



INTRODUCTION

Natural miracle Cappadocia Region is defined as the combination of provinces like Aksaray, Nevşehir, Niğde, Kayseri, Kırşehir (Figure 1). Rocky Cappadocia region is formed from Uçhisar, Göreme, Avanos, Urgüp, Derinkuyu, Kaymaklı, İhlara and their environment.

Region, which began to be constituted ; presented unique aesthetics of curly rocks, 'fairy chimneys' that form spaces befit fairies, worship and accommodation places which has built a lot of meters beneath the ground attractively.

Millions of years ago in geologic periods, Mounts Erciyes, Mount Hasan and Mount Güllü, which located in Cappadocia Region and who have active volcanic characteristic and sometimes erupt, were source of inspiration by Prehistoric human to cave wall art.

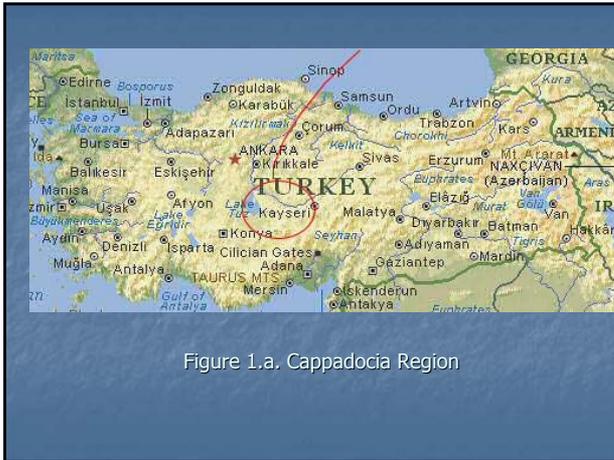


Figure 1.a. Cappadocia Region

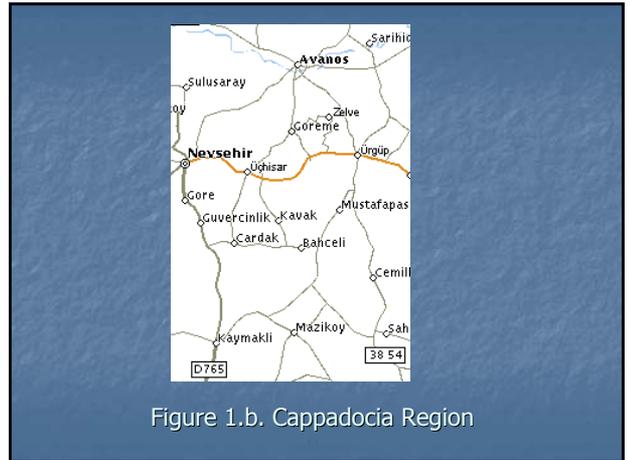


Figure 1.b. Cappadocia Region

Tuff rocks which resulted from volcanic formations, to be easily worked up and become solid after meeting air (Figure 2), According to aim of use issue of possession through centuries and nowadays this region still conserve its current interest with admiration of whole World



Figure 2 A panorama of Cappadocia

Issues of possession must be investigated and whom and how title registrations are done must be researched in Cappadocia region especially in Nevşehir Province and its townships.

In this study, how operation of cadastre and getting title to a piece of land is done and registration problems have been investigated.

CADASTRE PROCESS and REGISTRATION PROBLEMS in CAPPADOCIA

Cadastre (getting title to a piece of land) process began in this region in 1965. Cadastre operations are done province and town centers in accordance to the 1934 date and in accordance to 1966 date and 766 numbered code. 2613 numbered code according to district basis and in villages. Topographical structure of the region; **Fairy Chimneys**, Houses that have been built in caves by curving them, depots (cellars), dovecotes led up to problems at the stage of restriction and determination.

This region has been investigated as Ürgüp Township and Göreme Town

Cadastre Process in GÖREME Region

Registration applications were started in 1974 in accordance to 1966 date and 766 numbered code in Göreme town and finished in 1976. During this application variety of problems were faced here again as in Ürgüp. Because of different applications, a committee was requested about the method of registration in Uçhisar, Avcılar (Göreme), Kaymaklı and Ortahisar towns by the directorate of land registration of Aksaray. Whereon the committee came and formed titles as house, ground plat, fairy chimneys, castles, dovecotes, depots, churches and spaces that cannot be measured and the report on 12/12/1974 declared to the General Directorate of Deed Cadastre.

Committee determined in their report;

Houses and Ground Plats : According to their projection real properties, one of them is completely above another one; first which one is registered must be determined, if both of them have titles the former one considered and the other one is written on a register of title deeds separately and permanently, if one of them has title the other one is written on a register of title deeds separately and permanently, if neither of them has title, in such a case first the former one is established in terms of date by the help of expert opinion, tax records and the other documents then the former one must be registered and the other one is written on a register of title deeds separately and permanently as upper and bottom right (Figure 6,7).



Figure 6: A room curved from rock



Figure 7: A settlement curved from rock

According to projection if one of them is partly above another one therefore it is fixed and established as *right of easement*, if more than a half is above the other one at that time we must apply the rules that are cited above in accordance to their registration condition.

Real properties beneath the public road and over public road with arc are not issue to registration but in such a case when registration is compulsorily on behalf of municipality, provincial administration or treasury established then if there are some real possessions like house, depot or straw house it is advisable to write on a register of title deeds separately and permanently as upper and bottom right.

Fairy Chimneys: It was denoted that according to the 1710 numbered Ancient Monuments Code that was in force in 1974. There must be representatives from the Ministry of Tourism and Culture and Directorate of Museums and Ancient Monuments while restricting and fixing

If the real property on which there is a fairy chimney has a title, it is established according to its purpose, fairy chimney is written in declaration column and then authorized people are informed.

Restriction and fixation of spaces, under decision and administration of the state, are done in behalf of treasury



Figure 8: Fairy Chimneys

Dovecotes : Rising with perpendicular slope at valley side formed of tuff rocks which have similar features, little rooms which are curved on hillside and connected to outside through the windows like a cage.(Figure 9) and fertilizer of birds is very useful because of this restriction and fixation of dovecotes, which is transferred from father to son or pass into another person's hand by purchasing, measuring by fixing leveling rods on broken points on valley and back cross section and putting a letter that shows its condition on a vertical scratch then attached to the section of map is requested.

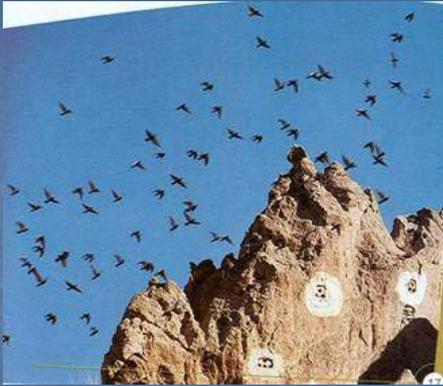


Figure9. Dovecotes, Built on Rocks.

Restriction and fixation are done on behalf of the owner of title according to the letters on the vertical scratches for dovecotes which have titles and by measuring parcels which are between upper and bottom borders of environment and established on behalf of treasury are connected then upper right is regulated after opening anew page in deed registry. **Dovecote** in the feature column and in the amount columnm2 space that was curved in rock must be written; inner size is not measured only settle for experts and owner's determining is requested.

Rock Cliffs: Rock Cliffs in this region are not from the rock cliffs which can not be property of somebody and can not be the issue of private property like spaces which are not convenient for farming; public properties e.g. water, rocks, hills, mountains until proved contrarily according to the 641stitem of Turkish Civil Law, because they are facts of nature and soft tuff rocks and they are from rock cliffs which can be facilities like houses, depots can be built on them easily, so they must be restricted, fixed and registered on behalf of national treasure after measured and '*easily operated soft tuff rock*' must be written in the feature column of register of title deeds, was noted.

Underground City: In the underground city, that contains 26000 rooms and nine floors, rooms are connected to each other through galleries and have ventilation shafts in Kaymakli town;

- This underground city which is in the content of no1710 law; the parcel, which is formed after fixation of ground borders of it and measuring as possible, is requested to be restricted, fixed and registered on behalf of the national treasury **ancient monument- historical underground city** in the feature column of register of titles and deeds and '*ancient monument can not be the issue of trade*' in the declaration column of register of titles and deeds must be written.
- Houses, plantations and stress at the upper part which have titles they must be fixed on behalf of title holders separately and permanently after they are measured and given a letter, then '*It is on the ancient monument*' an annotation is requested to put on those parcels

Spaces which have been curved in rocks in Göreme Town are shown on measurement scratches. Kaymaklı underground City was also restricted, fixed and registered based on this decision. These types of places are shown by scanning on measurement scratches. Arched places are formed parcels and shown as permanent and separate right, however they do not touch the ground (Figure10, 11).

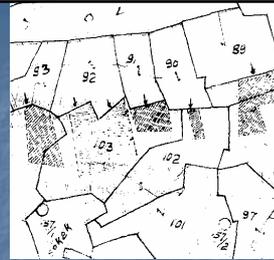


Figure10: A Sample Section of a Map

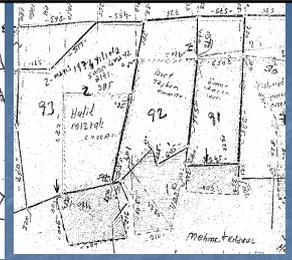


Figure 11: A Sample Scratch

Aksaray Directorate of Land Registry finished operation of this region in this way. In practice, during the investigation of Fairy chimneys and houses which have been curved in rocks in three sections of a map by sampling, it was observed that upper and bottom rights were not cited on the record of the study of houses which have been curved from rock and fairy chimneys. Main real property of Fairy chimneys were written on behalf of the National Treasury, invasions on them were cited in related columns of the record.

CONCLUSION

The sources and results above were reached during investigation in Cappadocia Region especially in Göreme Town and Urgüp Township .In Göreme 1966 date and no 766 titling code and in Urgüp 1934 date and no 2613 Cadastre and Cadastral Survey code were used. In both of the survey commissions from General Directorate of Land Registry have investigated, have prepared reports and 94th and 115th commission decisions of Central Title Commission were taken then all operations were performed according to these decisions.

Title deed officers acted self-sacrificing according to technical conditions of that time and tried to do the best according to available bad condition. However, spaces, which have been curved into rocks and registered, could not be measured. Only shown on scratches and process was only to fix the owner. Title registrations, which are still, continue to exist at present must be measured by the help of the latest technology and rooms, houses, depots etc., which have been built into rocks by curving, must be provided to be registered.

Henceforth Title and Cadastre organization will fulfill its responsibility to protect our cultural heritage

We think that it is acceptable to get over registration problems, which were faced in the Cappadocia Region by second cadastre or 3D cadastre

- if spaces which have been curved into rock are not ancient monument must be fixed and registered on behalf of its owners, limits of spaces which were curved must be fixed shown in the plan to protect invasions.
- Fairy Chimneys are never issue for ownership and use, it will be advisable to protect after written on behalf of the National Treasury.

- Dovecotes in rock Cliffs must be fixed as rock cliff on behalf of the National treasury, but entrances of dovecotes must be shown on scratches by their coordinates.
- Vertical dimension, the third dimension must be used at dovecotes which were issue of property and registration must be done by the help of them.

Registration problems in Cappadocia need a second Cadastre and 3D Cadastre because of these legal regulations must be done.



THANK YOU FOR ATTENTION

CONTACT

Assis.Prof.Dr.,Tayfun CAY
University of Selcuk
Faculty of Engineering –Architecture
Department of Geodesy and Photogrammetry
42075 Konya
TURKEY
Tel. +90 332 223 19 44
Fax +90 332 241 06 35
Email:tcay@selcuk.edu.tr
tcay@hotmail.com