complete, and they allowed to spill over the carpet as it were a scarlet shower of anemone-petals, among which I could not resist the temptation to plunge my bare feet for a moment. And on the wall which faced the window and so was partially lighted, a cylinder of gold with no visible support was placed vertically and moved slowly along like the pillar of fire which went before the Hebrews in the desert. I went back to bed; obliged to taste without moving, in imagination only, and all at once, the pleasures of games, bathing, walks which the morning prompted, joy made my heart beat thunderingly like a machine set going at full speed but fixed to the ground, which can spend its energy only by turning upon its own axis." - Proust, last page of "within a budding grove"

SLOW GLASS

Slow glass is a fictional material in Bob Shaw's short story "Light of other days" (*Analog*, 1966), and several subsequent stories. The glass, which delays the passage of light by years or decades, is used to construct windows, called *scenedows*, that enable city dwellers, submariners and prisoners to watch "live" countryside scenes. "Slow glass" is a material where the delay light takes in passing through the glass is attributed to photons passing "...through a spiral tunnel coiled outside the radius of capture of each atom in the glass."

Miscellaneous

22. Lexicon

23. Glossary

24. Participants

25. About

26. Contact

22. LEXICON

The aim of the Gangplank Vademecum lexicon is not to attack, define or simply redefine theoretical terms coming from the performance practice but to enrich and widen the potentiality of the meaning and knowledge production that appears from the Gangplank projects and meetings. There is a necessity to search for the meanings/words/definitions in order to translate and communicate our practice and projects derived from the type of practice and discourse built around it.

DIMENSION

Within the works of Gangplank, dimension refers to a perceptive and political term, not just a parameter. (project example: Still Lives).

FREE SOFTWARE

Free softwares can be used, studied and modified without restriction, at the exception of a constraint (inscribed in a free license) ensuring that further manufacturers, developers and users also benefit of those freedoms.

GANGPLANK

- A movable plank used to board or disembark from a ship or boat (Compact Oxford English Dictionary)
- A mayday collective/ movable and portable research project : a group of light/sound/video designers, musicians, choreographers, theater directors, fine artists, managers, scientists and performance art practitioners that once or twice a year meets up on residency to fire up discussions on the interactions of technology and dramaturgy in our practices of making stage work.

HORIZONTAL

Refers to certain type of organizations / networks organizing work without hierarchy. The ways horizontal practices are questioning the term of authorship, in an art production that relays on the idea of originality as a basis of authorship. One of the contradictions with vertical ways of production is the awareness of Borders of responsibilities: in horizontal production they are blurred. For examples, look at the project Domini Public or [Where is my privacy?](#)

LOCATION

The use of the world location is losing its basic meaning (space and time) by the usage of technology, change of roles of the participants and telelocation / presence or for works that are avoiding the means of Location. The term Location often is replaced with Venue, because of the aim to position the artwork as an event (project example: works existing only online).

MAPPING

Artistic practices which are usually multidisciplinary oriented. As a result or a tool they create a certain architectonic, symbolic organization of the space, mapping particular events, energies, synergies, discourses the given spaces consists of, in order to install a new one. Often they operate with the flow of data in order to exaggerate perceptive or sensory effects of mapping (project example: Tertulia)

MUTATION / EVOLUTION

Evolution to where and Mutation to what refers to the ever changing investigation of the role of the audience in the artistic process and presentation of artistic works. The technological evolution redefines the notion of the work but also the notion of the presentation and communication of the work. We can almost talk about development which is trying to shift, change and destabilize the role of the performer as the one who acts and produces and the role of the spectator as the one who witness. The biggest shift is coming from the field of perception of the work, because the work is changing its basic parameters, such as dimension, duration and location. Are we building a new esthetic, cognitive and social platform for the spectator? Is it already happening and how do we analyze those processes, while they are happening .

OPEN SOURCE

Open source describes practices in production and development that promote access to the end product's source materials. This pragmatic methodology was phrased to differ a bit from the Free Software philosophy that was too much insisting on the concept of Freedom (with the ambiguity behind the term of free as in free speech or in free beer) Open source practices enforce the use of licences committing the software's code to stay readable (not necessarily freely editable and sharable for any use. Meaning everybody can access the code and modify it towards his or her personal needs.

OPEN SOURCE MAGIC

This Gangplank term - refers to the tools of how things work, as well as to the tools of sharing them. The moment when the Wizard of Oz gets behind his curtain for instance

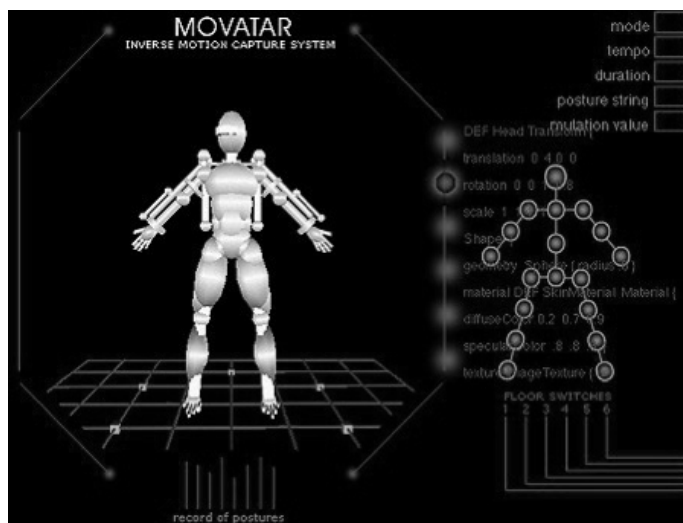
PRACTICE

The shift in art practice comes from the possibility to practice with the majority of the tools from the first moment of production, using more possibilities and input/output parameters at the spot. On the other hand the notion of this kind of work stresses out the final product in which the performers and the audience has to react to number of inputs and outputs which enriches their perceptive field.

TELELOCATION AND TELEPRESENCE

Those terms refers to a location as something you can travel to, to be divided in several sub locations; can be sent or exist in several places. Location as a process, a transfer and a message.

Telepresence is enlarging or destroying the idea of the performer or the author to be represented as a body. Through technology the body can be present and exist in different / several locations or dimensions. The term can be used for the combination between a body and a machine, creating a chimera or a monstrous body.



(project example: Inverse motion capture system)

TOOL

By tools we mean a particular kind of work in the Gangplank is aiming the usage of any means of know how as a tool. Enlarge, discover, spread out and share the individual knowledge by "learning through doing" in a group environment, using it as a plug-in for the works of cooperation.

VERTICAL

We often talk of verticality when referring to product oriented projects. In the contemporary product oriented practice we search for ways to enrich normative field of verticality (by applying horizontal strategies). We aim to allow different knowledge and experience to circulate among contributors / creators in order to collaborate with more fluidity. Concept, initiative, mutual agreement and production conditions are affecting the creator's choice of working vertical or horizontal.

23. GLOSSARY

an overview of rather technical terms one might encounter or need in a gk meeting

ABSTRACTION OR PATCHES

are modular, reusable units of code written natively in Pd, used as standalone programs and freely shared among the Pd user community. No other programming skill is required to use Pd effectively.

DATA FLOW

A flow like a water flow from top to bottom, you cannot stop it, you can move it around or canalize it, and by that slow it down.

FREE SOFTWARE

Free software can be used, studied, and modified without restriction, at the exception of a constraint (inscribed in a license) ensuring that further manufacturers, developers and users also benefit of those freedoms.

HARD PATCH

Physically connecting the lamps to the dimmer channels i.e. plugging plugs of electrical cords connected to the lamps in the sockets of the dimmers.

LANBOX

A black metal box connecting quite some Gangplankers. A light interface which works with many different protocols: TCP/IP, Midi, UDP, OSC, DMX out & in, serial-, analog-, digital- I/O ports. It can output MIDI, DMX and Serial messages. It can be addressed by different means than programming. Manual en how to: [LCedit Start up Recipe](#).

LCEDIT

The software with which you program and which gives you feedback about what's happening in the lanbox [LCedit Start up Recipe](#)

LIBRARY

a collection of resources used to develop software. Libraries contain codes and data that provide services to independent programs.

THE MATRIX

A matrix is a two dimensions table containing numbers. In our case, it is a mathematical tool allowing to interact in real time with a light-plot controlled by a Lanbox via DMX. It allows to control lights in a different way than programming cues (light atmospheres), and to combine within one project different approaches of controlling lights. This principle can be applied to control sound (we already tested the control of volumes of sound outputs via the matrix) and potentially to the control of video, motors, etc.

The matrix allows for instance to treat light independantly from a sequence of pre-determined light atmosphere, by converting, filtering and mixing on the fly dataflows considered globally, coming from sources such as a video clip, a camera, stills, etc.

It aims at re-introducing organicity in light-control, and proposes for instance a set of tools that allow to artificially re-create the perception of behaviours and movements observed in nature (clouds in the sky, a lighter's flame...).

MIDI CONTROLLER

is hardware or software which generates and transmits [MIDI](#) data to MIDI-enabled devices.

MIDI

A protocol we use to f.ex. connect a midi controller to the Lanbox in order to have a hands on possibility of working with lights. (You can work with the lanbox without faders, only with your laptop and a mouse, but it's very nice and practical to have physical faders once in a while)

PROTOCOL

A language which enables machines to communicate amongst each other like TCP/IP, Midi, OSC etc. ...

PUREDATA OR PD

a visual programming language developed by Miller Puckette in the 1990s for the creation of interactive computer music and multimedia works. Though Puckette is the primary author of the software, Pd is an open source project and has a large developer base working on new extensions to the program. It is released under a license similar to the BSD license. It runs on GNU/Linux, Mac OS X, iPhoneOS, Android and Windows. There are older ports for FreeBSD and IRIX.

SOFT / HARD TIME

R.K. (the acronym stands for Soft Hard Real-time Kernel) is a completely configurable kernel architecture designed for supporting hard, soft, and non real-time applications with interchangeable scheduling algorithms. The major benefit of the proposed kernel architecture is that an application can be developed independently from a particular system configuration, so that new modules can be added or replaced in the same application, to evaluate the effects of specific scheduling policies in terms of predictability, overhead, and performance. (Wikipedia)

SOFT PATCH

Connecting Light channels to DMX outputs in a LCedit Project (in our case) inside the software.

OPEN SOUND CONTROL OR OSC

is a content format for messaging among computers, sound synthesizers, and other multimedia devices that are optimized for modern networking technology. Bringing the benefits of modern networking technology to the world of electronic musical instruments, OSC's advantages include interoperability, accuracy, flexibility, and enhanced organization and documentation.

OPEN SOURCE

describes practices in production and development that promote access to the end product's source materials. This pragmatic methodology was phrased to differ a bit from the Free Software philosophy that was too much insisting on the concept of Freedom (with the ambiguity behind the term of free as in free speech or in free beer) Open source practices enforce the use of licences committing the software's code to stay readable (not necessarily freely editable and sharable for any use.) Meaning everybody can access the code and modify it towards his or her personal needs.

WIKI

a website that can be entirely edited by its readers and keep track of the history of all interventions. We are using a [wiki](#) at Gangplank for the planning and archiving of our activities. This book is a kind of wiki but more oriented to book-types of publication.

24. PARTICIPANTS

Between July 2009 and July 2011, the following persons have been taking part in Gangplank meetings

- Margreta Anastasova
- Florian Bach
- David Bergé
- Jaco Bouwer
- Sasa Bozic
- Judith Depaule
- Jan Fedinger
- Julien Fezans
- Julie Gicquel
- Anne Goldenberg
- Laurent Golon
- Boris Hauf
- Olivier Henry
- Kimberley Horton
- Maika Knoblich
- Tanguy Nedelec
- Conrad Noack
- Bruno Pocheron
- Yrjänä Rankka
- Nadia Ratsimandresy
- Anjara Rodado
- Isabelle Schad
- Heiko Schramm
- Mehdi T outain Lopez
- Minna Tikkainen
- Rut Waldeyer
- Dragana Zarevska

25. ABOUT

Summary : This book is about the research, reflexions and free tools developed by a group of technicians and artists active in the fields of dance, theater and performance in Europe, dealing with issues such as the influence of technology upon dramaturgy and the definition of common languages in interdisciplinary processes.

Publisher : the Gangplank group

Subjects : art, video, light, sound, synesthesia, puredata, gridflow, lanbox, dramaturgy, praxis, learning by doing

Type of Document : Collective handbook

License : GPL

Language: English

Other versions: Vademecum de Gangplank (French translation)

Authors:

Introduction to this Vademecum

Modifications:

AnneGoldenberg - Anne Goldenberg 2011

What's Gangplank

Modifications:

AnneGoldenberg - Anne Goldenberg 2011

albucyd - Conrad Noack 2011

Statements

Modifications:

AnneGoldenberg - Anne Goldenberg 2011

maika - Maika Knoblich 2011

albucyd - Conrad Noack 2011

Gangplank in an interview with the Labos

Modifications:

MarikaRizzi - Marika Rizzi 2011

AnneGoldenberg - Anne Goldenberg 2011

maika - Maika Knoblich 2011

Shaping Gangplank (to be revisited)

Modifications:

AnneGoldenberg - Anne Goldenberg 2011

david_b - david bergé 2011

rut - rut waldeyer 2011

Collaboration (to be developped)

Modifications:

AnneGoldenberg - Anne Goldenberg 2011

david_b - david bergé 2011

jacobouwer - Jaco Bouwer 2011

Transmission ? (to be developed)

Modifications:

MarikaRizzi - Marika Rizzi 2011

AnneGoldenberg - Anne Goldenberg 2011

invader_bob - Jan Fedinger 2011
rut - rut waldeyer 2011

Philosophy behind the tools

Modifications:
AnneGoldenberg - Anne Goldenberg 2011

Gangplank's tools

Modifications:
AnneGoldenberg - Anne Goldenberg 2011
albucyd - Conrad Noack 2011

LAN connection between computers and Lanbox

Modifications:
florian - Florian Bach 2011
albucyd - Conrad Noack 2011
rut - rut waldeyer 2011

LC Edit Startup

Modifications:
albucyd - Conrad Noack 2011

Example of LCedit project compatible with the Matrix

Modifications:
AnneGoldenberg - Anne Goldenberg 2011
albucyd - Conrad Noack 2011
rut - rut waldeyer 2011

LCeditCommandlist

Modifications:
rut - rut waldeyer 2011

Midi Controller to Lanbox

Modifications:
AnneGoldenberg - Anne Goldenberg 2011
albucyd - Conrad Noack 2011
rut - rut waldeyer 2011

Matrix V0.2

Modifications:
AnneGoldenberg - Anne Goldenberg 2011
rut - rut waldeyer 2011

Matrix V0.3

Modifications:
AnneGoldenberg - Anne Goldenberg 2011
rut - rut waldeyer 2011
JulienFezans - Julien Fezans 2011

Future tools developements

Modifications:
MarikaRizzi - Marika Rizzi 2011
AnneGoldenberg - Anne Goldenberg 2011
albucyd - Conrad Noack 2011

Stage Projects related to Gangplank (under construction)

Modifications:

MarikaRizzi - Marika Rizzi 2011

AnneGoldenberg - Anne Goldenberg 2011

dzarevska - Dragana Zarevska 2011

rut - rut waldeyer 2011

Minutes of dramaturgy discussions (to be restructured)

Modifications:

AnneGoldenberg - Anne Goldenberg 2011

albucyd - Conrad Noack 2011

How do tools influence interactions ? (notes from Anne, to be continued)

Modifications:

AnneGoldenberg - Anne Goldenberg 2011

Fictions (to be read again by Jaco)

Modifications:

MarikaRizzi - Marika Rizzi 2011

AnneGoldenberg - Anne Goldenberg 2011

jacoubouer - Jaco Bouwer 2011

Lexicon

Modifications:

MarikaRizzi - Marika Rizzi 2011

MargretaAnastasova - MargretaAnastasova 2011

david_b - david bergé 2011

dzarevska - Dragana Zarevska 2011

AnneGoldenberg - Anne Goldenberg 2011

marika - marika rizzi 2011

rut - rut waldeyer 2011

Glossary

Modifications:

albucyd - Conrad Noack 2011

rut - rut waldeyer 2011

david_b - david bergé 2011

Participants

Modifications:

albucyd - Conrad Noack 2011

david_b - david bergé 2011

About

Modifications:

AnneGoldenberg - Anne Goldenberg 2011

maika - Maika Knoblich 2011

Contact

Modifications:

albucyd - Conrad Noack 2011

26. CONTACT

- Main website: <http://gangplank.servideo.org>
- Photo gallery: <http://gangplank.servideo.org/media>
- English Booki : <http://www.booki.cc/gangplank-vademecum>
- French Booki : <http://www.booki.cc/vademecum-de-gangplank>
- Contact e-mail : gangplank-owner@listes.misto.servideo.org