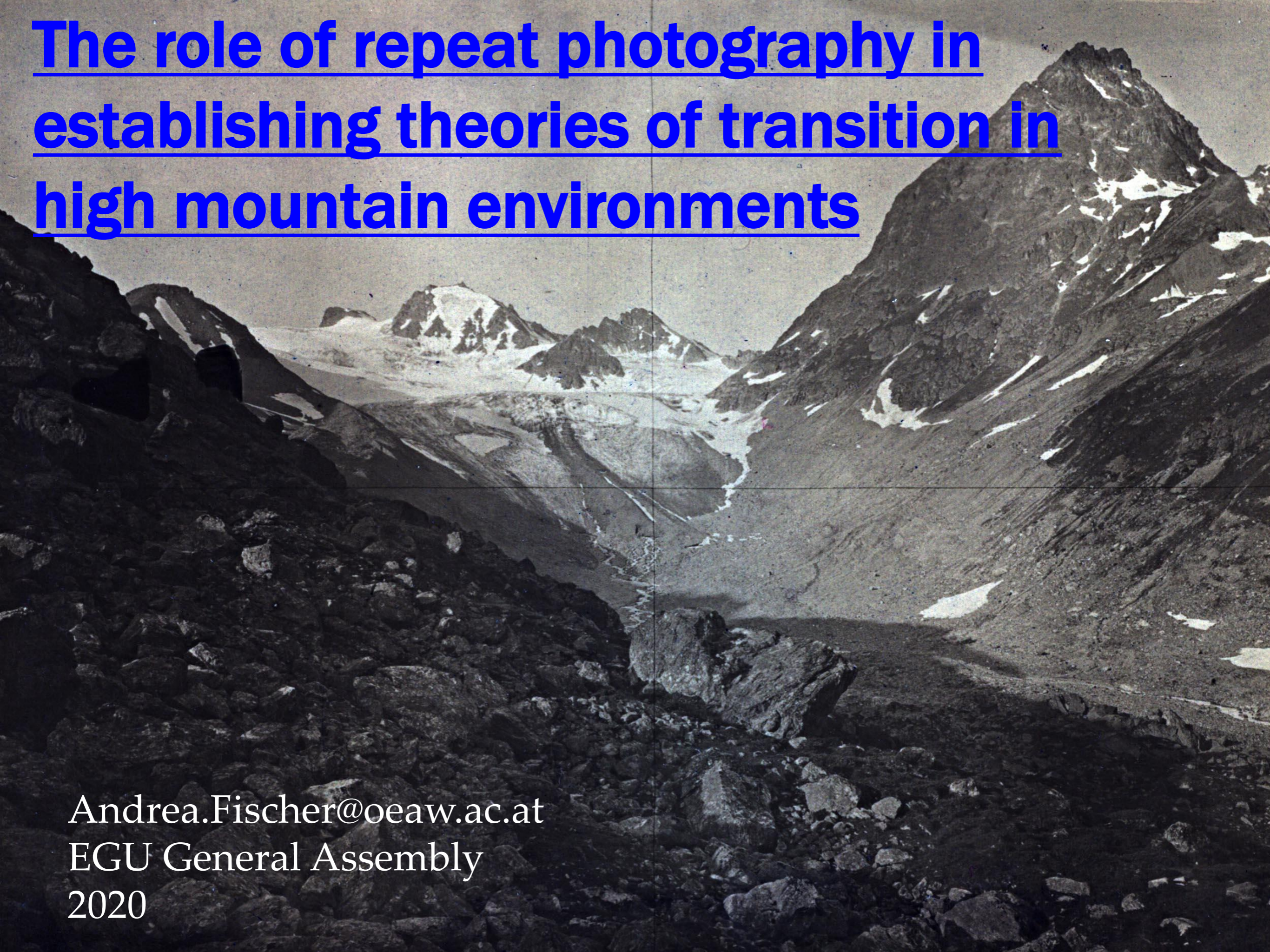


The role of repeat photography in establishing theories of transition in high mountain environments

Andrea.Fischer@oeaw.ac.at
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I am very sorry to say that currently it is not possible to present historical documents and photos with a CC4 licence at this hub. Therefore, please find just a few images of Jamtalferner and a list of publications! I still hope to find a solution until EGU takes place.

Abstract

Today, photos play an important role in geoscience and public discussion. When photographic techniques developed during the second half of the 19th century, it took several decades until high mountain areas and specific features could be captured with this technique, as a follow up to traditional paintings and drawings. In European geography, Friedrich Simony developed the idea of tackling geomorphological processes by time lapse photography. Contemporary literature shows that his technique of combining photography with empirical data and theories was convincing, and that he established a new style of scientific discussion. Still, the comparison of historical with contemporary photography offers scientific insights and information which is not covered by any other type of empirical evidence as measurements, maps or descriptions. For example not only extent, but also firn and debris cover of glaciers, information on type and extent of vegetation, the width and style of roads, details of infrastructure and cultural practices can be tackled from early photographs. Several archives do allow not only access to photographic documents, but also to metadata. Interdisciplinary effort has to be taken to further analyze this wealth of information.

1997



Gross

2017



Fischer

I consider Friedrich Simonys photographic Oevre as most important for the development of European geoscience, see some examples here:

Magdalena Vuković (Hg.): Von wunderbarer Klarheit: Friedrich Simonys Gletscherfotografien, 1875–1891, mit Texten von Monika Faber, Andrea Fischer, Friedrich Simony und Magdalena Vuković, Wien: Album Verlag, 2019

<https://www.bonartes.org/index.php/publikationen-detail/von-wunderbarer-klarheit.html>

Here we used images for mapping changes in the glacier forefield:

Fischer, A., T. Fickert, G. Schwaizer, G. Patzelt & G. Groß, 2019, Vegetation dynamics in Alpine glacier forelands tackled from space, Nature Scientific Reports 9,

<https://www.nature.com/articles/s41598-019-50273-2>

Some documents on Austrian glaciers:

Fischer, A., G. Patzelt, M. AchRAINER, G. Groß, G. K. Lieb, A. Kellerer-Pirklbauer & G. Bendler, 2018. Gletscher im Wandel: 125 Jahre Gletschermessdienst des Alpenvereins. Springer Spektrum, 140 S. doi:10.1007/978-3-662-55540-8.

<http://www.springer.com/de/book/9783662555392>.

Early Paintings in Eastern Alps

Patzelt, G., 2019. Gletscher. Klimazeugen von der Eiszeit bis zur Gegenwart, Hatje Cantz, Berlin. With possibility to look at the book online! <https://www.hatjecantz.de/gletscher-7474-0.html>