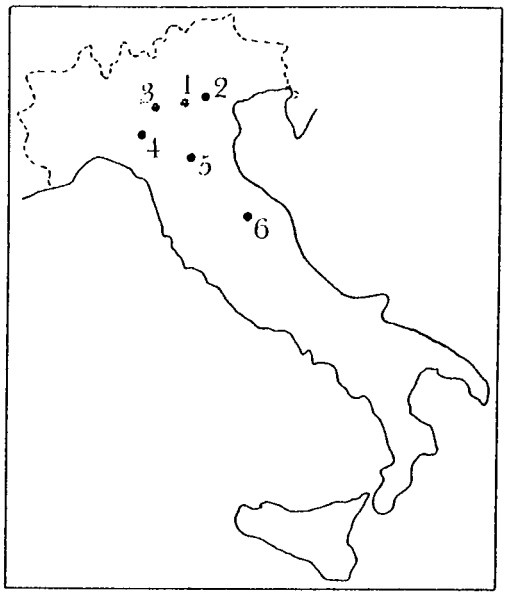
LOESS LETTER

LL19 April 1988 ISSN 0110-7658



1. Rivoli area
2. Lessini Plateau and Tagliente rock shelter
3. Castenedolo Terrace
4. Trebbia Valley Terraces
5. Ghiardo Terrace
6. Marche area : Crispiero and Fosso Mergaoni

THE LOESS IN NORTHERN AND CENTRAL ITALY : A LOESS BASIN BETWEEN THE ALPS AND THE MEDITERRANEAN REGION

26th September - 1st October 1988

LL19 : April 1988

Loess Letter LL is the newsleter of the Loess Commission of the International Union for Quaternary Research INQUA. It is published by the Documentation Working Group at the Leicester University Centre for Loess Research and Documentation. The aims of LL are communication and dissemination - to provide a link for the widely scattered community of loess scholars, to spread news of meetings and publications, to publish short papers (submissions are invited) and to provide a forum for the discussion of any loess-related topic. Editorial address: Loess Letter, Geography Department, Leicester University, Leicester LE1 7RH, England (phone 0533 523831).

The Documention Working Group of the Loess Commission is based at Leicester. One of its major tasks is the production and distribution of Loess Letter - another is the establishment of a 'Loess Archive' and readers of LL are reminded that we would like to receive reprints of all their loess-related publications - to build the data-base and possibly to feature in future issues of LL. And while we are on the topic of future issues of LL... look out for the approach of a subscription charge, probably £1 (or 2 dollars) per annum, to partially cover production and distribution costs.

LL18: Remember that LL18 is a reference issue; keep your copy by you - it contains details of the eight current working groups and names and addresses for the current full members of the Loess Commission. A few spare copies of LL18 are available, write to Leicester if you want a copy. LL1-10: The reprint volume is still available from Geo Books in Norwich. This volume was specially produced by Geo Books to coincide with the Ottawa INQUA meeting - and may not be available for very long.

LL19: This issue highlights the Alps: extracts from the new books by Armelle Billard and Mauro Chremaschi, and details of the joint meeting of the Loess Commission and the Palaeogeography Commission in North Italy in September 1988. Contact Dr. Chremaschi quickly if you want to go to the meeting. The books may be ordered via your bookstore. The questionnaire for the Survey of Loess Research and Register of Loess Investigators now circulated with LL18 - please complete and return. If you have lost the original - it is reprinted in LL19. We will use the completed forms when compiling the new mailing list for LL. Contrary to what Frank and Ernest think it <u>is</u> possible to escape from a mailing list.

Meetings: Martin Buber said that 'Real life is meeting' and there is no shortage of meetings to which loess enthusiasts ought to go. The next major Loess Commission meeting is the North Italian gathering in September 1988 - already noted: application form included in this issue of LL.

1988: With the growing interest in loess bricks we should note the Annual General Meeting of the British Brick Society - to be held in Leicestershire on Saturday 18 June: contact Hon. Sec. BBS, 9 Bailey Close, High Wycombe, Bucks. HP13 6QA, England, for details.

Meeting of Geological Societies of the British Isles 21-23 September at University College London

International Symposium on 'Quaternary Stratigraphy and Correlation of Asia and Pacific Region' to be held in Nakhodka USSR 9-16 October 1988. Details from Dr. A. E. Dodonov, Geological Institute, Academy of Sciences, Pyzhevsky per.7, 109017 Moscow, USSR.

1989: Soil Erosion on Agricultural Land; 3-6 January, at the British Geomorphological Research Group meeting at Coventry.

Active Tectonic Regions 3-7 April, at University College London.

Quaternary Engineering Geology 10-14 September at Heriot-Watt University in Edinburgh: abstract deadline is 31 October 1988.

Meeting on South Asian Loess at Deccan College, Pune, India - sometime in the latter half of 1989. Details from Prof. s. N. Rajaguni, Deccan College, Pune, Maharashtra State, India.

CLRD: The Centre for Loess Research and Documentation. This Centre was established at Leicester University in late 1987. Its aims are encapsulated in its title, and it provides a setting for two Loess Commission Working Groups: Geomorphology and Land Use (Prof. E. Derbyshire) and Documentation (Prof. I. Smalley). One of the major current tasks of the Documentation Group is the Liu Festschrift volume - see below.

Liu Festschrfit. To celebrate and recognize the great contribution made to loess studies by Prof. Liu Tung-sheng a Festschrift volume entitled 'Loess and China' is being prepared. It is edited by Ian Smalley and Edward Derbyshire and will be published by the Leicester University Press. This will hopefully also be a major Loess Commision contribution to the Beijing INQUA Congress of 1991. Contributions to the Liu Festschrift are invited from LL readers - this should be a major state of the art volume and a fitting tribute to a great loess scholar.

Frank & Ernest

ASIAN STUDIES NEWSLETTER ARCHIVES

The Archives consist of an extensive collection of academic and cultural newsletters and association bulletins dealing in whole or in part with Asian affairs and Asian Studies. They have been developed and maintained since 1970. Three primary objectives are involved:

(1) The creation of a centralized collection of newsletter-type materials containing information about the growth and state of Asian Studies and Asia-related organizations and about the activities of various institutions and individuals. Most publications on file have been in English, French or German, but an increasing number are in Asian languages. Many have enjoyed very limited circulation. Some have appeared in mimeographed or xeroxed format; others more closely resemble professionally printed magazines in their appearance.

(2) The preservation of these same materials for long-term scholarly use, especially as libraries and individual recipients of newsletters generally discard them on account of their ephemeral nature. (No research library or professional organization appears to be systematically collecting and retaining such publications for Asian Studies as a whole.)

(3) The creation of a data base that serves as the basis for tne preparation of a variety of bibliographies and reference tools, some of which are published.

All work on the Archives is being undertaken by Frank Joseph Shulman on a private basis, without any institutional support or outside funding, as a service to researchers, students, librarians and the general public.

Approximately 900 titles from all over the world are already on file. These range from the *Newsletter of the Society for South India Studies*, the *Bulletin of Sung and Yüan Studies*, *Berita* (newsletter of the Malaysia/Singapore/Brunei Studies Group), and bulletins issued by the European Association for Japanese Studies and the Tokyo-based Asiatic Society of Japan, to the *Southeast Asian Research Materials Group Newsletter* (Canberra), the newsletters of some U.S.-China Peoples' Friendship Associations, and such outreach-oriented bulletins as the *SACPAN Newsletter* (publication of the South Asia Colloquium of the Pacific Northwest) and Princeton University's *East Asian Newsletter*.

A two-part guide to some of these newsletters was compiled and published by Frank Joseph Shulman in the *Asian Studies Professional Review* (vol.4, nos.1 & 2, Fall/Spring 1974-1975, pp.30-58; and vol.5, nos.1 & 2, Fall/Spring 1975-1976, pp.11-16). A highly selective list of currently published academic newsletters focusing on China appeared in the March 1980 issue of the Association for Asian Studies' *Asian Studies Newsletter* and in the June 1980 issue of the *Chinese Librarians Association Newsletter*. A detailed listing of titles relating to Southeast Asia, in turn, has appeared in *Southeast Asian Studies: Options for the Future*, edited by Ronald A. Morse (Lanham, Md.: University Press of America, 1984; pp.166-184) as part of an overview and guide prepared for a Smithsonian Institution conference. Shulman is gradually preparing an updated, vastly expanded guide to as many past and current newsletters and association bulletins relating to Asia as possible for eventual publication as a monograph through the University of Michigan.

All files in the Asian Studies Newsletter Archives are open by appointment to people visiting the Washington, D.C. area. Requests by mail for xerox copies of individual issues are being filled whenever possible at cost. Inquiries are welcome. A 46-page bibliography of archival holdings as of October 1984 is available at cost ($5.00).

The cooperation of newsletter and association bulletin editors, university centers, various organizations and associations, cultural groups, and individuals everywhere will always be appreciated. Shulman would be grateful to have his name added to mailing lists for appropriate newsletters no matter how irregularly published or limited in distribution they might be. Please address all correspondence to:

FRANK JOSEPH SHULMAN
Asian Studies Newsletter Archives
c/o East Asia Collection, McKeldin Library
University of Maryland
College Park, Maryland 20742 USA

Tel: (301) 454-2819
(301) 935-5614 (evenings)

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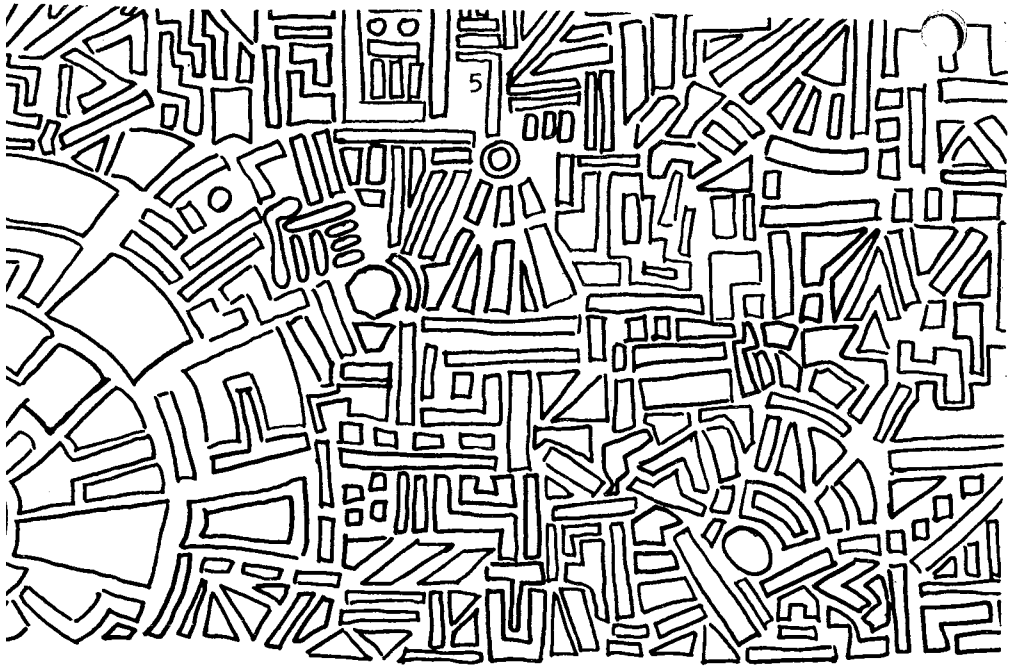

MAURO CREMASCHI

STUDI
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RICERCHE
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TERRITORIO
collana
diretta
da
Giacomo
Corna-Pellegrini
Edizioni
UNICOPLI
Milano

PALEOSOLS AND VETUSOLS IN THE CENTRAL PO PLAIN (NORTHERN ITALY)

A STUDY IN QUATERNARY GEOLOGY AND SOIL DEVELOPMENT

INTRODUCTION

The subjects of this study are the paleosols of the central part of the Po Plain (Fig. 1). Its aim is to recognize and to describe their characteristics, their stratigraphic and areal distribution, the factors which controlled their development and the relationships with the Quaternary enviromental evolution.

1.1. *THE PALEOSOLS IN QUATERNARY GEOLOGY*

Paleopedology represents the historical branch of pedology (Ruellan, 1971); and its subjects are represented by the paleosols which, according to a largely accepted definition (Yaalon, 1971; Birkeland; 1974; Orombelli, 1971; Ferrari and Magaldi, 1983), are the soils developed in a landscape of the past. In commenting upon the definition, most authors point out that the bioclimatic environment, in which the paleosol evolved, must be different from the present one. In Orombelli's definition (1971) the morphological implications are particularly emphasized: the paleosols are soils developed in the past, in ancient topographic surfaces.

Generally speaking, the surface of the emerged lands alternatively undergoes gradational and pedogenetic processes. According to a concept used in geomorphology (Chamberlain and Salisbury, 1904) the gradational processes are those which level by lowering the relief through erosion (degradational processes) and by filling the depressions with the accumulation of materials (aggradational processes). The development of a soil takes place where there is a balance between aggradational and degradational processes or where both are inactive. Therefore pedogenesis evolves in contraposisition to erosion-sedimentation and is connected to the stability of the surfaces on which it acts (Bos and Sevink, 1975).

It is well known that in the evolution of the lithosphere periods of prevailing stability (Biostasy), during which the continental areas mainly undergo bioclimatic and pedogenetic alterations, after all due to the plant cover, alternated with periods of intensive erosion, during which the surfaces, devoid of vegetation, have been strongly affected by gradational processes (Resistasy) (Erhart, 1967).

In the geological perspective, during very long time-intervals, pedogenesis is a pulsating phenomenon. For this reason, the stratigraphic record often includes

pedogenetic bodies which represent fossil evidence of the periods of Biostasy. These represent the *buried paleosols* (Ruellan, 1971), or *Geosols* (Morrison, 1967; North American Stratigraphic code, 1983) or the *Sols fossiles* (Duchafour, 1977). In this case the paleopedological evidence represents a single pedogenetic period,

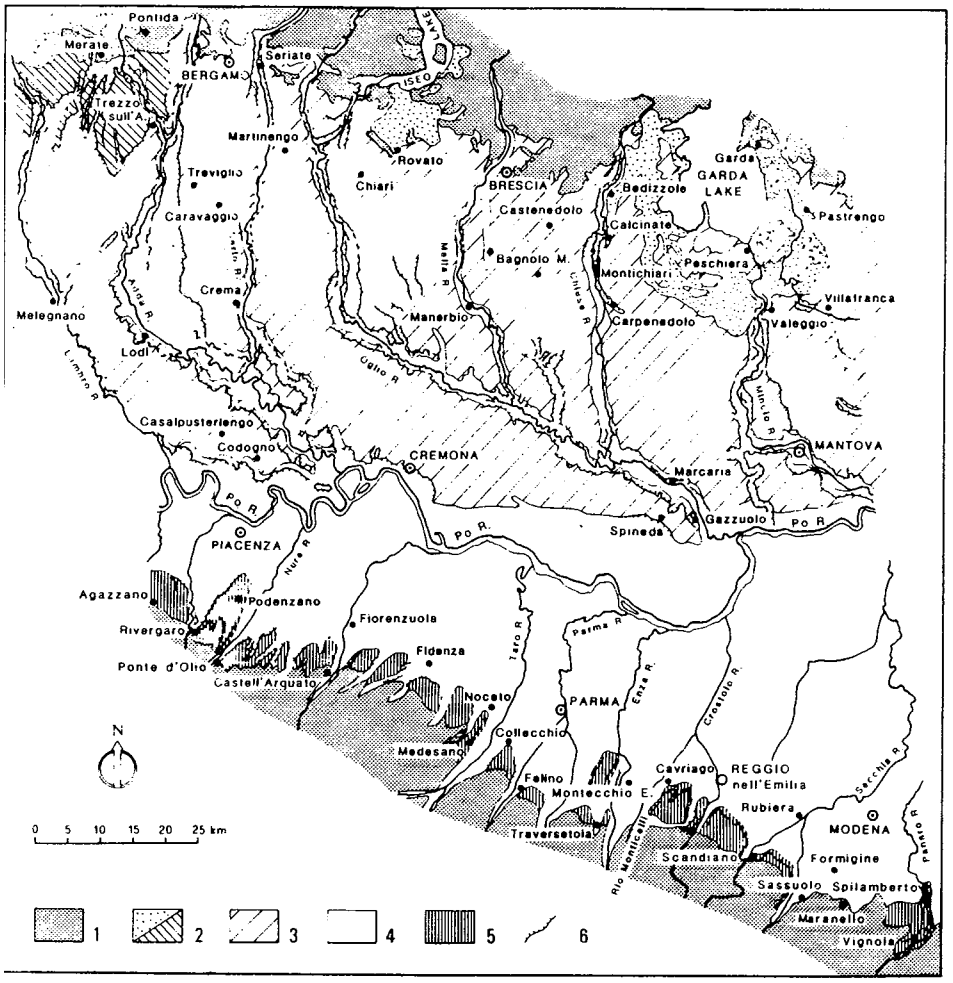


Fig. 1 - The investigated area and its main physiographic systems. 1) Pre-Quaternary formations; 2) moraines and related fluvioglacial deposits of the Adda river, Iseo and Garda lakes areas; 3) Main level of the Plain; 4) alluvial plain; 5) Pleistocene terraces of the Apennine fringe; 6) main scarps.

Fig. 1 - L'area in esame ed i principali sistemi fisiografici in essa compresi. 1) formazioni prequaternarie; 2) morene e depositi fluvioglaciali dell'area dell'Adda del lago d'Iseo e del lago di Garda; 3) «Livello principale della pianura»; 4) pianura alluvionale; 5) terrazzi pedeappenninici; 6) principali carpate.

independent of its duration and, if it has sufficient lateral continuity and clear diagnostic characteristics, it may be used for stratigraphic studies as a pedostratigraphic unit. This is defined at the same time by stratigraphic characteristics and pedological characteristics for which specific proof of existence is required (Working Group on the origin and nature of paleosols, 1971; Ruellan, 1971; Finkl, 1980).

A pedostratigraphic unit usually includes different soils in catenary sequence, or lateral variation (pedologic facies of Morrison, 1967), depending on the original topography of the surface from which the geosol evolved (Birkeland, 1974; Gerrard, 1981); the buried soils are therefore stratigraphic markers and have paleogeographic and paleoenvironmental significance.

In the Quaternary continental deposits, the geosols are present in particular types of sedimentary environments, mainly in the thick loesses of the Central Europe (Fink, 1954, 1969; Kukla, 1975; Valentine and Dalrymple, 1976), in the slope deposits (Bolt et alii, 1980; Kwaad and Mücher, 1979) or in subsiding fluvial plains. Nevertheless their study is made particularly difficult by scarcity and casualness of the outcrops (fluvial cuts, quarries, construction pits).

Relict paleosols (Ruellan, 1971) are more common in the Quaternary deposits. These paleosols are defined as soils that, even if not buried, preserve in their profile characteristics which are not in equilibrium with the present pedo-environment and were produced by soil forming processes which acted in the past. Time, therefore, plays an important role in their genesis.

Yaalon (1971) distinguishes three groups of pedological features according to their persistence: – rapidly adjusting features, – relatively persistent features (near the steady state), – persistent features produced by self-terminating processes. It is well known that (Birkeland, 1974; Sharpenseel, 1971) accumulation of organic matter is the complex of properties which rapidly reaches the steady state in time, ranging from hundreds of years to a few thousands of years. On the other hand, the rate and nature of this process may be easily altered, being controlled by biological cycles. Besides, the A horizons, in which organic matter is predominantly included, are the most subject to erosion. For such reasons they have been placed by Yaalon (1971) among the rapidly adjusting features and therefore they are little useful in the study of the paleosols, where, on the contrary, evidence of past or ancient processes must be searched inside the B horizons, in which persistent features are generally preserved and can be used to reconstruct past conditions of pedogenesis. Many authors attribute polygenetic characteristics to relict paleosols: they would have originated, through various different pedogenetic phases that took place in time, from the same parent material (sols polycycliques: Duchaufour, 1977), or with the interposition of a thin sedimentary cover, which is not sufficient to isolate the underlying paleosol from the new pedogenetic cycle (composite paleosols: Morrison, 1967; polypedomorphic profiles: Bos and Sevink, 1975). The development of the relict paleosols is commonly assumed to be connected with interglacial periods, while during the glacial ones, there should be a substantial decline or interruption of the soils forming processes. In fact Birkeland (1974) points out that some relict soils are identical to equivalent buried soils covered by sediments of the glacial

Fig. 15 - Distribution of loess outcrops in Northern Italy. 1) limit of areas affected by glaciers, 2) main loess outcrops, 3) wind directions, 4) loess in limited outcrops or found in shelters and cave-sequences (after Cremaschi, 1983).

Fig 15 - Distribuzione dei depositi loessici in Italia settentrionale. 1) limite delle aree glacializzate; 2) principali depositi in loess; 3) direzioni dei venti dominanti; 4) loess in limitati affioramenti o contenuti in ripari e cavità carsiche.

Павел Аполлонович

ТУТКОВСКИЙ

1858—1930

В. П. Опоричко

МОСКВА
«НАУКА»
1987

ББК 26.3
О 59
УДК 551

Рецензенты:
член-корреспондент АН УССР
Ф. Н. ШЕВЧЕНКО,
доктор геолого-минералогических наук
С. А. МОРОЗ,
доктор исторических наук
В. Г. САРБЕЙ

Оноприенко В. И.

О 59 Павел Аполлонович Тутковский: 1858—1930.— М.: Наука, 1987.— 160 с., ил.— (Научно-биографическая литература).

Книга посвящена жизни, научной и научно-организационной деятельности выдающегося украинского геолога и географа академика АН УССР и АН БССР Павла Аполлоновича Тутковского. Подробно анализируются многочисленные оригинальные его работы в области четвертичной геологии, палеонтологии, стратиграфии, гидрогеологии, региональной геологии. Рассматривается активная и неутомимая деятельность ученого по популяризации научных знаний, педагогическая работа в средних и высших учебных заведениях. Впервые используются архивные материалы по истории организации и становления АН УССР, активнейшим строителем которой был П. А. Тутковский. Восстанавливается история создания первых геологических учреждений Академии наук, ее Физико-математического отдела, которыми он руководил.

О $\frac{1402000000\text{-}079}{054(02)\text{-}87}$ 39—87 НП ББК 26.3

Дом (Провиантская, 12, ныне Довженко, 27), в котором жил П. А. Тутковский во время работы в Житомире

Armelle Billard

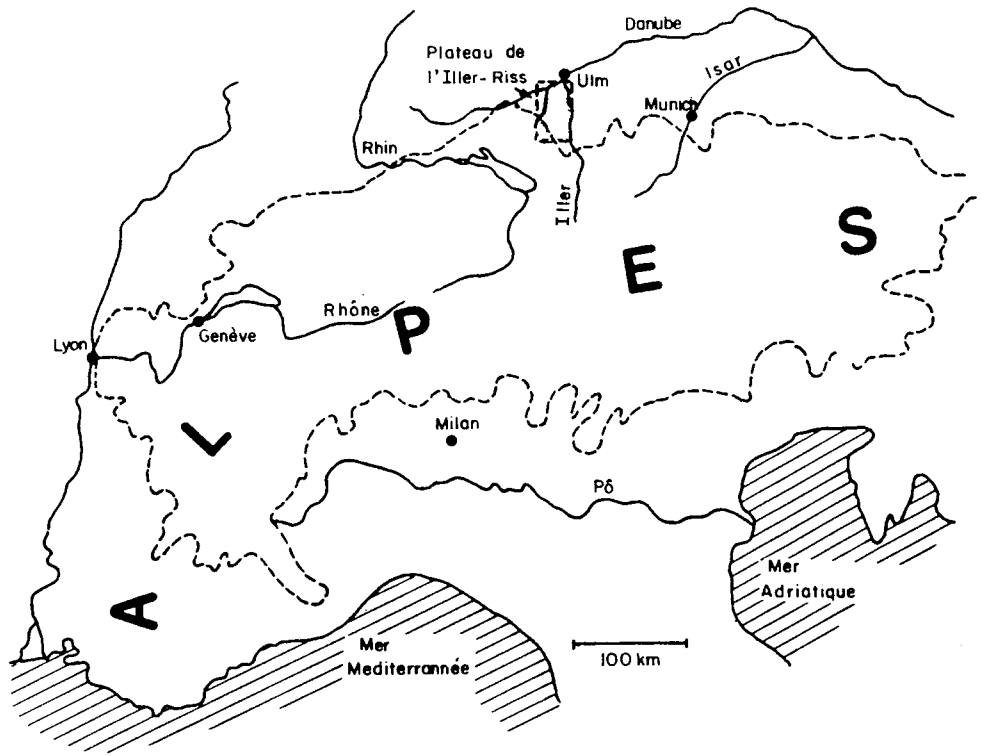


Fig. 1. – Les Alpes : localisation du plateau de l'Iller-Riss sur le piedmont nord. Le tireté représente l'extension maximale des glaciations quaternaires.
Fig. 1. – The Alps showing location of the Iller-Riss plateau on the northern piedmont. Broken line represents the maximum extension of the Quaternary glaciations.

Centre régional de publication de Meudon-Bellevue

Laboratoire de Géographie Physique
U.A. 0141

Éditions du Centre national de la recherche scientifique
15, Quai Anatole-France 75700 Paris

INTRODUCTION

Le cadre géographique régional

Au nord des Alpes, du lac de Constance à la rivière Inn, le plateau souabe et bavarois forme une vaste région longue d'environ 300 km sur une largeur de 60 à 80 km à sa partie occidentale proche de Biberach et de Memmingen passant à 100-120 km à sa partie centrale proche d'Augsbourg et à sa partie orientale (fig. 1-2). Très bosselée ou formée de surfaces planes étagées, la région dans son ensemble (à l'exception des environs de Ravensburg qui s'abaissent vers le S-O en direction du lac de Constance) s'incline du sud au nord depuis le rebord des Alpes jusqu'à la vallée du Danube avec des altitudes passant de 1000 m près de la montagne à 500 m à l'ouest en bordure du cours supérieur du Danube et 300 m à l'est. L'ensemble est drainé par les affluents alpins du Danube à direction générale sud-nord sur la partie souabe. Il s'agit d'un plateau à substrat molassique qui a été recouvert à diverses reprises par les glaciers originaires des Alpes centrales, dont le plus vaste a été celui du Rhin et par les accumulations fluvio-glaciaires épandues par leurs eaux de fonte. La surrection lente du plateau souabe a favorisé l'incision des rivières cycliquement interrompue par les alluvionnements fluvio-glaciaires suscitant la formation de systèmes de terrasses étagées. Tandis que la subsidence de la plaine de Munich provoquait, dans cette partie de la Bavière, l'empilement de nappes d'alluvions successives.

Une contradiction : la théorie des «glaciations alpines» confrontée aux données stratigraphiques des loess et des sédiments marins profonds

Dans l'histoire des études sur le Quaternaire des Alpes, la Souabe et la Bavière se différencient de l'ensemble des piedmonts comme ayant servi de support principal aux recherches de Penck et Brückner (1909)*. La région a été le point de départ de leurs

* Dans l'ouvrage de Penck et Brückner (1909), la partie concernant le plateau souabe et bavarois a été traitée par Penck et dans la suite du texte cette référence se limitera à son seul nom.

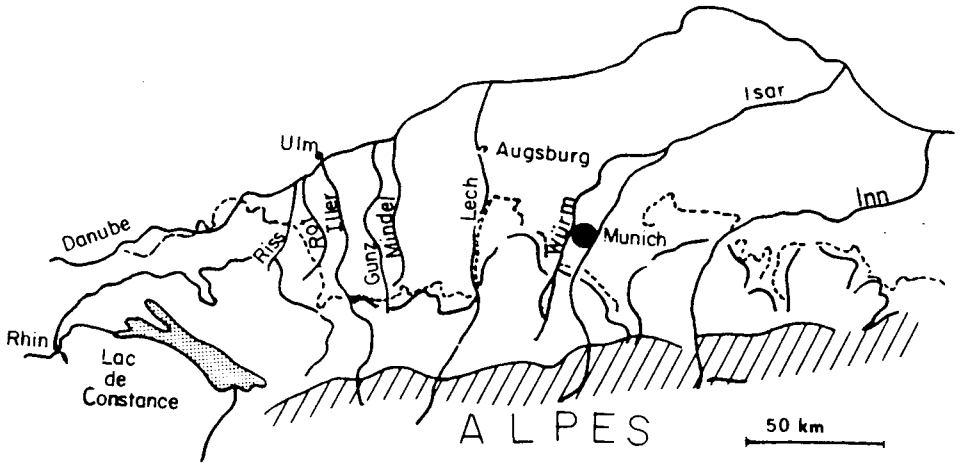


Fig. 2. – Le plateau Souabe et bavarois. - - - - - moraines terminales externes ——— moraines terminales internes (d'après Graul, 1973).
Fig. 2. – The Swabian and Bavarian plateau. - - - - - external end moraines ——— internal end moraines (after Graul, 1973).

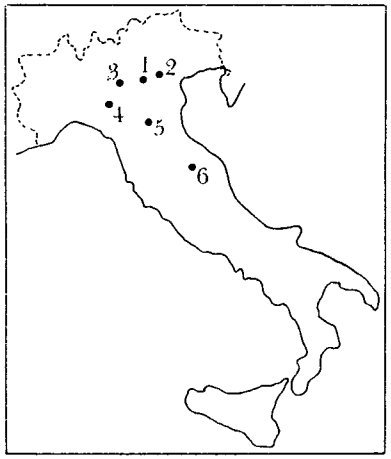
investigations débouchant sur une théorie tri puis quadri-glacialiste qu'ils ont transposée sur les piedmonts français et italien. Quatre glaciations ont été désignées, dans un ordre chronologique croissant, du nom de quatre rivières du plateau souabe et bavarois : Würm, Riss, Mindel et Günz. Le long de ces trois premières rivières Penck a identifié d'amont en aval une moraine formée de dépôts glaciaires, reliée à une terrasse constituée d'alluvions fluvio-glaciaires. Seule la terrasse est représentée le long de la rivière Günz, ses caractéristiques sédimentologiques, granulométriques et pétrographiques lui faisant attribuer la même origine fluvio-glaciaire qu'aux autres. Sur tout le plateau souabe, les autre unités ainsi définies en des lieux d'observation privilégiés ont été retrouvées selon un schéma morphostratigraphique similaire : moraines frontales se plaçant en retrait les unes des autres selon un ordre d'ancienneté décroissant, alluvions étagées dont les deux nappes les plus anciennes dites Günz et Mindel constituent deux «plateaux» (Altere Deckenfelder et Jungere Deckenfelder) et dont les plus récentes forment des «terrasses» plus étroites (Hochterrasse et Niederterrasse) encaissées en contrebas des précédentes (fig. 3).

Joint meeting of the :

INQUA COMMISSION ON LOESS and INQUA COMMISSION ON PALAEOGEOGRAPHY

THE LOESS IN NORTHERN AND CENTRAL ITALY : A LOESS BASIN BETWEEN THE ALPS AND THE MEDITERRANEAN REGION

26th September - 1st October 1988
Second Circular



1. Rivoli area
2. Lessini Plateau and Tagliente rock shelter
3. Castenedolo Terrace
4. Trebbia Valley Terraces
5. Ghiardo Terrace
6. Marche area : Crispiero and Fosso Mergaoni

Aims of the Meeting

Stratigraphy , Geochronology and palaeoenvironmental significance of loess and related fluvioglacial , glacial , periglacial and fluviatile deposits archaeological , palaeontological and palaeocological implications of loess deposits.

PROMOTORS : C.N.R. Centro di Studio per la Stratigrafia e la Petrografia delle Alpi Centrali , Milano ; Dipartimento di Scienze della Terra , Milano ; Dipartimento di Scienze della Terra , Camerino ; AIQUA Associazione Italiana per lo Studio del Quaternario ; C.N.R. Gruppo Nazionale Geografia Fisica e Geomorfologia ; Istituto di Geologia dell ' Università di Ferrara ; Istituto di Geografia dell'Università di Padova.

Provisional Program

Sept. 26, Monday.	Natural History Museum in Verona; Opening of the Meeting. Paper session: the loess in alpine and mediterranean environments. Visit to the Archaeological Collections of the Museum. Overnight: Verona
Sept. 27, Tuesday.	Departure of the excursion : the Rivoli area. Upper and Middle Pleistocene moraine systems and related loess; buried chernosems and "Eemian" paleosol in the Val Sorda sequence; loess, buried chernosems and slope deposits in the Gaiun sequence. Overnight: Verona
Sept. 28 , Wednesday.	Lessini area; the sequence of the Tagliente rock shelter: loess, cryoclastic breccias, Mousterian and Upper Palaeolithic living floors, fauna and pollen in loess environment; Grezzana, Terra Rossa-like soils, loess and stratified slope waste deposits on the top of the Lessini Plateau. Tour of the City of Verona. Overnight: Verona
Sept. 29 , Thursday.	Castenedolo hill; Lower and Middle Pleistocene stratigraphic sequence; old soils (vetusols) and weathered loess covers. The Apennine fringe : loess covers and the Ghiardo Acheulean site. Overnight: Rivergaro
Sept. 30 , Friday.	Trebbia terraces; chronosequences of old soils (vetusols) in gravel and weathered loess covers . Travel to Iesi (Marche) Tour of the city of Iesi Overnight: Iesi
Sept. 31 , Saturday.	Crispiero; "Eemian" buried paleosol and associated Mousterian site , loess , slope deposits and chernosems; Colonia Orfei, Upper Pleistocene stratified slope waste deposits and intercalated tephra; Fosso Mergaoni sequence. Visit to Frasassi caves. End of the Meeting. Overnight: Iesi
Oct. 1 , Sunday.	Morning return to Verona (possible departures by train or plane from Bologna)

- A registration desk will be open in the evening of Sept. 25th , Sunday at the Museum of Natural History in Verona.
- Papers on genesis, stratigraphy and distribution of loess are welcome. Abstracts of paper (no more than one page) with the author(s) full name and address should reach Dr. M. Cremaschi before 30th June 1988. The authors are requested to prepare their abstracts in English for direct reproduction, to be distribuited at the Meeting.
- Papers presented to the Paper Session will be published in an Italian Journal or in a special volume .
- Average total cost (including registration fee and guide-book) 350 U.S. dollars.
- The third circular including the final program will be sent in June 1988 , only to those who will answer to this notice before 15th April 1988.

Dr. M. Cremaschi

Dr. M. CREMASCHI C.N.R. Centro di Studio per la Stratigrafia e la Petrografia delle Alpi Centrali , Via Mangiagalli 34 , 20133 MILANO (ITALY) phone number 02/230328 .

APPLICATION FORM

Please complete and return this form before 15th April 1988 if you are interested to attend the Meeting and wish to receive the third Circular.

Name First name Title

Institution

City Postal Code Country

Telex Phone

☐ I intend to present a paper in the Paper Session and I will send an abstract before 30th June 1988

Title

☐ I prefer to be arranged in a single room.

☐ I accept to be arranged in a double room.

☐ I wish to reserve a room at Verona for the evening on the 25th September

Date Signature

Please return this form to :
Dr.M.CREMASCHI C.N.R. Centro di Studio per la Stratigrafia e la Petrografia delle Alpi Centrali, Via Mangiagalli 34,20133 MILANO (ITALY) phone number 02/230328 .

Loess and China: Essays for Liu Tung-sheng
Edited by Ian Smalley & Edward Derbyshire
Published by Leicester University Press

The Liu Festschrift was discussed at the Ottawa INQUA meeting and the publication policy and schedule have been agreed. The project is being organized by the Documentation Working Group of the INQUA Loess Commission and should be completed in the next inter-congress period. Contributors should submit their papers by the end of September 1988 - this should be regarded as a firm, fixed date. The book is due to be published by 1990, certainly in good time for it to be presented to Professor Liu at the Beijing INQUA meeting in 1991.

Contributors should emphasize the general and universal parts of their work and ensure that they are communicating as clearly as possible. Send manuscripts to Ian Smalley, Geography Department, Leicester University, Leicester LE1 7RH, England.

黄土通讯

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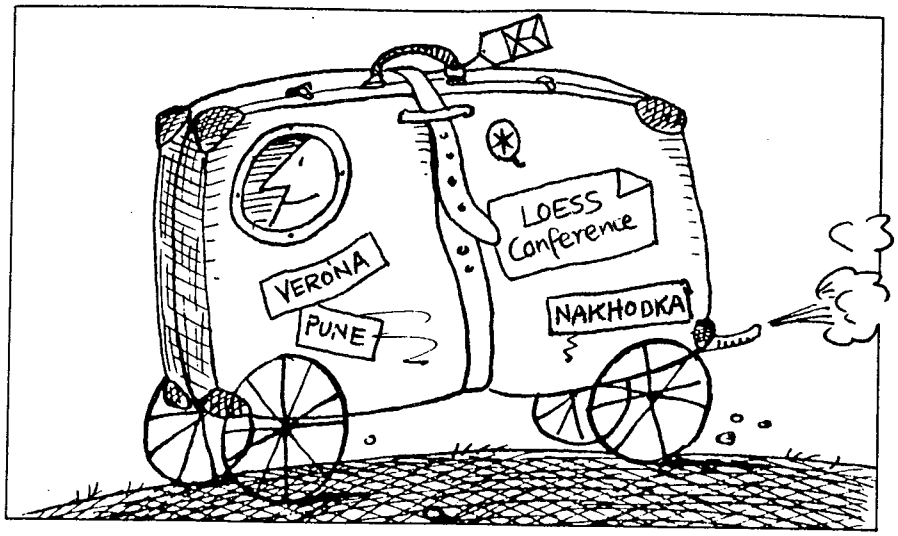

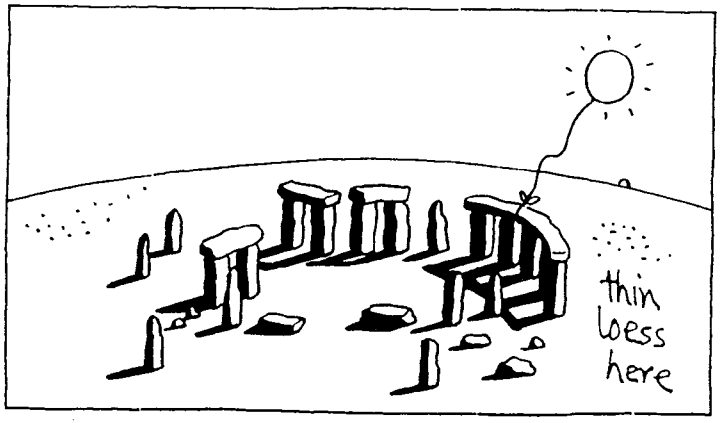

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