

REFLECTIONS ON ISSMGE PAST

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ABSTRACT

This presentation summarizes the evolution of ISSMGE, from its first International Conference with 206 delegates to its current status with nearly 19,000 members. Three phases are defined: Infancy, followed by Adolescence and Maturity. Personal reflections accompany the discussion of each phase. On this 75th Anniversary of ISSMGE, the Society can look back on its achievements with considerable pride.

RESUMEN

Esta presentación resume la evolución del ISSMGE, desde la primera Conferencia Internacional con 206 delegados, hasta su situación actual con casi 19,000 miembros. Tres fases son definidas: Infancia, seguida de Adolescencia y Madurez. La discusión de cada fase esta acompañada por reflexiones personales. En este 75 aniversario del ISSMGE, la Sociedad puede mirar atrás y contemplar sus logros con orgullo.

1 INTRODUCTION

The web site of our Society provides a brief summary of its history and its current status. It records that 206 delegates attended the First International Conference on Soil Mechanics and Foundation Engineering held at Harvard in 1936. The Society now has 88 Member Societies worldwide representing nearly 19,000 individual members and operates 30 technical committees working on a wide range of topics. Its aim is, and has always been, the promotion of international cooperation amongst engineers and scientists for the advancement and dissemination of knowledge in the field of geotechnics, and its engineering and environmental applications.

On this occasion, we celebrate the 75th anniversary of the Society which is a matter of very considerable achievement. All of our membership has benefitted from the remarkable success of this organization and it is appropriate to take this opportunity to reflect on our history and recognize the contributions of those who have guided it through its continued success.

Table 1 lists the Presidents of ISSMGE and this chronology provides a useful reference basis for identifying key phases in the evolution of our Society. No less significant are those who have served the Society as Secretary/Secretary General and they are listed in Table 2.

My own involvement with the Society began in 1957 when I was a graduate student at Imperial College and attended the 4th International Conference. This was the last that Terzaghi attended and marked a significant new phase in the maturing of the Society. My sense of the phases are:

- 1936-1957 Infancy
- 1957-1977 Adolescence
- 1977-Present day Maturity

Reflections and reminiscences follow below under these headings.

Table 1. ISSMGE Presidents

Years of Service	ISSMGE President	Phase
1936–1957	K. Terzaghi (Austria, USA)	Infancy
1957–1961	A.W. Skempton (UK)	Adolescence
1961–1965	A. Casagrande (USA, Austria)	Adolescence
1965–1969	L. Bjerrum (Norway)	Adolescence
1969–1973	R.B. Peck (USA)	Adolescence
1973–1977	J. Kerisel (France)	Adolescence
1977–1981	M. Fukuoka (Japan)	Maturity
1981–1985	V.F.B. de Mello (Brazil)	Maturity
1985–1989	B.B. Broms (Singapore)	Maturity
1989–1994	N.R. Morgenstern (Canada)	Maturity
1994–1997	M. Jamiolkowski (Italy)	Maturity
1997–2001	K. Iihara (Japan)	Maturity
2001–2005	W. Van Impe (Belgium)	Maturity
2005–2009	P.S. Sêco e Pinto (Portugal)	Maturity
2009–2013	J.-L. Briaud (USA)	Maturity

Table 2. ISSMGE Secretaries/Secretaries General

Years of Service	Secretary/Secretaries General
1936 – 1945?	A. Casagrande (USA)
1948	T.K. Huizinga (Netherlands)
	D. Taylor (USA)
1957 – 1961	A. Banister (UK)
1961 – 1965	A. McDonald (UK)
1965 – 1981	J.K.T.L. Nash (UK)
1981	J.B. Burland (UK)
1981 – 1999	R.H.G. Parry (UK)
1999 - 2013	R.N. Taylor (UK)

2 INFANCY

The actual father of our Society was Arthur Casagrande who conceived of and organized the First International Conference on Soil Mechanics and Foundation Engineering with Karl Terzaghi as President and Daniel Moran as Vice-President. This perceptive contribution went a long way to establish Casagrande's international reputation and the Soil Mechanics program at Harvard University as a destination of choice.

Richard Goodman (1999), in his intimate memoir on Terzaghi, provides some details on the interchange between Casagrande and Terzaghi at the time. At first, Terzaghi was fearful that the subject was not adequately mature to warrant an international congress and worried that dissatisfaction with the congress would be retrograde for the development of the subject. Ultimately, he accepted the concept with enthusiasm and Goodman records his close interaction with Casagrande working on the details of the Conference.

Finally the Conference began on June 19, 1936 with an event at Rockefeller Centre in New York, prior to continuing at Harvard. The Conference was a great success with 206 delegates from twenty countries.

A resolution adopted at the First Conference expressed that the Second Conference be called to meet at a time and place to be selected by the President of the International Conference (Karl Terzaghi), with the advice of the International Committee. This resulted in preparations for the Second International Conference to be convened in the Netherlands in 1940 in honour of the opening of the Maastunnel at Rotterdam. However, all of these plans were interrupted by the second world war.

Soon after the war, and notwithstanding their straightened circumstances, the Dutch regained the initiative to plan for the next Second International Conference on Soil Mechanics and Foundation Engineering in Rotterdam in 1948.

This must have been a remarkable event. There was an explosion of material published, culminating in six volumes. Planning was based on 300 participants but, ultimately, there were 596, together with representatives

of 23 National Committees. It is of interest to note that in his Opening Address, Terzaghi (1948) observed that the boundary between Soil Mechanics and Engineering Geology appeared to be artificial and "that the time may come when it will be appropriate to combine soil mechanics and engineering geology into one unit, under a name such as "geotechnology". These issues are still with us!

This address was also visionary in emphasizing the regional variations in soils requiring regional variations in practice. Distinctions were made between the cohesionless and soft organic clay soils of the Netherlands, the varved clays of Sweden and Northern North America and the residual soils of Brazil, thereby presaging the rapid expansion of the subject and our Society on a regional basis.

The formalization of the Society actually occurred at the Second Conference. On June 22, representatives of 23 National Committees assembled to discuss proposed statutes with Karl Terzaghi as President and Chair. A comprehensive record of discussion exists in Volume VI of the Conference Proceedings. The statutes were presented to the Conference on June 24 and approved with modifications arising from the discussions. These original statutes are included as Appendix A. The major activities of the Society centered around the assembly of Annual Reports from National Committees and the organization of the next Congress.

In 1951, Executive Committee of the Society decided to hold the Third Conference in Switzerland in 1953 and with the support of the Swiss National Committee it was convened in Zurich in August of that year. This Conference attracted about 700 participants and the membership of the International Society had grown to 27 National Societies. A comprehensive report on the Executive Committee meeting appears in Volume III of the Proceedings of the Third International Conference on Soil Mechanics and Foundation Engineering. The revised statutes are also presented. The value of creating permanent Research Committees had now been identified as a valuable activity for the International Society.

The Fourth International Conference was convened in London, in 1957. At that time National Society membership was up to 30, representing an individual membership of 2525. Additional countries were in the process of joining. As before, members of the Executive Committee meetings are published in Volume III of the Proceedings of the Fourth International Conference on Soil Mechanics together with revised statutes reflecting discussions at the meeting. It is of interest to note that the organization of technical sub-committees now appeared within the mandate of the International Society. The following sub-committees were appointed:

- Classification of Geotechnical Literature
- Notations and Symbols for Use in Soil Mechanics
- Methods of Static and Dynamic Penetration Tests
- Undisturbed Sampling

At the time of the 4th International Conference in 1957, Terzaghi was still President of the Society, but was approaching the age of 74 years. It was his view, and that of others, that it was time to elect a successor. Arthur Casagrande appeared to be the logical successor

in the minds of many, but he declined the nomination. Casagrande held the view that the President ought to be elected from the continent in which the Conference will be held. This view prevailed and Alex Skempton (UK) was elected President by acclamation.

This marked the end of the period of Infancy of the Society.

3 ADOLESCENCE

WIKIPEDIA describes adolescence as “usually accompanied by an increased independence allowed by the parents or legal guardians and less supervision.....”. The Adolescent period of the Society began with Skempton’s presidency.

In the 1950’s the value of Regional Conferences became recognized. The first was the Australian Conference held in Australia in 1952. Other regions followed resulting in a quadrennial pattern for Regional Conferences set off by two years from the quadrennial sequence of the International Conferences. This 14th Pan-American Conference reflects regionally based activities of the Society. In addition, nationally-based technical activities proliferated. For example, the 64th annual Canadian Geotechnical Conference is being held in conjunction with this Pan-American Conference.

The value of convening conferences on subjects of special and current interest also became recognized. The European Conference on the Stability of Earth Slopes in 1954 and the Brussels Conference on Earth Pressure in 1958 established the technical value of such meetings. Peck (1985) has chronicled the first quarter-century of the Society and observed by 1961 “The growth of interest in soil mechanics has indeed been explosive”.

In my view, the period of Adolescence ended in 1977 with the convening of the International Conference under the presidency of Masami Fukuoka. The appointment in 1965 of Kevin Nash as Secretary-General was transformative for the Society. It brought a knowledgeable and caring person to the administrative helm of the Society and, without this change, it is unlikely that the Society could have matured as it did.

One excellent outcome of this strong administrative guidance was the new constitution and by-laws published in the Proceedings of the 7th Conference in 1969. They guided the organization structure of the Society for many years and stand in fascinating contrast with the first Statutes reproduced here in Appendix A.

A limitation of the Society during the period of Adolescence was its failure to recognize the emergence of both Rock Mechanics and Engineering Geology as disciplines that required their own societal structure. This arose notwithstanding the recognition of Terzaghi and subsequent Presidents of the Society of the need to embrace both in Geotechnical Engineering. Morgenstern (2000) recounts the historical evolution of the sister societies and their specialized perspectives.

4 MATURITY

My dictionary defines “mature” as “complete in natural development; with fully developed powers of body and mind”.

The transformation to Maturity began with the award of the International Conference to Tokyo in 1977 and the subsequent election of Masami Fukuoka to President at that time. It was, to a large degree, completed by the next two Presidents, Victor De Mello and Bengt Broms. In my acceptance speech of the Presidency (Morgenstern, 1989), I commented on the evolution of the Society as follows:

“With Past President Fukuoka the responsibilities for guiding our Society left its Euro/N. American roots. The fledgling had grown up. The bird was ready to leave its nest. The Society began to operate in a truly international manner.

With Past President de Mello we were challenged to raise our ambitions, to increase our level of activities and to open and regularize our organizational systems. This was a watershed experience for the Society after which there was no turning back.

With Past President Broms, we were directed to become a more caring Society. The Model Library Project and the Young Engineers Conference, concepts initiated by Dr. Broms, are two examples that illustrate our direction.”

Society management and ambitions during its Adolescent phase were primarily custodial. With the beginning of the Mature phase the desire to do more technically is seen to emerge and the potential to utilize Technical Committees in a more pro-active manner can be discerned. An early example was the establishment of a Technical Committee on Landslides with, among other things, a mandate to convene an International Symposium on Landslides every four years. This was a perceptive and timely act of leadership whose success is beyond doubt. However, it began a process of weakening the content of the International Conference in its traditional mold. In the following years much of the technical leadership of the Society was driven by the work of these Committees with spectacular results. The publications on Environmental Geotechnics, Geotechnical Earthquake Engineering and others provide compelling examples.

In my own Presidential Address to the XIII – ICMFE Conference in New Delhi (Morgenstern, 1994), I was able to express my satisfaction with the growing capacity of the Society to meet the needs of its membership and reflect on efforts taken and needed in the future to:

- Be financially secure
- Provide technical leadership (the Technical Committee complex had become remarkably productive)
- Collaborate (the need for collaboration with both ISRM and IAEG was emphasized)
- Communicate
- Care for our members

The Society has continued to attend to these and other matters under the effective leadership of subsequent Presidents.

5 ISSMFE-ISSMGE

The limitations associated with the traditional name of the Society had long been an issue of contention within the Society and proposals to change it had been deflected on a number of occasions. Agreement to change the name to ISSMGE was finally reached in 1997 when Michele Jamiolkowski was President. The discussions leading to this agreement reflected the widespread view that ISSMFE no longer reflected the breadth of activity of its membership but there was a need to avoid a clash with ISRM and IAEG. The resulting change was accepted as a necessary step in the right direction, notwithstanding some criticism from Presidents of ISRM and IAEG.

At the same time, following a suggestion of Jamiolkowski, there was agreement that the three Sister Societies should jointly sponsor a major conference in the year 2000. This culminated in Geo Eng 2000, held in Melbourne, which was an enormous success. My keynote address to the Conference traced the development of the three sister societies and spoke to the value of more formal collaboration (Morgenstern, 2000). This has yet to be achieved in a meaningful manner, although the increased evolution of National Societies to be umbrella organizations, and the increased complexity of the technical issues of our times, which transcends simple discipline boundaries, emphasize the need to continue to address the challenge.

6 CONCLUDING REMARKS

We have much to be proud of as we celebrate the success of ISSMGE, both at the technical and the operational level. I wish it ongoing success as it continues to evolve.

REFERENCES

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INTERNATIONAL SOCIETY OF SOIL MECHANICS
AND FOUNDATION ENGINEERING

S T A T U T E S

I. NAME, AIM, SEAT AND LANGUAGE OF THE SOCIETY.

Art. 1. The name of the Society is the "International Society of Soil Mechanics and Foundation Engineering".

Art. 2. The aim of the Society is to promote International cooperation among scientists and engineers, interchange of knowledge, ideas and the results of research and practical experience in the sphere of Soil Mechanics and its practical applications.

The Society ensures the progress of Soil Mechanics and its practical applications by:

- a. holding congresses
- b. publishing annual reports containing a review of the contributions to Soil Mechanics which every country has made during the last year.

Art. 3. The Executive Committee determines the seat of the Society, until otherwise determined the seat of the Society shall be at the Harvard University, Cambridge (Mass).

Art. 4. The official languages of the Society are English and French.

II. MEMBERS, NATIONAL COMMITTEES, CONTRIBUTIONS.

Art. 5. The International Society is composed of National Committees. Each National Committee may organize a National Society or affiliate to existing Societies.

Art. 6. Every member of one of the aforementioned national organizations is at the same time a member of the International Society. Membership of the Society may be acquired by any person or Society who is interested in Soil Mechanics or its practical applications, subject to approval by the National Committee.

Art. 7. Annual contributions will be collected by the National Committees only. They should be determined such as to cover the business expenses of the National Committees.

Art. 8. In the last month of every year the Chairman of each National Committee should send in duplicate to the Secretary of the Executive Committee the names, addresses and professional affiliate of all its members. He should also provide the Secretary of the Executive Committee with the Statutes of his national organization in duplicates and he should inform him on any amendments to the Statutes which are made in the course of time.

After all the membership lists have arrived, the Secretary of the

Executive Committee will make an estimate of the cost of printing of the membership list of the International Society and inform the Chairman of each National Committee on the price. The Chairman will place an order for the number of copies he desires for his country, accompanied by payment in U.S.A. currency whereupon printing will be started.

III. MANAGEMENT OF THE SOCIETY.

Art. 9. The management of the Society consists of the Executive Committee.

Art. 10. The Executive Committee consists of:

1. The President
2. The Secretary
2. A delegate of each National Committee.

The president of the present Congress will also be president of the Executive Committee.

The Secretary of the Executive Committee will be appointed by the President.

Until this appointment can be made, the functions of the Secretary will be carried on by the Secretary of this Congress.

Art. 11. During the interval between two Congresses the Executive Committee has all the powers of the Congress.

IV. THE ANNUAL REPORTS.

Art. 12. Every member of every National Organization should submit before the end of June of each year to the Chairman of his National Committee a statement of his activities in the field of Soil Mechanics and its applications and a brief abstract of all his publications during the last 12 months. The scope of this statement is left to the discretion of the member.

Art. 13. The National Committee prepares a summary of all the individual statements which have been received. This summary should contain a comprehensive picture of all the activities which have been carried out during the last twelve months in the country represented by the National Committee. In this summary the material should be divided into sections corresponding to the sections covered by the Proceedings of the Second Congress and each section should be followed by the abstracts of all the papers which belong to this Section.

Art. 14. The Chairman of the National Committee should send before the first of October of each year to the Secretary of the Executive Committee

100 copies of the annual report of his National Committee. The size of the annual reports shall be the same as that of the Proceedings of this Conference. The Secretary arranges these reports into 100 annual reports each of which contains a complete set of the National reports.

After the reports are assembled into sets the Secretary of the Executive Committee sends at least two sets to the Chairman of each National Committee.

V. THE CONGRESS.

Art. 15. Time and place of the next Congress will be decided by the Executive Committee.

Art. 16. One year before the next Congress the Executive Committee will appoint a general reporter for each one of the 12 sections covered by the annual report. The National Committee to which a general reporter belongs shall appoint one or more assistants to the general reporter. On the basis of the contents of the annual reports and of any additional information which he can secure, each general reporter will prepare a report on the progress which has been made since the last congress in the field covered by his section. The general reports will be assembled in

the first volume of the Proceedings of the Congress and every participant of the next Congress will receive a copy of this volume not later than 6 months before the Congress starts. The printing and mailing of the Proceedings will be carried out by the National Committee of the country in which the Congress is to be held.

Art. 17. During the Conference the presentation of the general reports will be followed by discussions. These discussions, together with written discussions, to be presented two months in advance to the General reporter should contain contributions to the subjects covered by the general reports, and the Congress will be ended by the formulation of conclusions to be based on the contents of both the general reports and discussions. The conclusions will be prepared by the general reporter. The discussions together with the conclusions will be published in subsequent volumes of the Proceedings.

Art. 18. These statutes are drawn up in the closing meeting of the Second International Conference on Soil Mechanics and Foundation Engineering at Rotterdam.

Rotterdam June 26th 1948

The President : K. Terzaghi.
The Secretary : T.K. Huizinga.