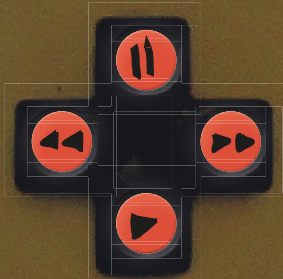"Hack the past to see the future."

Interactivos?'12 Ljubljana: Obsolete Technologies of the Future (Zastarele tehnologije prihodnosti) is an intensive ten-day workshop and social event, where six selected projects will be co-created by more than 30 international guests. The selected projects aim to rethink the qualities of outdated technology and make way for long-term, sustainable usage of technology in the decades to come.

Interactivos?'12 Ljubljana
Obsolete Technologies of the Future

ON   OFF

LJUDMILA \ SGMK
\ MEDIALAB-PRADO

5 – 15 SEP
2012

http://ljudmila.org
http://www.mechatronicart.ch
http://medialab-prado.es

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WELCOME TO INTERACTIVOS?'12

OBSOLETE TECHNOLOGIES OF THE FUTURE

Ljudmila – Ljubljana Digital Media Lab is honored to host this year's Interactivos? in Ljubljana in cooperation with Medialab-Prado, Madrid, Interactivos? initiators, and SGMK (Swiss Mechatronic Art Society).

It is our great pleasure to welcome all the participants (group leaders, collaborators, mentors, members of the organisations, professional attributors, and the general public) to join us in the exciting development of six selected projects. We wish you lots of great fun while working, hacking, assembling, disassembling, emitting, planting, growing, analysing, and tinkering. We also hope you will enjoy the accompanied events and additional programs as well as your stay in Ljubljana in general. We encourage all the participants to follow the the open-source, free hardware ethics, and support the spirit of collaboration and the exchange of ideas and know-how.

We would also like to express our gratitude to all applicants to the open call who made the selection process of the projects very difficult, and all the institutions and individuals who helped us spread the word about our prototyping workshop as well as all those who, actively or in spirit, support the realisation of this great mashup of knowledge and experiences.

/01/

DESCRIPTION OF PARTNER ORGANIZATIONS

LJUDMILA – LJUBLJANA DIGITAL MEDIA LAB

LJUDMILA – Ljubljana Digital Media Lab has been operating since 1994 and is based on open-access and open-source principles. It connects new media technologies and artistic projects as well as encourages broader, savvier, and more creative uses of new technologies. It focuses on art production as well as education, research and development of open hardware and software.

Ljudmila organises regular workshops in basic and advanced use of open source software Edu lab / Izobraževalnice, as well as the Free Circuit Prostovezje (open hardware) workshops and Digital Dish public lectures and talks by international new media artists. The Prosto-vezje programme in general engages in experimental ("circuit bending", "tinkering" and "kits") development practices and construction of electronic circuit hacks based on free software. The participants are encouraged to develop further uses of these practices and techniques and include the findings in their artistic work.

Ljudmila is based on the DIY, DIWO and DIT spirit, and is firmly engaged with open source production and development.

Ljudmila's art programme is combined with the production of local artist and annual resident programmes.

Ljudmila strongly supports communities such as Theremidi Orchestra, Bookitype-collaborative writing and 3D Blender enthusiast.

Since 2005 Ljudmila has been operating also as a public lead for the Creative Commons Slovenia project and is a member of the international Creative Commons network. For the last two years Ljudmila has been developing Culture.si, an online platform for international cultural collaboration (founded and funded by the Ministry of Education, Science, Culture and Sport). It is based on the semantic MediaWiki and the content (referential articles, lists and images) is licensed under Creative Commons.

Links:

http://www.ljudmila.org/

http://www.culture.si/en/Ljudmila_-_Ljubljana_Digital_Media_Lab

http://www.culture.si/en/Ljudmila_Art_and_Science_Laboratory

Medialab-Prado

Medialab-Prado is a program of the Department of Arts of the City Council of Madrid, aimed at the production, research, and dissemination of digital culture and of the area where art, science, technology, and society intersect.

Many workshops for the production of projects, conferences, seminars, encounters, project exhibition, concerts, presentations, etc. take place in its versatile space. All activities are free and open to the general public.

The primary objective is to create a structure where both research and production are processes permeable to user participation. To that end, Medialab-Prado offers: a permanent information, reception, and meeting space attended by cultural mediators. And open calls for the presentation of proposals and participation in the collaborative development of projects.

There are several on-going programmes: Interactivos?: creative uses of electronics and programming; Inclusiva.net: research and reflections on the network culture; Visualizar: data visualization tools and strategies; Commons Lab: trans-disciplinary discussion on the Commons; and AVLAB: audio-visual and sound creation.

Links:

http://medialab-prado.es/

http://medialab-prado.es/article/interactivos12_ljubljana_selected_projects

Swiss Mechatronic Art Society /SGMK/

The Swiss Mechatronic Art Society (SGMK), established in 2006, is a collective of engineers, hackers, scientists and artists that joined to collaborate and promote on creative and critical uses of technology. They develop DIY technologies and organize collaborative events, such as a yearly research-camp in the mountains and local regular workshops in electronics, robotics, physical computing, diy-biology, lofi-music etc. They run a public hacker space MechArt Lab (since 2009) and organize the international DIY festival, held every year in Zürich since 2005. Internationally they have cooperated on the organisation of PlayAround.cc 2008–2010 in Taiwan, and the KIBLIX Festival 2011 in Maribor, Slovenia. They also cooperate with various socio-cultural organisations, such as IngCH, Technorama, Universikum, Dynamo Zürich and Bug'n'Play, to hold creative technology courses at schools and youth communities. With the DIY Makeaway, a series of mini-workshops for kids and other open-minded people, they have been present in Switzerland and internationally at various exhibitions and festivals, such as SHIFT Festival in Basel, Copy!, Poolloop and Dorkbot in Zürich, Les Digitales in various locations, MediaLab Prado in Madrid, CTM.09 in Berlin, CEMA in Bangalore, Cellsbutton#03, #04, #05 in Yogyakarta, Tinguely Museum in Basel,

Piksel 2010 in Bergen, Interfiction 2010 in Kassel, ISEA2010 in Dortmund, Mal-au-Pixel 2011 in Paris, Fête de la cité 2011 in Paris, Electron Festival 2011 in Geneva, CYW Ars Electronica 2011 in Linz, Dimension+ in Hong Kong, EPFL's Festival de Robotique 11/12 in Lausanne and many more.

Links:

http://www.mechatronicart.ch/

http://www.mechatronicart.ch/events/interactivos12:-ljubljana

Studiolab

The workshop at Science Gallery is part of Studiolab, a 3-year Europe-wide initiative that merges the artist's studio with the research lab. Funded by the EC Seventh Framework Programme in 2011, Studiolab is a network that provides a platform for creative projects that bridge divides between science, art and design.

Link:

http://studiolabproject.eu/

GENERAL PROJECT DESCRIPTION

Ljudmila – Ljubljana Digital Media Lab, in collaboration with Medialab-Prado and Swiss Mechatronic Art Society are organizing this year Interactivos?'12 Ljubljana: Obsolete Technologies of the Future. The Interactivos?'12 Ljubljana workshop aims to be a collective platform for research, production, and learning, and offers support in developing the selected projects. The six selected projects will be carried out in multidisciplinary groups comprised by the project leaders and joined by interested collaborators, with conceptual and technical suggestions from the advisors.

The workshop will be dedicated to explorations of Obsolete Technologies of the Future, collaborative prototyping vol. 1, rethinking the qualities of outdated technology and making way for a long-term, sustainable usage of technology in our environment for the decades to come.

These outdated technologies have not been pushed aside and rendered insignificant merely for pragmatic purposes, but also for economic and political reasons. The topic suggests – but is not limited to – dealing with increasing lack of natural resources, ecological questions in urban environments, and overlooked technologies of the past. Projects are also connected to media hacking and subverting the automatism of behaviour in the society, and suggesting new forms of social networking that are not dependent on existing corporate hierarchies.

Alongside artwork, innovative installations and collaborative practices, our goal is to encourage thinking differently about how we set up products and services for our demands and everyday living. A glimpse into the past makes us understand the reasons behind technological development and what role art plays in promoting or challenging the existing modes of behaviour. Is it possible for an artwork to hack the system from within? Is it possible to think outside of our mindframes? To think outside the binary code? To view the world in nano scale? To explore our perception beyond the virtual and the real? To imagine moving fast without an exhaust engine? To explore how the web should operate? To turn off and tune in?

INTERACTIVOS?'12 LJUBLJANA: CREW

LJUDMILA TEAM

Ljudmila, Rimska 8, 1000 Ljubljana, Slovenia \ **delavnica@ljudmila.org** \ **+386 1 426 9530**

Robertina Šebjanič \ robertina@ljudmila.org \ +386 41 360 177
(programme coordinator and head of educational and artistic activities)

Tina Dolinšek \ tina@ljudmila.org \ +386 31 713 402
(programme coordinator of educational activities)

Jani Pirnat \ ivanpirnat4@gmail.com
(programme coordinator of artistic activities at Ljudmila)

Helena Božič \ helena@ljudmila.org
(pr, coordinator, design and photo documentation)

Laia Ros \ laiarosg@gmail.com
(coordinator)

/09/

MEDIALAB-PRADO

Mónica Cachafeiro \ monica@medialab-prado.es
(project developer at Medialab-Prado)

SGMK

Urs Gaudenz \ urs@gaudi.ch

Patric Kaufman \ patric@anorg.net

SELECTED PROJECTS

Short Description of 6 Selected Projects

Domače Volt Orkester

Matthew Gingold & Ben Olsen \ Austria

"Domače Volt Orkester explores the many facets of our relationship to domestic electronic appliances. The inherent tension between the 'mass-produced' and the 'personalization' of technology is a pervasive force in contemporary society. It is an 'I' phone, a 'smart' toaster, a 'my' light. Behind the obvious marketing ploys that attempt to stimulate and associate our personal desires with generic objects, there is an actual, real and personal relationship between us (humans) and our (eletro-mechanical) tools, toys and transportations.

As we voraciously consume every-day technology, some products fall by the wayside – anonymous, discarded and/or destroyed – whilst others ascend to rock star like status – fetishized, collected and coveted. What are the perceptible qualities of these obsolete and not-so-obsolete technologies? What do they look like? What do they sound like? And how do they move?

What do we own today, that we will throw away tomorrow? And what will we want back, the day after that?

Inspired by the works of Maywa Denki and Ujino Muneteru the Domače Volt Orkester seeks to re-purpose discarded technologies to create instruments and installations of new wonder. The detritus of domestic electrical goods can be given a new life, a new 'stage' on which to 'perform' afresh for us humans, or even just for themselves – hairdryers, blenders, toasters, washing machines, toys, toothbrushes, cd-rom drives, phones, printers – are all transformed into 'orchestras' via AC sequencers, interface hacks and interactive trickery."

Autonomous Interactive Radio

Reid Bingham & Sean McIntyre \ USA

"As radio markets increasingly become corporate owned monocultures and governments slash funding to public radio, smaller communities and subcultures become underserved or cut out completely from this vital form of communication. Our project, AIR, seeks to address this problem by going smaller instead of bigger, focusing on creating a direct relationship between radio listener and radio station, turning the top down one way direction of traditional radio into a circle.

AIR, is an autonomous, neighborhood oriented, interactive, micro-radio station. The station consists of a low power radio transmitter and wifi enabled computer that is scripted to automatically download, queue, and then play, all audio files emailed to it. Files are played as they are downloaded by the station computer, and if multiple files are sent at once, they are queued in the order they are received. All files are added to a running playlist that is played and looped through continuous-

ly when no songs are being received. The content of this micro-radio station is based solely on the files people email to it. The queue system is set up to ensure a direct and immediate way to interact with A.I.R. With this project we wish to make radio a new space for neighborhood level interaction, expression, and experimentation."

Ophiodea

Laura Gabriela Olalde Verdes \ Argentina

"The project consists on the construction of a compound eye based on multiple cells or lens inspired on the Ophiocoma wendtii organism. In this special kind of organisms, skin becomes a visual organ as well as tactil , as it is cover by light sensitive cells all over its surface.

From a biomimetic approach, this project is planned to be executed in two different steps. The first one, consists on the prototype and rehearsal of the multicamera system, and on the visualisation process resulting of the different images coming from different units. For this project, all cameras, both photographics ones and webcams will be recycled. In order to collect a good stock of them, there will be a public and open call to local community in order to invite people to bring their old cams and join the proyect.

The second step in this project consists on the construction of an sculptural object. With organic characteristics, its surface will have inserted lenses of the hacked cameras and that will build the compound eye. This object will have a semi transparent skin, mostly done in latex and with a metal structure inside that will give it support to be hold on itself. As surface is traslucid, it will be the screen in which we will see the processed images coming from an inside projector, offering this way, an unique and particular way of visualization."

/11/

TeleVotón: An automated voting machine

Yasmina Morán Conesa \ Spain

"Televotón is a prototype of an Automatic Teller Machine (ATM) turned into a direct democratic participation device, a terminal for voting political affairs.

The votings will be possible using an electronic ID card (implemented in some European countries). We introduce our ID and pin in the same way as we do in a regular ATM. Once the identification process is completed, the daily votings will be shown to us, and we will be able to vote, as an example, a proposal submitted to the National Parliament.

As an utopia, this prototype would be part of an electronic voting network, consisting of the current ATM network (the voting functionality would be added to it), and those ATMs withdrawn during the bank restructuring due to the global economic crisis. This network would improve the electronic accessibility: not everybody has a computer at home, but everybody has an ATM just around the corner.

The prototype will consist of a real ATM frontal panel, an obsolete computer and peripherals: keyboards, a screen and a card reader. The software, which will looks like a a bank interface, will be programmed using open source software. This software will send to a web server the votings. The final look of the Televotón container will be decided during the workshop, having into account its mobility and autonomy."

Repurposing of abandoned printing devices

Gonzalo Ramírez Restucci \ Chile/Spain

"Printers and plotters have always been one of the best sources for the harvesting of electronic components for anyone interested in the practices of DIY. From DC motors to steppers, gears and belt mechanisms, dot matrix LCD displays, power supplies, optical encoders and switches, and a huge amount of "spare" parts, such as metal rods ands mounting brackets.

Home and office printers are really cheap and disposable, it's very common to find abandoned units on the streets lying next to dumpsters, and just by searching a little bit deeper it's easy to find companies getting rid of old units by the means of tens or hundredths of units.

Interesting enough, is the amount of companies that are doing the same with printer's big brother: The Plotter. Usually units older than 10 years not in working conditions anymore, nor satisfying requirements for current printing jobs are being replaced with new ones. With the bulk factor being the most important in avoiding storage of it and throwing it away in a promptly manner.

Plotters provide and excellent resource for component scavenging, usually using huge and powerful motors and much higher quality components and almost 3 times the amount of each that could be found in a simple printer. All this together with the fact that they provide a much bigger form factor, allows for ideas on creating systems based on this beasts to be much more ambitious."

Mycophone

Saša Spačal & Mirjan Švagelj & Anil Podgornik \ Slovenia

"This is an invitation for you to become the explorer of the force of technology, to enter the realm where biological and non biological are no longer anything else but a type of material that technology as dynamic force deals with and manipulates through the hands of human beings.

By opening the mycophone, a biohacked music box, you can explore a new kind of biotech organism that makes sounds like many biological organisms do and if you pet it on its hairy mycelia fur it's voice changes, it could be said that it starts to purr. As any other biological being it needs maintenance to exist and care to live to its highest potential.

And as any other organism it has patterns, repetitive processes, that have to be met for it to exists and

to live. They are there to process the signal that has been put into the box with the energy from the windup key of the music box. These patterns are seen as visual, graphical patterns on the laminate that translates the signal and is heard as repetitive sound. The repetitions can be transformed by the biological part of the box, by the growth of mycelia as well as proximity or touch of a hand of the explorer, the carer of the mycophone."

Approaches to the workshop Interactivos?'12 Ljubljana: Obsolete Technologies of the Future by the advisors of the workshop: Luka Frelih, Ida Hirsenfelder, Chris Sugrue and Yago Torroja.

Approach by Chris Sugrue

"When considering the obsolete, I believe it is worthwhile to question how the latest technological advancements (which change at an almost incomprehensibly fast pace) fall short in some areas that previous ones might not have. An obsolete technology is not necessarily replaced with a better one. As well, many platforms that may be considered outdated or unfashionable in some parts of the world, may be important and thriving in others. Re-thinking, re-inventing or re-using the outdated may have relevancy outside of our own field of view. A project production workshop such as this has the potential to bring together many backgrounds and experience, offer unexpected ideas or alternatives and help us collectively reconsider the past and future. I believe a great asset of working in digital media is its flexibility to merge with other domains, traditions, crafts or philosophies and create new possibilities and works. Through hacking, experimenting with, and creating new uses of technology we create the opportunity to live in the future we want rather than that which is constructed for us. Can we re-invent the past to build our futures?" by Chris Sugrue.

Approach by Yago Torroja

"I look at my mobile, the one I've had for five years, turning it over in my hands. What's old about it? Yes, it's obviously beat up on the surface—you can hardly read the keys… (Remember those?... Keys?) But what's old about it? It's small, you can make calls on it, the battery lasts for four or five days… Why does it seem so old to us? Are we running away from our own ageing? Maybe we think that if things age faster, we'll live faster and wrinkle slower? We don't measure time in seconds or days or months anymore. We use changes now. "I met you seven mobiles ago. Remember? Almost three years ago!" This dynamic of change, of the new, of the essential, this buying novelty to buy

ourselves time, has become the leitmotif of most of our technology and economy. Make what's obsolete useless; make the everyday obsolete; make the new the everyday. Breaking down this unsustainable pattern is a matter of more than just reusing waste, more than using one hand to put together what we break with the other. It is not just a question of reusing, because reusing something means admitting it's no longer useful. Instead, we need to ask about the end of its usefulness: when does that time come? And propose other models with no place for the concept of waste...Where talking about what is obsolete is no longer common but rather something old-fashioned, out of date, obsolete... "I'm getting my new mobile today. Like the others I've had, it's made of germinable plastic. I'm looking at the one I've got in my hands now... I'm fond of it (remember?... it's been almost three years). I'd like to plant it. What will come up when I water it? I smile as I look around my terrace... the rose bush and bamboo look fantastic! They grew out of the other ones I planted." by Yago Torroja.

Approach by Ida Hir enfelder

"The collaborative prototyping workshop is one of those unique opportunities for people from different professions to come together and explore the dynamics between the fascination over technology and the disbelieve in the technology as a great contributor to the human civilisation and the development of human mind. The technology we are using is constantly subjected to being deemed as obsolete, henceforth creating a rather unhealthy condition from a psychoanalytical point of view; the discarded and disposed functions like the civilisation's suppressed memory of an experience that might have been pleasant or not, but is nevertheless rejected in the premises of the new discoveries. The old is ridiculed by the next generation as something childish and immature, while it is the very obsolete technology of the past that construct the ways we perceive our own world in the very moment. It is a result of an evolutionary processes that not so much invents the new, but perpetuates the same systems of hierarchy and the power dominated drive that is inherent in the current technology. It would perhaps prove helpful to view the technology not only as a product of physical laws, but inherently a cultural phenomenon. The way to disrupt the existing cultural codes of the technology is not only to give way to the playful and the innovative or to artistic, but also to do away with the utilitarian demand for its usefulness or functionality? The question of possible applications of the results of the prototypes is perhaps not the best one in the sense of cultural critique. The machines that are strictly set to serve a purpose inhibit the invention of alternative energy sources and hinder a more open vision of technology that is not just an accumulation of algorithms but an incredible series of coincidences. The question for experimentation is not only how to artistically beautify errors but to make them an essential part of the system. The purpose is not just to demystify the machines in the do-it-yourself collaborative process and to make a human mind at ease with the machines but also to construct the machines in order to constantly challenge and trigger ways of thinking. To envisage what is going to be the obsolete technology of the future, inevitably sets us on a different and unpredictable path." by Ida Hiršenfelder

PROGRAMME

Interactivos?'12 Ljubljana: Obsolete Technologies of the Future

September 5–15, 2012

COLLABORATIVE DEVELOPMENT OF PROTOTYPES
10 days of intense activities / workshop / presentations / exhibitions

Duration: **Every day from 10-8 pm**
Venue: **Ljudmila** – Ljubljana digital media lab, Rimska 8, Ljubljana, Slovenia

Opening hours of Ljudmila
10 am–8 pm, Monday–Saturday

Workshop hours
10 am–1.30 pm collaborative prototyping at Ljudmila
1.30 pm–3 pm break
3 pm–8 pm collaborative prototyping at Ljudmila

More: /15/
http://wiki.ljudmila.org/Obsolete_Technologies_of_the_Future

Wednesday, September 5, 2012

INTRO to Interactivos?'12 Ljubljana

Duration: 10 am–1 pm
Venue: **Ljudmila**

Welcoming and presentation of:

— **Organizations**
   Medialab-Prado – Monica Cachafeiro,
   Ljudmila – Robertina Šebjanič,
   SGMK – Urs Gaudenz and Patric Kaufmann

— **Workshop methodology**

— **Accompanied events**
   Tina Dolinšek, Ljudmila
   (short break)

— **Introduction of mentors**
   Chris Sugrue\USA,

Yago Torroja\Spain,
Luka Frelih\Slovenia
and Ida Hiršenfelder\Slovenia.

— ### SELECTED PROJECTS AND PROJECT LEADERS
Domače Volt Orkester, Matthew Gingold & Ben Olsen\Austria
Autonomous Interactive Radio, Reid Bingham & Sean McIntyre\USA
Ophiodea, Laura Gabriela Olalde Verdes\Argentina
TeleVotón: An automated voting machine, Yasmina Morán Conesa\Spain
Repurposing of abandoned printing devices, Gonzalo Ramírez Restucci\
Chile/Spain
Mycophone, Saša Spačal & Mirjan Švagelj & Anil Podgornik /Slovenia

SATURDAY, SEPTEMBER 15, 2012

PUBLIC PRESENTATION OF DEVELOPED PROTO-

TYPES AND CONCLUSION OF THE WORKSHOP

Duration: **4–8 pm**
Venue: **Ljudmila**

Project leaders and collaborators will present projects developed during the ten-day workshop.

ACCOMPANIED EVENTS

WEDNESDAY, SEPTEMBER 5, 2012

WELCOMING PARTY: MIDWEEK – DJ Borka
at 9 pm
Venue: **Bi-Ko-Fe**, Židovska steza 2

SATURDAY, SEPTEMBER 8, 2012

CLUB EVENT: OBSOLETE DJs AND VJs OF THE FU-

TURE
from 10 pm on
Venue: **Channel Zero**, AKC Metelkova mesto, Metelkova ulica 4

Interactivos?'12 Ljubljana: Obsolete Technologies of the Future side "party-on"

event and the celebration of the 19th anniversary of AKC Metelkova. Participants of the workshop will replace their hacking skills with DJing, VJing and various AV performances at Channel Zero .

http://metelkovamesto.org/

http://www.ch0.org/

Sunday, September 9, 2012

VITANJE EXCURSION
Visit to the Cultural Centre of European Space Technologies (KSEVT)
Guided Tour: Dragan Živadinov and Miha Turšič
Departure: **at 11am** from KUD France Prešeren Trnovo, Return: **at 7 pm**
Please apply at **delavnica@ljudmila.org**. The number of bus seats is limited.

The participants and other guests of Interactivos?'12 Ljubljana: Obsolete Technologies of the Future are cordially invited to join us on field trip to Vitanje, where on the 6th of September 2012 opened a unique Cultural Centre of European Space Technologies (KSEVT). The new center will be presented by Dragan Živadinov and Miha Turšič, the initiators and funders of KSEVT. They will present the project, its vision and the centre's permanent exhibition.
Ksevt's permanent project is 0.14::VERTIKALIZACIJA::MG /17/
The première of the fifty-year-long theatre performance NOORDUNG::1995–2045 took place in 1995. Once every ten years a reprise will be staged on the same day, at the same time and with the same performers. If one of the actors or actresses happens to die in the interval, they will be replaced on stage by an abstract entity, manipulated by a remote control and set up in the equatorial orbit as an art satellite in 2045. In 2011, Milena Grm, the first actress of this fifty year-long performance, passed away.

www.ksevt.eu

Tuesday, September 11, 20112

"LIGHTNING TALKS" – Short presentations
8–10 pm
Venue: **Sax Pub**, Eipprova ulica 7

Ideas – projects – concepts – lifestyles – reflections – obsolete technologies of the future. The participants of Interactivos?'12 Ljubljana and any other interested party who wish to share knowledge, experiences and views, will conduct a series of short 5 minutes presentations i.e. "lightning talks".

http://www.saxhostelljubljana.com/
Please apply at: **delavnica@ljudmila.org**.

Saturday, September 15, 2012

FAREWELL PARTY: INTERŠMANO
at 9 pm
Venue: **Cirkulacija 2/Rog Factory**, Trubarjeva 72

Joint forces of NanoŠmano – LifeSystem team and Interactivos?'12. Obsolete Technologies of the Future are inviting you to a farewell party at the end of temporary ad hoc laboratory and ten-day workshop.

http://hackteria.org/wiki/index.php/Nano%C5%A0mano_-_Life_ Season#Description

http://www.kapelica.org/

http://www.cirkulacija2.org/

SCHEDULE / URNIK / PROGRAMAR / ZEITPLAN
Interactivos?'12 Ljubljana: Obsolete Technologies of the Future

10 days of intense activities / workshop / presentations / exhibitions

Opening hours of Ljudmila
10 am–8 pm, Monday–Saturday

Workshop hours*
8 am–10 am breakfast for the participants of Interactivos at Ljudmila
10 am–1.30 pm collaborative prototyping at Ljudmila
1.30 pm–3 pm lunch at Meta in bazilika for the participants of Interactivos
3 pm–8 pm collaborative prototyping at Ljudmila

***have a look at the detailed schedule
September 10 and 11 there is a change of the lunch time!**

Day 1 \ Wednesday, September 5
Venue: **Ljudmila**

8 am–10 am
breakfast

10 am–1 pm
INTRO to Interactivos?'12 Ljubljana: Obsolete Technologies of the Future

— **Organisations**
  Medialab-Prado – Monica Cachafeiro,
  Ljudmila – Robertina Šebjanič,
  SGMK – Urs Gaudenz and Patric Kaufmann

— **Workshop methodology**

— **Accompanied events**
  Tina Dolinšek, Ljudmila
  (short break)

— **Introduction of mentors**
  Chris Sugrue \USA,
  Yago Torroja \Spain,
  Luka Frelih \Slovenia
  and Ida Hiršenfelder \Slovenia.

Selected projects and project leaders
Domače Volt Orkester, Matthew Gingold & Ben Olsen\Austria
Autonomous Interactive Radio, Reid Bingham & Sean McIntyre\USA   /19/
Ophiodea, Laura Gabriela Olalde Verdes\Argentina
TeleVotón: An automated voting machine, Yasmina Morán Conesa\Spain
Repurposing of abandoned printing devices, Gonzalo Ramírez Restucci\
Chile/Spain
Mycophone, Saša Spačal & Mirjan Švagelj & Anil Podgornik /Slovenia

1.30 pm–3 pm
lunch break

3 pm–8 pm
collaborative prototyping

Critical sessions I: will be conducted with mentors and teams. The first meeting
will explain the objectives and steps that teams should complete in the first week.
Each session will take around 30–45 minutes.

Critical sessions I: Suggested schedule for these meetings:
  3.15 pm Domače Volt Orkester, Matthew Gingold & Ben Olsen\ Austria
  4.15 pm Autonomous Interactive Radio, Reid Bingham, Sean McIntyre\USA
  5.15 pm Ophiodea, Laura Gabriela Olalde Verdes\Argentina
  6.15 pm TeleVotón: An automated voting machine, Yasmina Morán Conesa\
  Spain

at 9 pm
WELCOMING PARTY: MIDWEEK – DJ Borka
Venue: **Bi-Ko-Fe**, Židovska steza 2

Day 2 \ Thursday, September 6

8 am–10 am
breakfast

10 am–1.30 pm
collaborative prototyping

Critical sessions I:
    10.15 am Repurposing of abandoned printing devices, Gonzalo Ramírez Restucci\Chile/Spain
    11.15 pm Mycophone, Saša Spačal & Mirjan Švagelj & Anil Podgornik\Slovenia

1.30 pm–3 pm
lunch break

3 pm–8 pm
collaborative prototyping

Day 3 \ Friday, September 7

8 am–10 am
breakfastt

10 am–1.30 pm
collaborative prototyping

1.30 pm–3 pm
lunch break

3 pm–8 pm
collaborative prototyping

Day 4 \ Saturday, September 8

8 am–10 am
breakfast

10 am–1.30 pm
collaborative prototyping

1.30 pm–3 pm
lunch break

3 pm–8 pm
collaborative prototyping

from 10 pm on
CLUB EVENT: OBSOLETE DJs AND VJs OF THE FUTURE
Venue: **Channel Zero**, AKC Metelkova mesto, Metelkova ulica 4

http://metelkovamesto.org/

http://www.ch0.org/

Day 5 \ Sunday, September 9

VITANJE EXCURSION – Visit to the Cultural Centre of European
Space Technologies (KSEVT)
Guided Tour: Dragan Živadinov and Miha Turšič
Departure: at **11 am** from KUD France Prešeren Trnovo, Return: **at 7 pm**
Please apply at **delavnica@ljudmila.org**. The number of bus seats is limited.

http://www.culture.si/en/KSEVT

www.ksevt.eu

Day 6 \ Monday, September 10 /21/

8 am–10 am
breakfast

10 am–1.30 pm
collaborative prototyping

Critical sessions II: Presentation of the state of progress of the projects. Each
team demonstrates how they are working and if they are completing the expected
steps. Teams should raise any issues encountered request special assistance,
and analyze how to achieve their objectives.

3 pm–4.30 pm
lunch break

4.30 pm–8 pm
collaborative prototyping
Critical sessions III: Focus on actual outcomes of the prototypes. Conducted by
mentors and teams.

Day 7 \ Tuesday, September 11

8 am–10 am
breakfast

10 am–noon
collaborative prototyping

noon–1.30 pm
lunch break

1.30 pm–7 pm
collaborative prototyping

8–10 pm
"LIGHTNING TALKS" – Short presentations
Venue: **Sax Pub**, Eipprova ulica 7

http://www.saxhostelljubljana.com/
Please apply at: **delavnica@ljudmila.org.**

Day 8 \ Wednesday, September 12

8 am–10 am
breakfast

10 am–1.30 pm
collaborative prototyping

1.30 pm–3 pm
lunch break

3 pm–8 pm
collaborative prototyping

Day 9 \ Thursday, September 13

8 am–10 am
breakfast

10 am–1.30 pm
collaborative prototyping

1.30 pm–3 pm
lunch break

3 pm–8 pm
collaborative prototyping

Day 10 \ Friday, September 14

8 am–10 am
breakfast

10 am–1.30 pm
collaborative prototyping

1.30 pm–3 pm
lunch break

3 pm–8 pm
collaborative prototyping

Day 11 \ Saturday, September 15

8 am–10 am
breakfast

10 am–1.30 pm
collaborative prototyping

1.30 pm–3 pm   /23/
lunch break

4–8 pm
**PUBLIC PRESENTATION OF DEVELOPED PROTOTYPES AND CON-
CLUSION OF THE WORKSHOP**
Venue: **Ljudmila**

Project leaders and collaborators will present projects developed during the ten-
day workshop.

at 9 pm
FAREWELL PARTY: INTERŠMANO
Venue: **Cirkulacija 2/Rog Factory**, Trubarjeva 72

**http://hackteria.org/wiki/index.php/Nano%C5%A0mano_-_Life_
Season#Description
http://www.kapelica.org/
http://www.cirkulacija2.org/**

MAP OF LJUBLJANA & VENUES

Interactivos?'12 Ljubljana
Obsolete Technologies of the Future

VENUES' MAP

1. **Ljudmila**
   Rimska cesta 8

2. **Channel Zero/AKC Metelkova**
   Metelkova ulica 4

3. **BI-KO-FE**
   Židovska steza 2

4. **Sax Pub Hostel**
   Eipprova ulica 7

5. **KUD Hostel**
   Karunova ulica 14

6. **Restaurant Meta in bazilika**
   Rimska cesta 25a

7. **Cirkulacija 2/Tovarna Rog**
   Trubarjeva 72

8. **Main Train/Bus Station**
   Trg osvobodilne fronte 6

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1000 ft
200 m
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EVENTS AT THE TIME OF INTERACTIVOS?'12

You can check it at Culture.si:
http://www.culture.si/en/Festivals_in_Slovenia_2012

"Beautiful game"
Mestna galerija Ljubljana:
June 28– September 23. 2012
On the occasion of the European Football Championship, Mestna galerija Ljubljana (MGML) is curating an exhibition on the theme of football and art.
http://www.mgml.si/en/city-art-gallery/

"Opening of Nano Šmano"
Onkraj gradbišča
13 September at 8 pm
http://hackteria.org/wiki/index.php/Nano%C5%A0mano-Life_Season#Description
http://www.kapelica.org/

"ICMC – International Computer Music Conference"
venues: **all around the city**
9–14 September
http://www.icmc2012.si/

Festival EarZoom in ICMC
- International Computer Music Conference
Kino Šiška
9 September at 8.30 pm
www.irzu.org/files/ICMC2012_Proceedings.pdf
www.irzu.org/files/ICMC2012_DailySchedule.pdf

"Metelkova In Memoriam"
Opening of the photo exhibition Frenk Fidler:
Klub Tiffany, Klub Monokel, Klub SOT 24,5 – Metelkova mesto
6 September at 9 pm   /25/
Admision free
http://www.kulturnicenterq.org/

M'Art
Galerija Alkatraz
6–24 September 2012
Opening 6 September at 8 pm
Artists: Edvin Dobrilovič, Tina Drčar, Tomaž Furlan,
Damijan Kracina & Vladimir Leben, Miha Perne in Uroš Weinberger.

Exhibition Oscilacios / Echoes
Primož Kuret, Igor Likar, Janez Matičič, Boštjan Perovšek, Gregor Pirš, Milan
Stibilj, Marjan Šijanec, Igor Štuhec, Bor Turel
Galerija Škuc
7–23 September (Tuesday–Sunday, noon–8 pm). Admision free.
Opening 7 September at 8 pm
http://www.galerija.skuc-drustvo.si/

CHEM:SYS:REAKTOR
Aksioma projektni prostor, Komenskega 18
29–14 September
www.aksioma.org

Unleash & Collide:
SuperCollider IDE preview party
Kiberpipa
14 September at 7 pm
http://www.kiberpipa.org/en/event/unleash-collide-supercollider-ide-pre-view-party-1620/

Events on AKC Metelkova
http://www.metelkovamesto.org

For more look at:
http://www.visitljubljana.com/en/events

WHERE TO EAT

BREAKFAST & LUNCH

Interactivos? crew has organized free meals for the participants of Interactivos? from September 5 –15. We will provide two meals a day – breakfast and lunch. Breakfast will be held at Ljudmila every day (except Sunday). Lunch is organised in a pleasant and quality restaurant Meta in bazilika. **http://metainbazilika.si**

Breakfasts are to be served at Ljudmila every morning from 8 am–10 am. Lunch is to be available at the close-by Italian restaurant Meta in bazilika around the corner of Ljudmila from 1.30 pm–3 pm for all participants.

DINNER

Here you can find a number of restaurants and places to go eat, drink coffee etc.

http://www.inyourpocket.com/slovenia/ljubljana/Restaurants-and-Cafes

http://www.ljubljana-life.com/eat/restaurants.php

http://www.ljubljana.info/restaurants/
Our recommendation of restaurants, bistros, cafes in the vicinity of Ljudmila.

RESTAURANTS & BISTROS

Thai Inn Pub
With its tuk tuk at the entrance, the jungle wallpaper all over the place, adornments and pictures, you'll get a good taste of what visiting a real restaurant is like in Thai-

land. Thai Inn Pub foregoes the ultra elegant, westernised take on their food. The result is Thai food that tastes like Thai food. If you're concerned about having food that'll leave your mouth on fire, you need not worry. The menu clearly explains to what degree the dish will make you beg for water, from nothing to really, really hot. It's very refreshing to see an ethnic restaurant that doesn't dumb down its offering for Westerners, but instead gives you the real thing. (All mains €6.90). Open 11 am–10pm, Sat noon–10pm. Closed Sun. Pub open 8 am–midnight, Sat 10 am–midnight.
Address: Rimska 17 Phone: (+386) 1 421 03 77

Gostilna dela
Gostilna Dela is a new restaurant just a stones throw away from the open market and from the Ljubljana Castle elevator. It is the creation of the JobFactory project whereby youth that are threatened with long-term unemployment and social exclusion are helped to enter the world of work. An important goal of the project is developing a model for social integration for vulnerable groups of young people through training and employment. Gostilna Dela employs youth between 17 and 25 years of age and they offer meals and snacks in a pleasant environment at affordable prices. The cousine is prepared in an open kitchen and is consistent with the principles of a healthy diet.
Open untill 6 pm
Address: Poljanska 7, 1000 Ljubljana
Phone: +386 (0)51 491 491

Pizzeria Foculus

Founded in 1996, Pizzeria Foculus soon became one of Ljubljana's most popular places, and not without good reason. Not only do they serve pizzas made the traditional way, which gives them that delicious crust, the place itself is something worth seeing also. Foculus is located only steps from the old town walkway by the river, close to architect Plečnik's most famous work The National University Library. Pizzeria´s newly remodelled historical interior includes an original pillar designed by grand master Plečnik himself and an inspiring hand painted arched ceiling, supported by historical pillars.
Open every day from 10 am–12 pm, and from noon–midnight on Saturdays, Sundays and holidays.
Address: Gregorciceva 3, Ljubljana
Tel: +386 (0)1 251 56 43
e-mail: foculus@siol.net

Bistro Pomf
A family-run bistro (okrepcevalnica) welcomes you for traditional Slovenian food, including thick soups and grilled meats a la carte. This is a recommended place to have your breakfast. They serve very good Italian espresso coffee and croissants. As an appetizer we recommend you order a bruschetta, a toast based pizza. Sitting on the terrace you will enjoy watching people passing by on the charming Trubarjeva street. The special menu is available everyday, and can be received daily by a mailing list.
The restaurant is open every day from 10 am–10 pm
Address: Trubarjeva 40
Phone: 041/868 582

Falafel
Proclaimed itself the first Arabian fast food venue in Slovenia and try their falafel because it's the best. Order maxi size coz the small one will disappear quickly. Ask for special sauces etc. Open daily from 10:00 to midnight.
Address: Trubarjeva 40
Advance orders: +386 (0)41 640166

Le Petit Cafe
Is situated near Krizanke monastery, or (if you prefer) near the The National University Library, the cafe is an ideal choice for breakfast. They offer a breakfast menu and fresh juice and also good food for lunch and dinner.
Address: Trg francoske revolucije 4

Harambaša
A Bosnian restaurant situated just off the tourist track, with excellent Sarajevo cuisine at very affordable prices. The menu is very simple – you can choose from 5 or 10 cevapi pieces, and pleskavica (a Balkan hamburger-like meat). The best choice restaurant for a "cevapi and beer" evening! Open until 10 pm.
Address: Vrtna ulica 8, Ljubljana
Phone: +386 (0)41 843106

Gostilnica Rimska XXI
With its low arched ceilings, moody red walls and touch of rustic furnishings this homey low-key restaurant has already become one of our favourite places to come when we're in the mood for traditional Slovene cuisine it a great setting. Fresh homemade dishes of all sorts are are the speciality here, including deer, fish and wood-baked meats, and the menu changes daily depending on the season and whims of the head chef. Even the beer, juice and brandy is homemade, and there's also an excellent selection of Slovenian wines.
Open 11am–11pm, Sat noon-5 pm. Closed Sun.
Address: Rimska 21
Phone:(+386) 1 256 56 54
http://www.r-g.si/xxi
gostilnica.xxi@gmail.com

CAFFE'S & BARS

Bi-Ko-Fe
Situated on a sloping cobbled lane in Ljubljana's old town, BiKoFe is something of a Mecca for hipsters, students, artists, designers, musicians and the like. The winner of an award for design, the interior was entirely renovated using recycled and refurbished furniture and materials, and we can honestly say that it's one of the cosiest places to relax with a drink (or a coffee) in the city. Live DJs keep the place bumping on Wednesday, Friday and Saturday nights, and from time to time musical acts (some quite well-known) perform cover-free shows for the cool crowd. They also now offer light snacks, including some of the best sandwiches in LJ. Wireless internet is available! Very recommended!
Open till 1 am.
Address: Zidovska steza 2, 1000 Ljubljana
Phone: +386 1 425 93 93

SAX PUB

This is what happens when an unruly youth inherits his great aunt's country cottage. This now legendary, graffiti-spattered nightspot wouldn't last a week in New Orleans, but in Ljubljana there's nothing of its kind to beat it. A fairly small bar features photographs of jazz greats on the walls and a clientele of people who appreciate what Charles Mingus once referred to as black classical music. Most of the time the music is pre-recorded, but they do have the occasional live band in from time to time. Check their Facebook page to see what's on.Very recommended!
Open 09:00-01:00, Sun 09:00-22:00.
Address: Eipprova 7
Phone: (+386) (0)51 804 450
http://www.saxhostelljubljana.com

Žmauc

A good location, well chosen music and a bohemian atmosphere make this place special and it is very popular among arty types and students. Parties take place in the evenings, while during the day it serves as a café and a restaurant. Although this L-shaped bar seems relatively small, it is constantly full, although despite that it doesn't feel crowded since smokers occupy the outside part.
Open until 1 am. Very recommended!
Address: Rimska 21, 1000 Ljubljana
Phone: +386 1 25 10 324

/29/

TRANSPORTATION
How to get/move Around

By foot
Ljubljana is a user-friendly city. The centre is small enough to cover by foot.

By bicycle
There is a system called "Bicikelj" where you can rent bikes for a week just for 1€. It has 300 bikes on 30 stations around the inner city part and you can subscribe with a credit card online. For more information, visit: http://en.bicikelj.si/

By city bus
The city's transportation authority LPP operates 22 bus lines. To ride the buses, you have to first purchase an Urbana card. These can be bought at self-service stations ("Urbanomat") found at the larger bus stops across the city, LPP sales sites, Tourist Information Centers and newspaper agents for €2 and need to be pre-loaded with an amount ranging from €1 to €50. Upon entering the bus by the front door, you need to position the card next to the reader to pay for the route.
http://www.jhl.si/en/lpp

By taxi

While taxis ordered by phone are cheap (approximately €5 - €10), those waiting on the street will usually charge through the roof, and you can end up paying €25 for a short ride! Unless you're in a hurry (as they normaly need around 7 minutes to pick you up), always order a taxi by phone! Taxi Laguna (tel. 080 11 17), Taxi Metro (tel. 080 11 90) and Intertours Taxi (tel: 031 311 311) are considered the cheapest taxi companies. These are free numbers (all numbers starting with 080 are free in Slovenia), so you can use a phone booth to make a free call.

PARTICIPANTS
WHO IS WHO

Mentors
Chris Sugrue (artist, programmer)
Luka Frelih (director of Ljudmila, artist, programmer)
Yago Torroja (hardware, electronics)
Ida Hiršenfelder (art critic, art consultant)

Project leaders
Matthew Gingold & Ben Olsen (**Domače Volt Orkester**)
Reid Bingham & Sean McIntyre (**Autonomous Interactive Radio**)
Laura Gabriela Olalde Verdes (**Ophiodea**)
Yasmina Morán Conesa (**TeleVotón: An automated voting machine**)
Gonzalo Ramírez Restucci (**Repurposing of abandoned printing devices**)
Saša Spačal & Mirjan Švagelj & Anil Podgornik (**Mycophone**)

Collaborators
Pepa Ivanova
Hector Zarate Rea
Kevin Ovita Teddyteddy
Hamilton Mestizo
Kruno Jošt
Maja Kalogera
Adnan Hadzi
Ana Gorría Ferrín
Ivan Arroyo Gonzalez
Andrea Baima
James Stevens
Juan Duarte
Boem Alberto
Marcos Quintana
Oksana Chepelyk
Helena Božič
Tomislav Butkovic
Matic Urbanija
Dan Adlešič
Pije – Dragan Pijetlovic
Mitja Koštomaj
Hana Kovačič

SPONSORS

Interactivos?'12 Ljubljana: Obsolete Technologies of the Future

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More about Studiolab project at:
http://studiolabproject.eu/event/interactivos-12-ljubljana-future-obsolete-technologies

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Sax Pub Hostel, Radio Študent: R A D A R – Open Radio Investigative Platform, Channel Zero AKC Metelkova, Bi-Ko-Fe, META IN BAZILIKA, Printec, KUD France Prešeren Trnovo Hostel, Circulacija 2.

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Museum and galleries of Ljubljana (MGML) – City Gallery, Cyberpipe, RadioCona – Temporary Project Radio For Contemporary Arts, Dr. Marc Dusseiller.

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Complies with the limits for a Class B computing
device pursuant to Subpart J of Part 15 of FCC Rules.

LJUDMILA
http://www.ljudmila.org

SMAS Swiss Mechatronic Art Society
SSAM Société Suisse d'Art Méchatronique
SGMK Schweizerische Gesellschaft für Mechatronische Kunst
www.mechatronicart.ch

BI·KO·FE

¡MADRID! MEDIALAB PRADO

7 CAPACITIES

kiberpipa

studiolab

PrinTec

REPUBLIC OF SLOVENIA
MINISTRY OF EDUCATION,
SCIENCE, CULTURE AND SPORT

SAX HOSTEL
SAX PUB
Eipprova 7
LJUBLJANA

EMBAJADA
DE ESPAÑA
EN LIUBLIANA

K·U·D
FRANCE PREŠEREN

META IN BAZILIKA

swiss arts council
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Mestna občina
Ljubljana