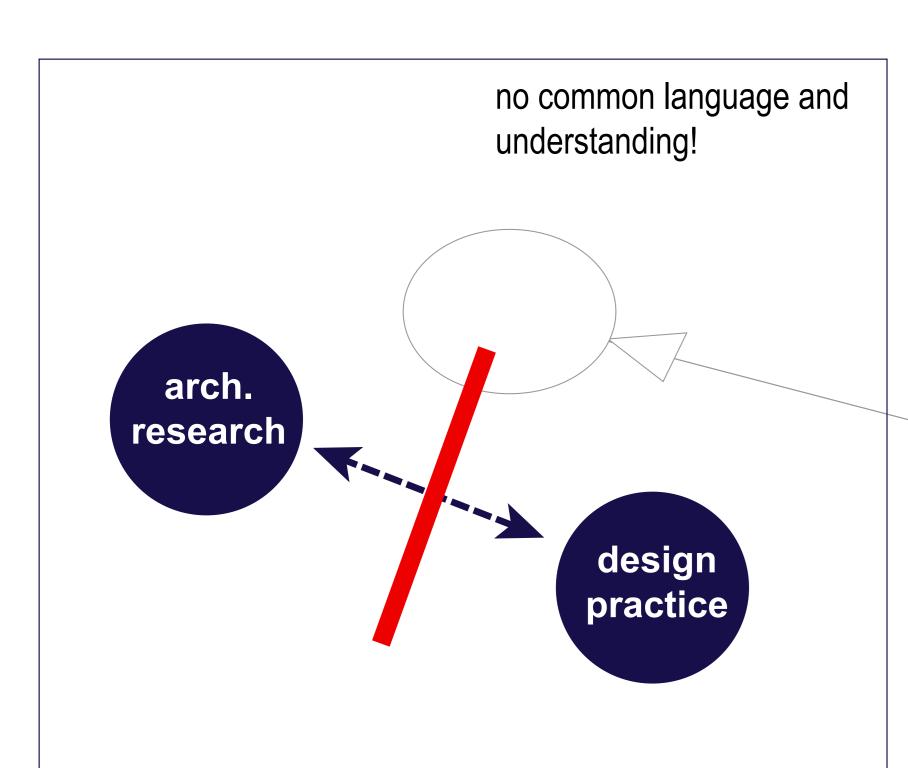
# EFFECTIVE WORKPLACES

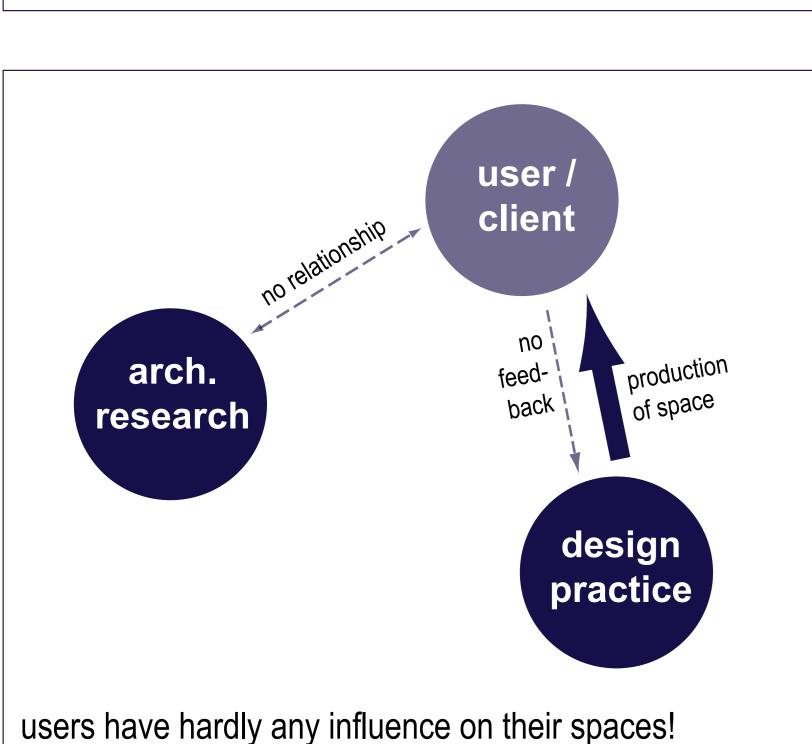
# Bridging the Gap between Architectural Research and Design Practice

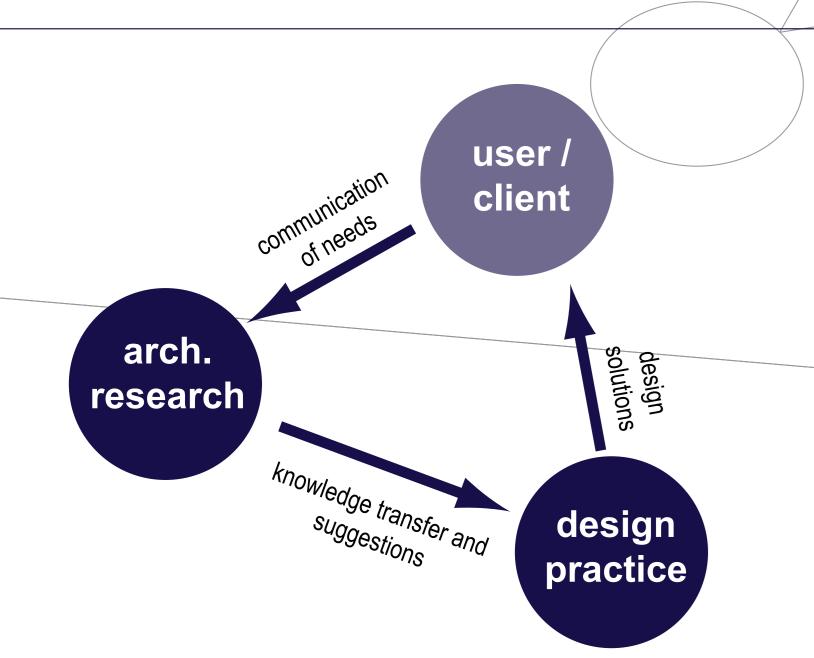
Kerstin Sailer<sup>1,2</sup>, Andrew Budgen<sup>2</sup>, Nathan Lonsdale<sup>2</sup>, Alasdair Turner<sup>1</sup>, Alan Penn<sup>1</sup>

Architectural researchers and design practitioners mostly segregate in distinct communities with hardly any overlap, collaboration or exchange of ideas. This gap between research and practice leads to a wide-spread ignorance and inability to make practical use of evidence produced by research, resulting too often in poor designs and a self-absorbed research that cannot make a difference to peoples' everyday lives and spatial experience.

In order to bridge the gap between architectural research and design practice, UCL's Bartlett School of Graduate Studies and Spacelab Ltd. have committed themselves to a Knowledge Transfer Partnership on Effective Workplaces. Ideas and concepts on how to change architectural business to combine research and practice will be presented as well as the first analytical results from this newly started venture.







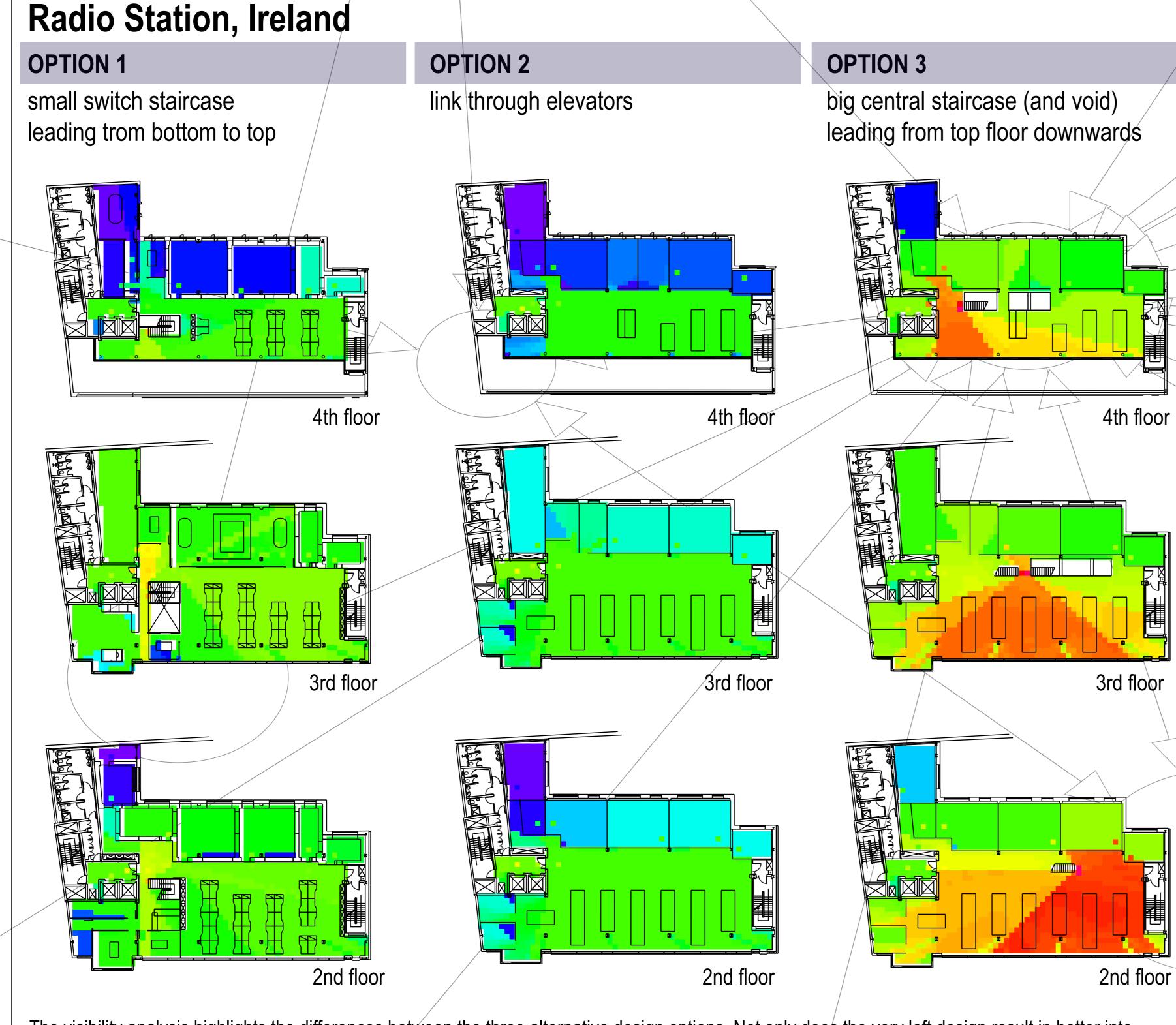
design alliance for well-used spaces

### The Problem

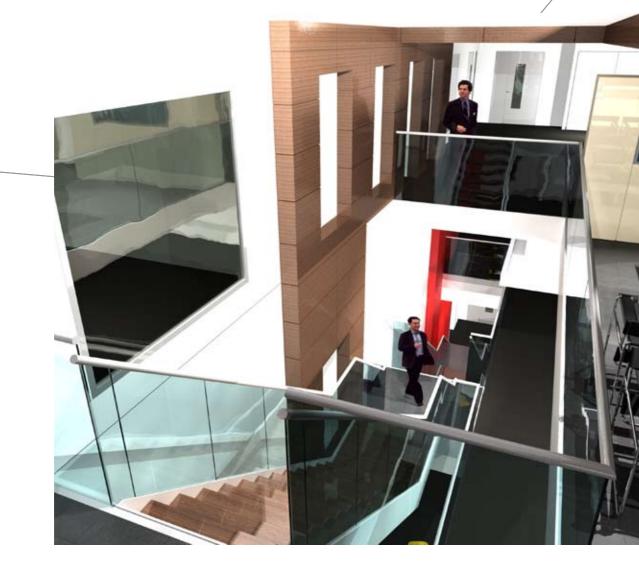
- Considerable gap between those who design and produce built form on the one hand (like architectural practices) and those that research the spatial and social effects of built form on the other (like the Space Syntax community)
- Architecture industry is too little process and too much project
- Practitioners produce built environments based on intuition or their experiences but hardly engage with the users
- Feedback by users never happens or is not constructive at all
- Architectural research has no relationship with users or clients

whatsoever, thus cannot contribute with its knowledge

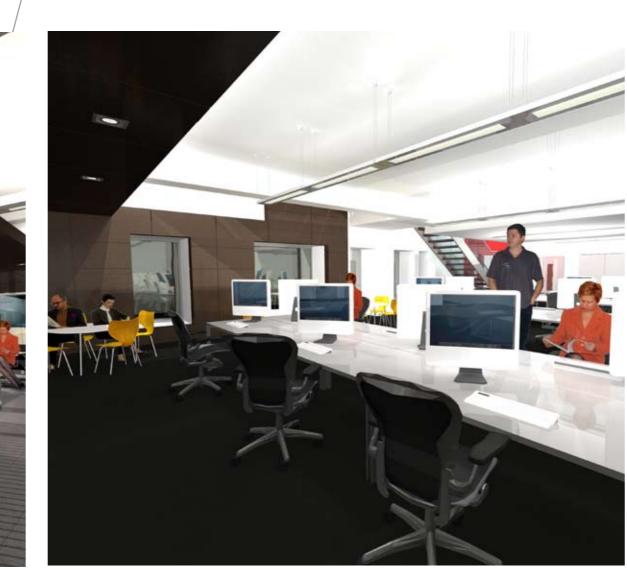
 Need to integrate all views to design for well-used and efficient workspaces beyond a genius-architect's intuition



The visibility analysis highlights the differences between the three alternative design options. Not only does the very left design result in better integrated spaces throughout the building, it also produces a wide range of integrated and segregated desk locations on all floors that can be used to allocate a qualitative variety of spaces to the different teams. This was the solution the client opted for finally (after seeing these images!)







# Space Syntax as tool to inform the design process

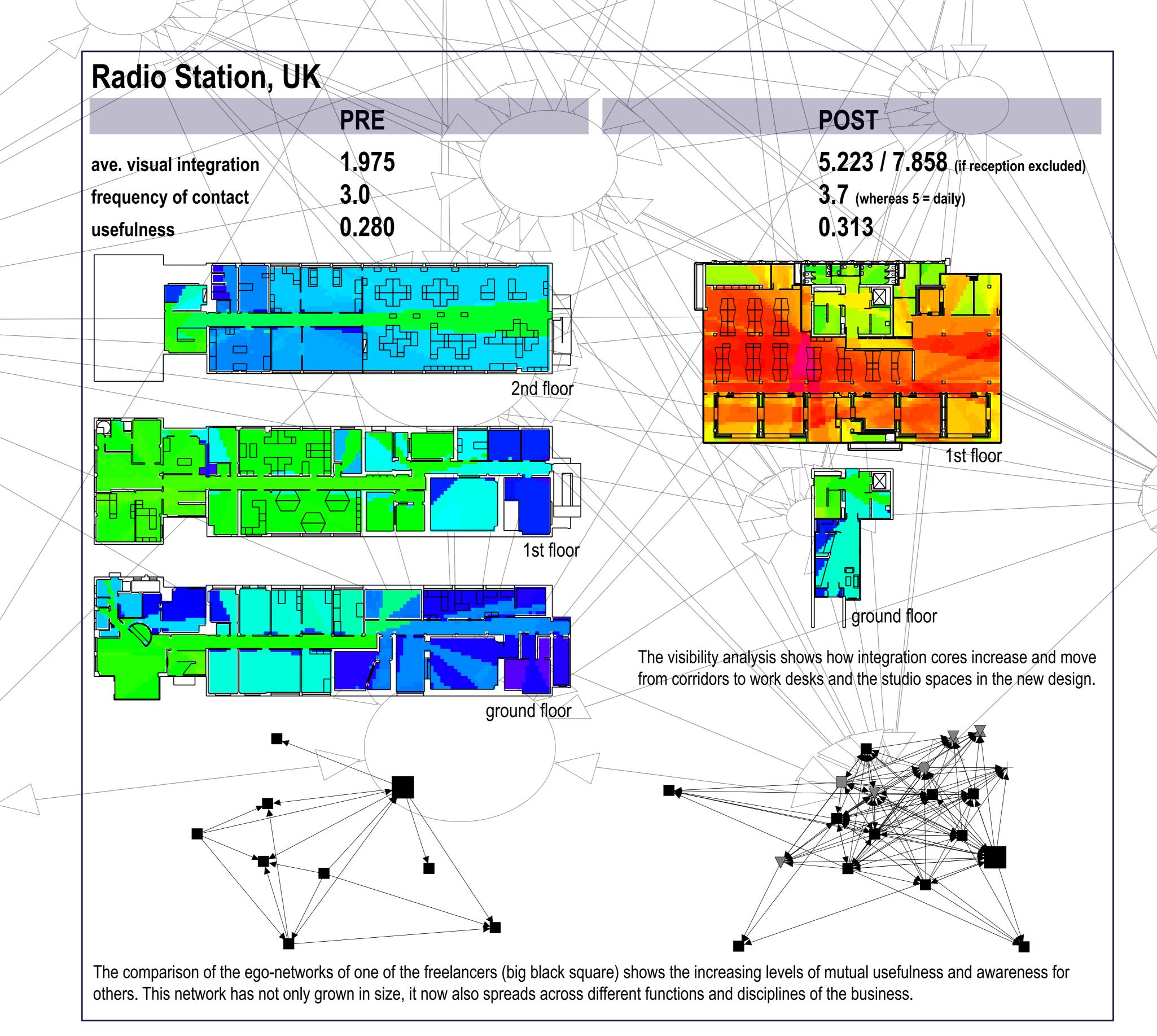
- Use of Space Syntax in a life design project of Spacelab: fit-out for two radio stations based in Ireland
- Integration of research knowledge at the front line of daily design tasks
- Design task: integration of both stations into a new and shared three storied building
- Different design alternatives developed concerning internal connection of the floors: option 1 with small staircase and central access to spaces from lowest floor, option 2 only connected through elevators,

#### and option 3 connected through a large, central staircase that leads from top floor downwards

# The Influence of Space Syntax

- Showing the advantages of a large staircase and void, thus the integrative power of a space
- Clear visualisation of differences between design solutions, thus disclosing the non-discursive intuition of architects
- Reinforced intuitive decisions of designers to argue for option 3
- Eased discussion with the clients

To summarise, the findings from the UK Radio Station case study suggest that the increased overall spatial integration may be reflected in increased overall levels of seeing others more frequently and finding them increasingly beneficial. Social networks are becoming more reciprocated with the influence of the new spaces and at the same time widening and condensing, especially for freelance staff members or those not regularly around and working out of usual office hours.









# Enhancing the design practice through a full research case study

- Case study conducted alongside a Spacelab fit-out project for a UK based radio station
- Study setup: space observation and interaction questionnaires gathered once before (PRE) and once six months after (POST) the organisation moved into their new spaces.
- Aim: to show what difference the new design made to the organisation's character and functioning in general, and to its interaction patterns and social networks in specific.

### Major changes from the old to the new design:

- Reducing the amount of unused spaces and offering a compact and efficient building layout
- Bringing everyone together on one floor (except for the receptionist



whose desk is located at the ground floor below), thus integrating functions like the studios and presenters

## Influences on organisation:

- Increased levels of visibility
- Amount of internal phone calls and emails dropped
- Increased frequency of contact and mutual feeling of usefulness for everyone in the organisation
- Receptionist segregated (only person on ground floor, daily routes no longer pass by her desk), results in decreased frequency of being seen (4.74 ---> 3.85) and decreased usefulness (0.357 ---> 0.122).
- Nominations as useful increasingly reciprocated (26% pre ---> 38% post), i.e. raised awareness.
- Personal social networks (ego-nets) grow in size and reach across disciplinary boundaries, especially for people at rim of organisation like freelancers.



In order to design for well-used and efficient office spaces, user-oriented and evidence-based research needs to be integrated into the design process. By attaching research procedures to the everyday design practice, both sides can build up a common understanding at the front line of design/ tasks to solve.

The UK based architectural firm Spacelab Ltd. and the Bartlett School of Graduate Studies at UCL have recently started collaborating on the basis of a Knowledge Transfer Partnership (KTP) in order to integrate architectural research and analysis more into the design business. More specifically, Space Syntax methods shall be used in order the exploit knowledge on the powerful relationship between spatial configuration and social behaviours in workplace environments and hence influence design processes as well as products. The basic idea is striking and simple: by investigating the spaces, cultures, behaviours, and space usage patterns of an organisation, this detailed knowledge may help to suggest better design \solutions that perfectly fit the clients' character and needs. Moreover, solid and comprehensible evidence can be provided to back up discussions with existing clients to argue for the most adequate solution, and new clients may be acquired that are interested in looking at space, property and effectiveness in line with an organisations' business objectives.

Of even more importance may be the opportunity to change architectural business: architecture could be turned from the predominant project management approach into a more operational and process management based discipline. By knowing more about the client than they know about themselves, it may be possible to continuously consult a client on the most adequate and efficient spatial solution fitting to his actual needs (that could change quite rapidly) as well as to offer designs for other properties the client may own. A client may hence not only buy an architectural service once, but become a repeat client.

Spacelab Ltd. has started to move on this track and has received a lot of positive feedback, from colleagues, own staff and clients likewise. For the future, Spacelab aims at intensifying these efforts by using the full range of Space Syntax analysis methods (among others like SNA) in order to influence the design process and help striving for the best design option for a client. An understanding as full and deep as possible of the manifold and multilayered influences of space on an organisation's behaviour needs to be developed; this involves post occupancy evaluations as well as an analysis of life projects, preferably before the design stage.

In the end this may not only feed into the knowledge base of the research community and into an enhanced portfolio of Spacelab, it may also inform, influence and change the design process itself and thus the way architectural business is set up.

