

# GIGA-mapping the Architectural Performance: Appreciation of New Coming Cultures

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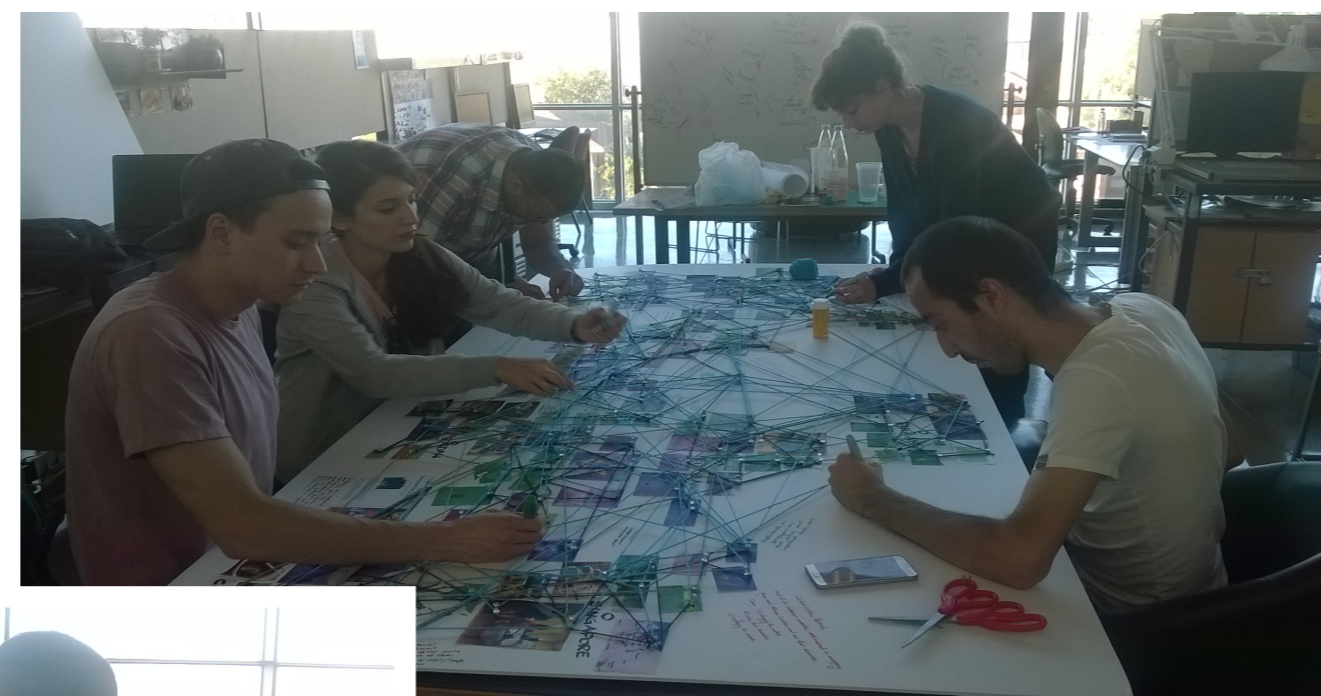
Performance Oriented Design (Hensel, 2015) in the means of architecture that reacts to its environment has strong background in traditional oriental architecture. In addition, the architecture that is adapted to the local environment is perceived as a necessity of our future. At the moment, strong weather extremes futures are expected in climatic adaptation documents of many countries, i.e. Norway, Czechia, Turkey, Canada or USA (Czech Republic Ministry of the Environment & Czech Hydrometeorological Institute, 2015; Fløete et al., 2010; Republic of Turkey Ministry of Environment and Urbanization, 2012; Richardson, 2010; U.S. Department of State, 2014). In these settings, we need to generate sustainable ecologies friendly and habitable environments that gain from previously developed architectures with tradition of weather extremes. These are usually, and not surprisingly the countries, where most of the refugees are coming from. Considering the refugees' crisis, within western world we should not ask what we lose by accepting different cultures, but how can these cultures enrich us. Semi-interior spaces, natural ventilation, hygroscopicity, etc. has been widely used features in the orient (Fakouch et al., 2004; Fathy, 1986; Hensel, 2011). Such performative spaces have high significance in socio-cultural relations (Davidová, 2016; Vegas, Mileto, Songel, & Noguera, 2014). People who experienced such in everyday life can save us from the worst harms of coming environmental changes, thus gaining new identity and appreciation in their new homeland. The ongoing series of workshops is using the methodology of Systems Oriented Design (Sevaldson, 2013, 2017), namely GIGA-mapping (Sevaldson, 2011, 2015), for mapping the socio-cultural as well as environment-performative potentials in oriental architecture with both, long term locals and new local refugees participation for practice applications in their new countries.



## Eskişehir Osmangazi University Turkey

Figure 1: Mapping with Bachelor Level Students at the University of Eskişehir at Bademlik Design Festival Organized by the Second Author, Turkey; The GIGA-map is structured into several transdisciplinary topics fields that penetrate into each other. There are marked relations within and across the fields and all these relations are linked to proposed supportive solutions on the right side of the GIGA-Map (photo: Davidová 2016)

The three workshops, that took a place at 1) the University of Eskişehir, Turkey (see Figure 1), 2) University of Arizona, Tucson, USA (see Figure 2) and 3) the Ecole Supérieur des Sciences et Technologie du Design in Tunis, Tunisia (see Figure 3), applied similar methodology: a) the students were first asked to express their own interests; b) having this in mind, the students had to sketch fully abstract concept of the system that is to be mapped; c) the students were asked to place their items on the board first individually on individual topics of their interests; d) the team work started among finding the relations across the topics and fields e) /1 and 2 cases only (three days workshop): computers, internet, role of paper, markers, colour A4 printer, scissors, coloured threads, board and pins were available; /3 case (2,5 hour workshop): coloured markers and paper sheets were available.



## University of Arizona in Tucson

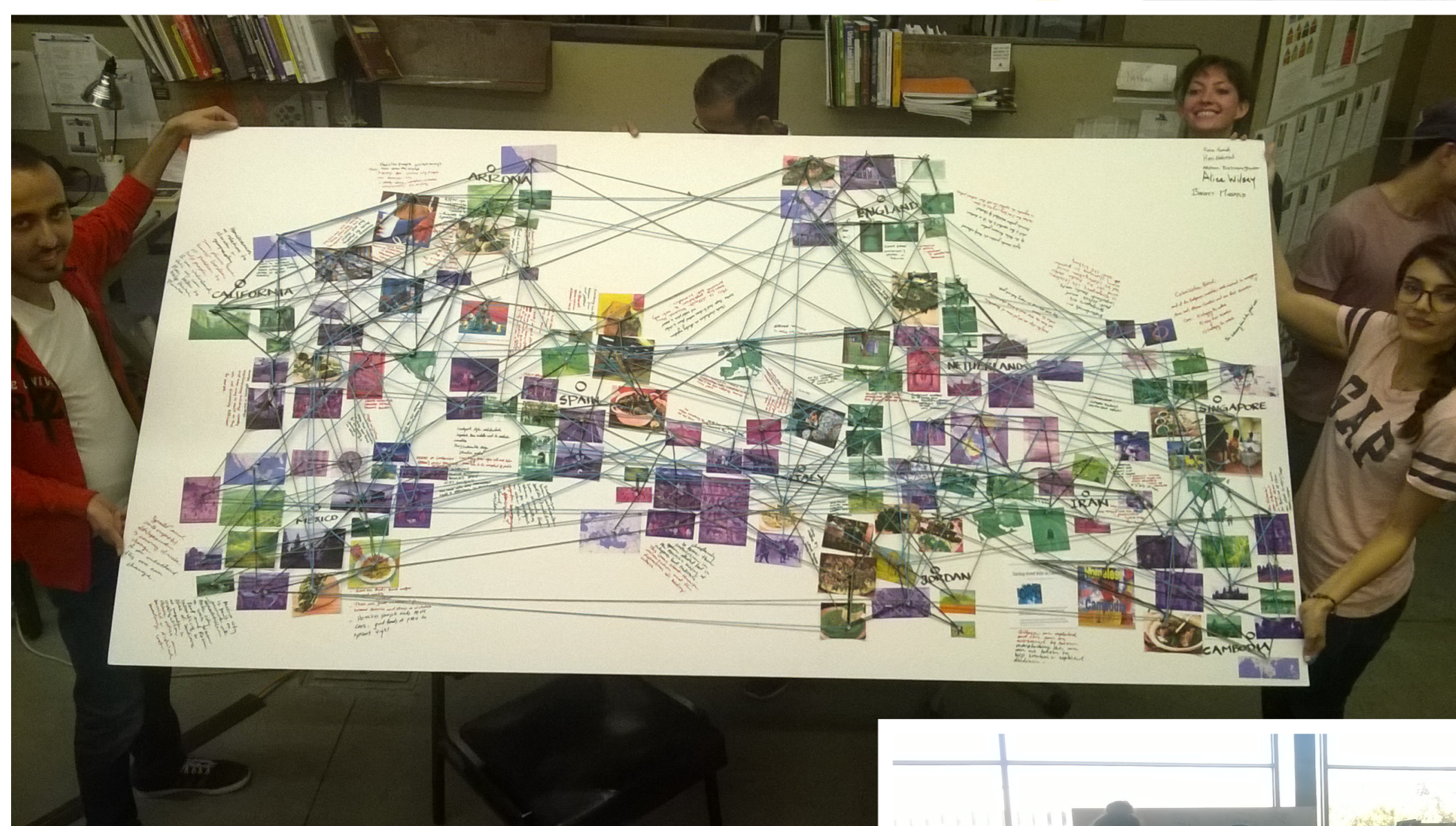


Figure 2: Mapping with MSc. Level Students with Majorly Immigrant Backgrounds at the University of Arizona in Tucson; The GIGA-map is organized as geographical map marking countries of interest. It is in fact field map, where the topics on the images are colour coded. There are marked relations within and across the fields and countries. The most interesting and surprising relations were narratively evaluated with scenario speculation of their positive and negative development. (photo: Davidová 2016)

The use of printed photographs and other hard data images, especially in this highly emotional topic, has its meaning: it is not reducing the mappings just to hard data. Discussing the fields with images motivates the participants to share their past, today and future stories even on emotional and subliminal levels. This generates better understanding and feeling of commonness across the team. Similar feelings also generates the interaction when marking the relations across the fields. Therefore, even in short term workshop without the equipment in Tunis brought results. It is interesting to note, that at all of the workshops, though coming from different background and education level, it was always concluded among all the participants to work with field maps, registering the intensities and penetrations among the fields. Such performance had also largely emotional character. To try to quantify a bit, we used size of printed items images based on their importance, in the second case of the workshop, we colour coded the images by their topics and for the third case, we draw the circles of fields of impacts of the topics with colour coding. All of the maps were time based. The first map covered situation field mapping on its left side and proposed future bettering solution and its development on its right side (see Figure 1). The second and third maps were geographically designed field maps, where it is to my mind the biggest contribution that the most interesting and surprising relations were evaluated with speculative positive and negative scenarios (see Figure 2 and Figure 3). We thus made our time based minds on individual and common emotional, cultural, geographical and i.e. in relation to homelessness or cultures distributions across the world with visions for small 'prototypical urban interventions' (Davidová, 2004; Doherty, 2005).

These workshops are not just search for supportive solutions that help, both to western world and to refugee societies in western world in general. They are supporting co-living among different individual participants from different cultures themselves through 'participation' and 'co-design' (Sanders & Stappers, 2008). By common GIGA-mappings with the need of discussions and cooperation - not avoiding personal levels - the project believes in increasing understanding among different social groups. This way the project aims in socio-environmentally sustainable 'bottom up' politics!

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## Ecole Supérieur des Sciences et Technologie du Design in Tunis

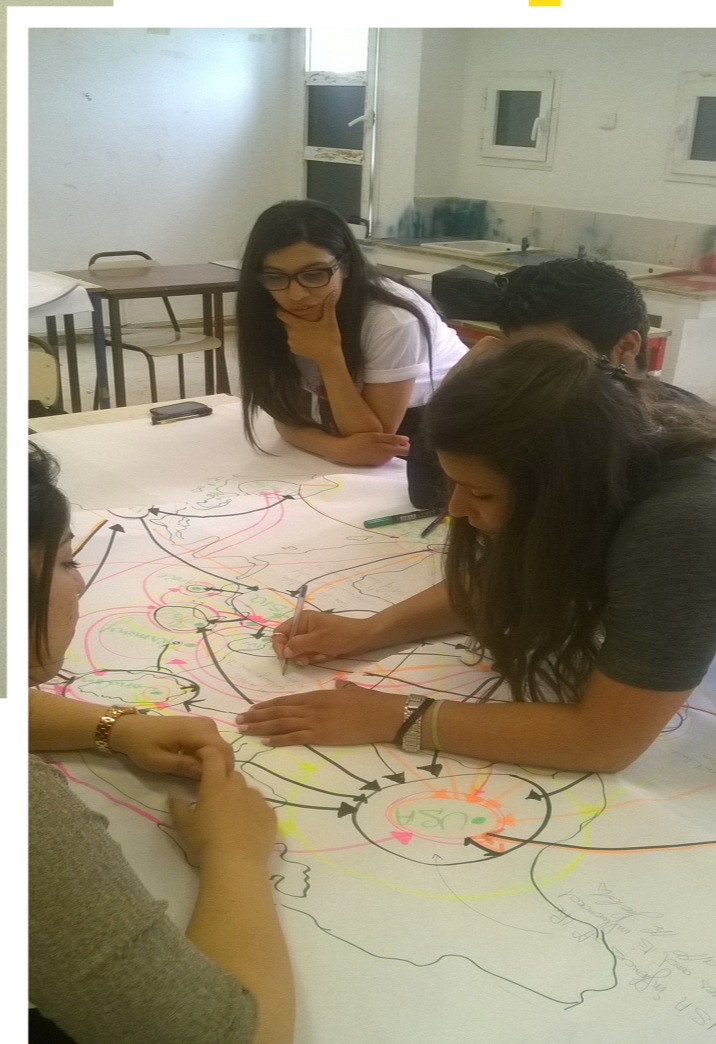
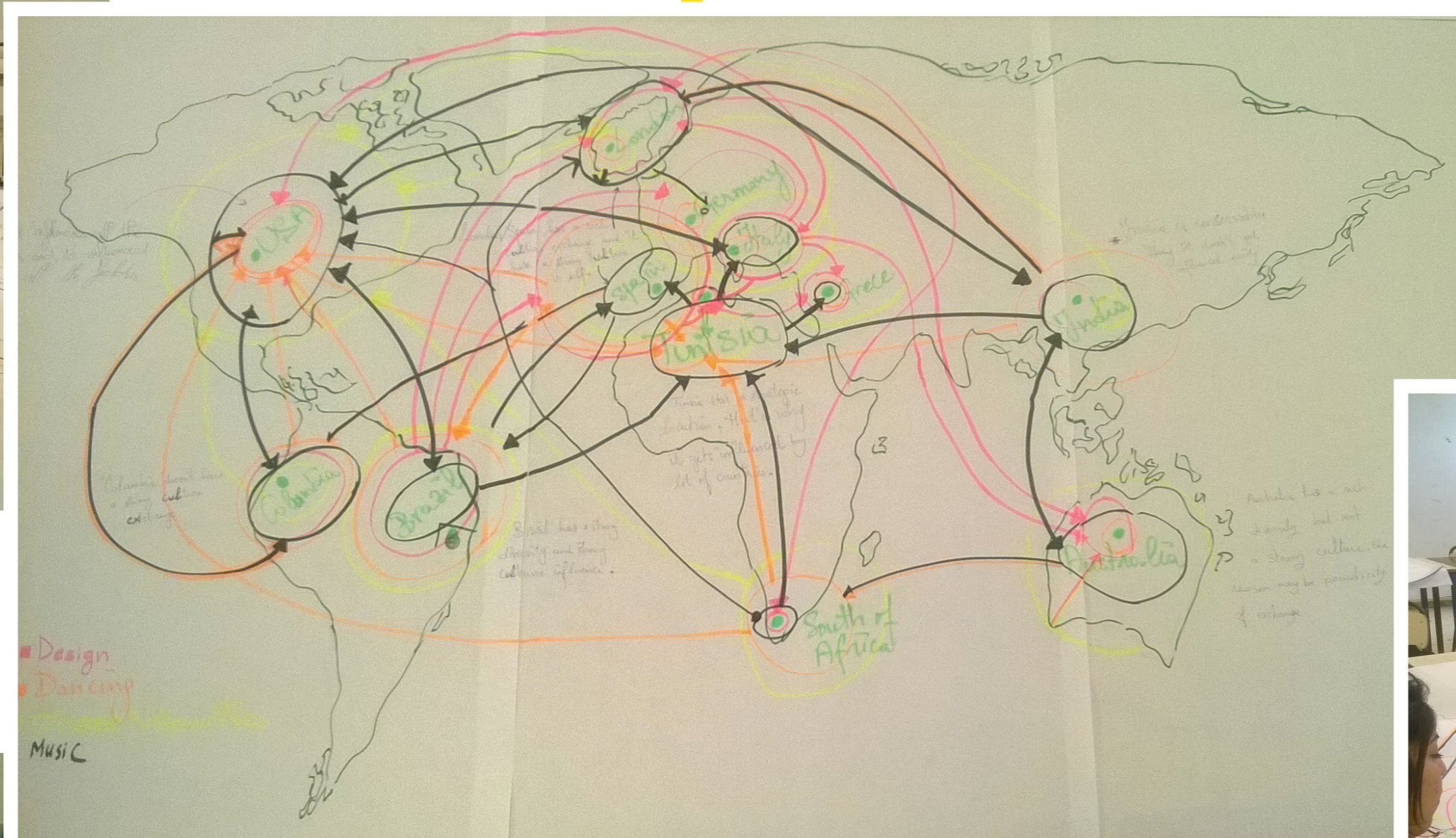


Figure 3: Various Disciplines Master and Bachelor Level Students at RAID conference focused on post digital age at the Ecole Supérieur des Sciences et Technologie du Design in Tunis, Tunisia; Within the 2,5 hours transdisciplinary workshop, we mapped the impacts of cultural exchange across the world. The result is a field map with registering impacts transitions and their interpretations. (photo: Davidová 2017)

