

NEWSLETTER WINTER SEMESTER

21th December 2022

DEAR RTG COLLABORATORS

It's almost time to wrap up 2022 and enjoy restful snowy days!

These have been busy months for everyone, and we are happy to share what everyone has been up to.

In the new year we are looking forward to more doctoral forum events with guest lecturers and exchange sessions.

In the meantime,

**we wish you a lovely time with
your beloved ones and a good
start of the year.**

Warm Regards,

Your Doctoral Forum representatives
Elizaveta Fakirova & Julia Micklewright

SUMMARY

- 02 Coordinator
- 03 Workshop
- 04 General
- 05 Cluster RC1
- 08 Cluster RC2
- 09 Cluster RC3
- 10 Diversity circle

COORDINATOR

„WHAT A YEAR!“

After a very successful project launch and kick-off event in June and the PhD thesis presentations in September, we met on December 5 and 6 for a **workshop on system modeling**.

Under the direction of **Prof. Dr. Gebhard Wulfhorst** and **Prof. Dr. Hans Pretzsch**, we were all given important insights into the world of theoretical modeling.

Together we defined the goals of an overarching system model, determined the input and target variables and designed the first causal loop diagrams.

In the end, the system model should unite all subprojects and thus disciplines of the RTG to draw a holistic picture of an urban neighborhood with green, blue and gray infrastructures. There is still a lot to do, to discuss the indicators and impacts of all variables on each other, to bring together the different time and space scales of all subprojects, etc. But we are working on it, and our **new post-doc Mohammad** will do his best (possibly with the help of a systems modeler) to bring all this together.

Thank you for an exciting year with so many great moments and inspirations. I wish you a blessed Christmas time and a happy new year! I look forward to seeing you all healthy again in the new year.

Warmest regards,

Astrid & the RTG management



WORKSHOP SYSTEM THINKING

5-6 December 2022

FOLLOW UP – NEXT STEPS

Vision	To develop a common vision about RTG work and visualise it. The development of the Vision is in several iterations and will be updated over the course of several years. Important to define if the Vision should be in a form of text fragments or drawing. (ex. Green City of the Future project vision. https://www3.ls.tum.de/lapl/gruene-stadt-der-zukunft/publikationen/)
Scale & Time	To fix the scale, planning unit and time boundaries at which all PhD Candidates will continue to work under the model. Clarify the boundaries of the model.
Timeline	To understand clearly the important milestones and align them with the timeline in order to be able to reach the goals in time.
Variables	Need to clearly describe every variable to avoid misunderstanding. Need to rapidly define a set of open space types and urban morphologies.
Causal loop diagram	Start to think about the positive / negative feedback loops between the variables.
Urban Labs	The ULs could be a place to location to test the model .
Product	To define the format of the final outcome of the transdisciplinary work. What will be the end product - a book, shared papers, ready to use tool etc. Consider how we can integrate existing models to the overall model.
City of Munich	To arrange the meeting with the representatives of the City of Munich . That will help for the defining RTG vision, receive the feedback, make the work more visible and to engage the city in the early stages. In case the final product will be a ready to use tool - we should explain the importance thereof for those who are going to be a user from the beginning.
Journal Club	The purpose of the Journal Club is to support the development of the causal loop diagram , gain common knowledge about each variable.
Visualisation	Include the external expert who will build the final model. Think of the way we will represent the system model in order to share it with others.
Homework	To fill the impact matrix table with variables until 21 January 2023 . To add the column to the table for the description of these measurables. Describe very specifically the variables. Explain why the decision about grades (0-3) was made. Excel table you can find at Sync and share: RTG UGI > Publications & Conference Participations > Meetings & Events > 2022.5-6.12_RTG_System Thinking Workshop Send over the filled table to Mohammad: ma.rahman@tum.de

DOCTORAL FORUM GENERAL

LOGO

The logo has been voted on and is now available to use in your presentations. You will find the files in the LRZ folder.



Miniature version for footers and other



SOFTWARE / PLATFORMS

(By Andrew Fairbairn)

Wiki	It only has some basic information on it now, but we can continue to fill it out. Here is the link
Website	We have a new TUM website for the project. This is still in the works and can be found here
Data server	Put datasets. Once that is clarified we will create a Wiki page or similar that will link to these data and have some metadata to help describe it.
Twitter	We are good to start Twitter and LinkedIn pages. Zbigniew will be sending something around soon regarding Twitter.
Zotero	Shared library created with files for each publication.
Researchgate	Project created

CLUSTER RC1

Andrew Fairbain, Mahtab Baghair Poor, Elizaveta Fakirova, Julia Micklewright, Ishika Alim, Hadi Yazdi

Sub-projects advancement

Meetings within the research clusters, agreements, future steps

Urban Lab

Updates on selection and agreements on Urban Lab

Urban Labs workshop arranged by Zbigniew

Andrew Fairbairn: Beginning in spring I will be developing a sampling design to test the effect of different city features throughout Munich (50+ sites).

Hadi Yazdi: several streets and squares are selected in Munich for scanning and preparing a georeference pointcloud in January. more than 1000 trees samples in 7 species will be measured.

Liza Fakirova: Collection of the repository of UGI projects around Munich on different levels

Mahtab Baghair Poor: A general comfort perception research in Ber am Laim and then I will focus on user groups throughout Munich and explore comfort components in their daily path wherever it is (people-based urban planning/research)

Visited Conferences

Conferences that were visited as a listener

Liza Fakirova: URBIO 2022 (28-30 November) - "Integrating Biodiversity in Urban Planning and Design Processes", Leipzig

Julia Micklewright: ISOCARP World Planing conference (03-06 Oct.) "From Wealthy to Healthy cities", I also became a member of ISOCARP

Gave a presentation

Presentation given by PhD candidate at conferences

Hadi Yazdi: Presented "The Methods of Deep Learning and Big Data Analysis in Promoting Sustainable Architecture" at sbe22 Berlin D-A-CH conference, 20/09/2022 - 23/09/2022 Berlin.

Andrew Fairbairn: Presented a talk on "The effects of design features on biodiversity in urban squares" at the SFE2-GFÖ-EEF conference in Metz, France.

Liza Fakirova: Presented in a online webinar "Urban green infrastructure: How nature can save cities" organised by IE University School of architecture and design and All Things Urban platform (150 attendees)

Julia Micklewright: Organised Symposium and Exhibition "Zwischenstand der Zwischenstadt", a cross-university project exploring peri-urban spaces. [link](#)

Gave a presentation

*Presentation given by PhD
candidate at conferences*

Papers under work

*Start date, estimated date of
submission, in collaboration
with, for what journal*

Ishika Alim: Facilitated the first 'Diversity Circle' workshops for the RTG

Mahtab Baghaie Poor:

1. Conducted women cycling training workshop in November
2. Two rounds of Walking awareness workshop as a part of newly founded Active Mobility course (Let me know please if you need more input here)
3. The Active Mobility course is a side-project of me in an attempt to test run the UX mapping methods in Munich. The first round of students' presentations using the methods for data collection in Munich have been done last week.

Andrew Fairbairn:

1. Different components of urban green drive biodiversity in cities. Submitting to Nature, spring 2023.
2. Acoustic monitoring and automatic species classification for long-term, large-scale bird surveys. Submitting to unknown, Spring 2023.

Hadi Yazdi: A Target-driven Tree Planting and Maintenance approach for next Generation Urban Green Infrastructure. Submitted to Journal of digital landscape architecture, Spring 2023.

Liza Fakirova:

1. Published: Climate Change Adaption between Governance and Government—Collaborative Arrangements in the City of Munich by Simone Linke, Sabrina Erlwein, Martina van Lierop, Elizaveta Fakirova, Stephan Pauleit and Werner Lang
<https://doi.org/10.3390/land11101818>
2. Doing the revision of a paper about achievement sustainable urban green-spaces (Bangladesh) for PLOS Sustainability and Transformation Journal
4. Contributed to the paper "Cosmopolitan conservation: the multi-scalar contributions of urban green infrastructure to biodiversity protection" (Grabowski et al.) for Biodiversity and Conservation, mid 2023 - in review process Published: ISOCARP. Conference Paper "Strategies and tools for just collaborative planning of nature-based solutions". Martina van Lierop, Elizaveta Fakirova

Julia Micklewright:

1. Contribution: "Cosmopolitan conservation: the multi-scalar contributions of urban green infrastructure to biodiversity protection" (Grabowski et al.) for Biodiversity and Conservation, mid 2023 - in review process
2. Published: Klawiter, Sebastian; Micklewright, Julia; Michaeli, Mark: Dazwischen, zwischen nichts und Zwischenstand. Zwischenstand der Zwischenstadt 1 (1), 2022, S. 20 – 26

Ishika Alim:

1. Gendered spaces: access to green spaces in the global south, a case of Dhaka, Delhi and Cairo. (article incollaboration with external PhD candidate) State: conception phase

Papers under work

Start date, estimated date of submission, in collaboration with, for what journal

Current challenges

Difficulties faced in the research

Needs & Possible solutions

What kind of support is needed to overcome eventual challenges

Additional ideas

Suggestions for improving collaboration

Mahtab BaghaiePoor:

1. "Effects of ICT on neighborhood walkability" is now under review at the journal of Transport Geography- A research of me before starting PhD
2. Contributing to the paper "Walk a mile in someone else's shoes: Development of perceived walking accessibility measures for different user groups"- Ulrike Jehle, et al- To be submitted by the end of the year.
3. Comfort in Active Mobility: a general perspective- as the first piece of my thesis and a collaboration with MGeM project (Sindi Haxhija) at our chair- Phase: Designing the survey

Liza Fakirova: Identification and collection of UGI projects in Munich

Ishika Alim:

1. Mapout the unused/underused green spaces in Munich City,
2. Find a mentor

Mahtab BaghaiePoor: Finding the best way to call for participants in the survey- Language barrier

Andrew Fairbairn: Looking for bachelors and or masters students for 3+ projects in biodiversity monitoring and bioacoustics in Munich. Contact me for advertisements.

Liza Fakirova: Looking for bachelor or Master degree student for 3+ months to become an intern in urban planning department and support the collection of UGI projects. Need to know German language and GIS.

Julia Micklewright: Need to define open space and urban morphology types with peers of the RTG for system mapping

Mahtab BaghaiePoor: Question: The internship situation- Are 21 days enough? Do we need German knowledge?

Liza Fakirova:

1. Would be nice to organise some 1 or 2 days trip together. Exkursion or workshop next year
2. To make the regular meetings (1 / three weeks) together with all the clusters for further development of the system thinking knowledge and discussions

Julia Micklewright: Looking forward to more doctoral forum meetings to learn more about each others discipline and common events.

Mahtab BaghaiePoor: Potential speaker: Bahar Gedikli, Ph.D. (<https://www.arc.ed.tum.de/en/ud/professur/akademische-gaeste/bahar-gedikli/>) - A new professor at the professorship of Urban Design at TUM. She is focused on Urban Green Infrastructure. I have participated in one presentation in which she talked about different aspects of UGI in urban planning and design; I am also in touch with her. We could invite her for a talk if there is interest within RTG.

CLUSTER RC2

Farzan Banihashemi, Roland Reitberger, Nayanesh Pattnaik, Martin Honold / Leila Parhizgar, Emmanuel Adeleke

Sub-projects advancement

Meetings within the research clusters, agreements, future steps

Last Cluster meeting took place in November with further discussion on Urban Labs. A cluster meeting with Dr. Chao Ren, who specializes in applied climatology and climate design in Hong Kong, was conducted to talk about air flow modeling. Additionally, the potential for a integrated lit review on how SUDS might affect UGI performance from the perspectives of trees and microclimate was also explored.

New team member Leila Parhizgar will replace Martin Honold for SP8. Welcome!

Nayanesh: Field work and measurements for this year campaign was finished in September.

Roland: Methodology for evaluating Trade-Offs on neighborhood level developed, currently working on implementation

Nayanesh: Data paper with people from Chair of Forest Yield.

Roland: Collaboration with University of Applied Sciences regarding multi-objective optimization (Prof. Herbert Palm as 2nd supervisor in PhD)

Nayanesh: Geo For Good Summit 22, Sustaining Cities Naturally (EU Horizon project conference)

Roland: PLEA2022 in Santiago de Chile

Roland: SBE2023 Conference (Synergies/Trade-Offs Buildings-Trees); submitted November 2022

Nayanesh: Start to analyse the data collected this summer and writing the first paper

Nayanesh: Planning ahead for next Summer's field work, I will be on the lookout for a HiWi to assist me during the measurements. I will soon send out a flyer, so request you all to circulate it.

Regular meetings between the whole group of PhDs, especially after witnessing the complexity of the Systems Model that we need to build. This would help us to discuss, deliberate, decide, define and finetune the components of the Systems model that was talked about during the modelling workshop

External collaboration advancement

With researchers outside the RTG program

Conferences

Conferences that were visited as a listener

Presentations

Presentation given by PhD candidate at conferences

Papers under work

Start date, estimated date of submission,

Current challenges

Difficulties faced in the research

Needs & Possible solutions

What kind of support is needed to overcome eventual challenges

Additional ideas

Suggestions for improving collaboration

CLUSTER RC3

Natalie Pérez-Curtidor, Lauren Porter, Swanandee Nulkar, Nadja Berger

Sub-projects advancement

*Meetings within the research
clusters, agreements, future
steps*

In December C3 primarily worked on their project. Swanandee (SP12) and Nadja (SP13) terminated their first experiment and will continue post processing of their samples to gain better insight of the system. Lauren (SP11) characterized potential substrate combinations and plans to start their first microcosm incubation experiment in January.

DIVERSITY CIRCLE

Diversity circle (DC) is sincerely working towards the goal of creating a safe and inclusive environment for all. From the DC survey, it was underlined that many of the RTG members did not know the existing services provided by TUM and which department to contact regarding communicating their needs and problems. Therefore, we compiled the most important services provided by TUM to make life a little bit easier for all.

WHERE TO FIND HELP AT TUM

TUM Compliance Office and OMBUD

- In case of suspicion of a violation of applicable standards and regulations all members can contact for support
- Protection of the person making the complaint
- Thorough examination by ombudspersons of any scientific misconduct
- The Ombudsperson's office is a neutral and independent office aimed to managing conflicts and resolving disputes arising in Academia. The Ombuds is available to discuss issues of concern, including interpersonal conflict or misunderstandings and academic or administrative concerns.
- TUM Ombudsperson - [Prof.Dr. Kristina Reiss](#)
- Resolve conflicts relating to academic freedom and freedom of conscience
-
- Enforce real equality of women and men at TUM
- Support employees in the scientific research and management field

Gender Equality Office

Staff Unit Diversity & Equal Opportunities

- Promotes culture of appreciation, openness and diversity
- Sets up the diversity monitoring system
- Advices for TUM members on a wide range of diversity issue
- Provides family services
- Provides counselling and support
- Provides support for 'specially-able and chronic illness'
- [Dipl. Psych. Claus Hertl](#) and [Manuel Rühl](#) provide psychological counselling for TUM employees with special needs.
- For urgent psychological help, turn to the psychiatric walk-in clinic of the Klinikum Rechts der Isar

TUM Living

Provides a platform with the list of real estate buildings

TUM Global Alumni Office

- International exchange opportunities
- Welcome services for new students/employees in Munich

DIVERSITY CIRCLE

DC WORKSHOP HELD ON THE 06.12.22

We appreciate everyone who participated in the session at the workshop and the initial survey last week. Both these activities have provided us an invaluable understanding of the social dynamics and personal values that exist within our group, as well as soliciting a group wide input which will be used to inform future DC activities. The survey is still ongoing, so if you haven't filled it out yet, we'd highly encourage you to do so. Make your voice heard!

WHAT WAITS AHEAD?

Future workshops:

Based on the feedback from last week's workshop and survey, please select (from the following options) which workshop you would like to see us organise - <https://forms.gle/bJ8ufavygvcQyM5w9>

To make this happen, we will coordinate with the Diversity office at TUM. Tentatively, this workshop will take place either end of January or early February 2023.

Mission statement:

Thanks to all the participants for giving us feedback. We are happy to see how Diversity Circle is slowly growing and evolving with everyone's participation. Based on the suggestions from the RTG participants, we have prepared a draft mission statement. You can access it here -

<https://syncandshare.lrz.de/getlink/fiSA9haUkD44gXSQsX4Wj5/Mission%20Statement%20for%20Feedback.docx>

We ask you to review, make any edits/comments, or commit to the statement.

Catch-up meeting:

Finally, for all the Doctoral candidates of the RTG, Monika will conduct a round of "touch-base"/ catch-up meetings, as a follow up from our first interviews with her from June. It's one-on-one time dedicated to sharing feedback, thoughts, ideas, challenges and updates. Sign up for your slot here -

https://syncandshare.lrz.de/getlink/fiEyPZqFMPGLMKCKAFeyoZ/Update_Interviews_202302.xlsx

**„WHAT LIES AHEAD? REIMAGINING
THE WORLD. ONLY THAT!“**

- Arundhati Roy.



Future workshops



Mission Statement



Catch-up meeting



See you next year!

