

A REVIEW OF THE CHRONOLOGICAL HISTORY OF *Soils and Foundations* FROM 1960 TO 1998

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INTRODUCTION

On the occasion of the 50th Anniversary of the Japanese Geotechnical Society (JGS), the editorial committee of *Soils and Foundations* (*SF*) set up a working group (comprising the authors) to review the 40 years of *SF* and provide a chronological perspective to its development. This can provide us a historical perspective to help the journal forge forward in its further development in the new millennium as Tatsuoka (1999) explains in this issue. In this report, the chronology of *SF* is presented together with brief explanation.

HISTORY OF SOILS AND FOUNDATIONS

Major events of *SF* are summarised in a chronological order together with special events in JGS and major natural disasters in Japan in Table 1. *SF* was founded as a semi-annual English geotechnical journal in April 1960. As shown in Fig. 1, the circulation of each issue was 300 copies in the first 7 years of its history. As Yoshimi (1999) pointed out and also shown in Fig. 1, the special issue on Niigata Earthquake was instrumental in establishing the reputation of *SF* in the geotechnical engineering community in the world and also helped to increase its circulation. In 1972 the establishment of the Journal of the Japanese Society for Soil Mechanics and Foundation Engineering (JJSSMFE, currently JJGS), which contains English papers published in *SF* and some Japanese papers, contributed to the sudden jump of the total circulation of *SF* and JJSSMFE. As Tatsuoka (1999) analysed, since this dramatic increase, the growth of circulation has been gradual. Although the record of subscribers before a certain period could not be ascertained, it can be seen from Fig. 2 that the number of Japanese subscribers has continuously increased, while the overseas one has kept constant at least in the last ten years. From Volume 39, which is published this year, *SF* increased the annual number of issues from four to six, thus becoming a bimonthly journal. This definitely solves some problems that *SF* had been facing in recent years and provides greater opportunities and flexibility for future development.

The chairmen and vice-chairmen of the editorial committee are listed in Table 2. In the history of *SF*, there have been a total of ten chairmen and nine vice-chairmen. Only two persons had served as the chairman twice, they are the founder of *SF*, Prof. T. Mogami and Prof. Y. Yoshimi. During the second period of Prof. Mogami's chairmanship, the position of vice-chairman was introduced for the first time and the holder was Prof. Yoshimi. In total, Prof. Yoshimi contributed for more than 12 years to *SF* as the chairman or vice-chairman. The contribution by Prof. Mogami and Prof. Yoshimi cannot be overestimated in the history of *SF*. In Fig. 3, chronological data of the number of editorial committee member are shown. From 1969 to 1980 the number increased gradually. However, since then, the number had remained virtually constant (18-21) until 1997 when the committee decided to increase the number in order to response to the increase in submitted papers and also decrease the processing time in the review of paper.

Development of cover layout in *SF* and JJGS are shown in Fig. 4. *SF* has kept simple designs at the cover even at the time when we change the size from B5 to A4 in 1994, though for the first time, a drawing was put on the cover. However, from this year it returned to a more simple style, similar to that in early 80's. Another major change in the cover was the change of name of our society, which was followed by the change of the logo of the society. These changes can be seen from 1994 to 1996.

STATISTICAL DATA ON THE PAPERS OF *S&F*

Figure 5 shows the chronological data of the number of papers and discussions published in *SF*. In the early period of *SF*, before establishing its reputation, the number of papers per year was very small. Actually only one issue was published in both 1961 and 1965. In this period, members who worked for *SF* produced papers by themselves. This tremendous effort produced the processing momentum which resulted in the continuous increase in the number since

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1966. However, because of the limitation of total pages published and an increase of the average number of page per paper, this increase was suddenly halted from 1992, and caused the long waiting period between submission and publication. But the efforts described by Tatsuoka (1999) in this issue overcome this intolerable condition and lead to a marked increase in the number of the paper in 1998. In Fig. 6 acceptance ratio is shown in a chronological order. The definition of acceptance ratio is the number published in a certain year divided by the number of submitted one in the same year. Hence, at times, the ratio could exceed 100% due to the rollover of papers submitted previously. Data about the submitted papers before 1967 could not be remained. Although some fluctuation can be seen in the ratio, average acceptance ratio since *SF* introduced the review system in 1968 is slightly higher than 60%.

In order to provide a historical perspective of *SF*, the working group made a brief review of all the papers published in *SF* and classified the papers from different perspectives. Figure 7 compares the number of papers published through the years in which the first author is Japanese versus those who are not. Submission of papers from overseas actually started in 1967, which is a good evidence that the Special issue on Niigata earthquake has drawn the international attention to *SF*. Furthermore the number of papers from overseas increases continuously from late 70's. From Fig. 8 which compares the first authors based on their affiliation, it can be confirmed that majority of the papers have come from university, that is academic world. This may have caused the current impression that *SF* is too academic and contains fewer papers concerning practical aspects of geotechnical engineering.

Paper classification 1 on research subjects are given in Fig. 9. It is clear that soil property is the major subject in the history of *SF*. Dynamic problem, foundation, slope stability and ground improvement formed the second most frequent topics. From this figure it can also be confirmed that the papers on practical topic dealing with field data, such as construction and underground structures have been less well published in *SF*. Figures 10 and 11 show the results of the review on paper classification 2 and 3, namely ground types and approaches used in each study respectively. Sand, clay and other unusual soils, such as volcanic soils, weathered granite, organic soil and intermediate soils have been evenly studied in the 80's. In the 90's sand has been most frequently studied followed by clay. The fewer number of papers dealing with rock clearly shows the importance to attract more papers on rock mechanics in order to be a real journal on geotechnical engineering. As for the approach adopted in the *SF* papers, the largest numbers of papers are based on laboratory tests. Analytical approaches and model and field tests showed a good shape in their proportion. It is very interesting to see that the paper using site investigation has increased in number recently.

FURTHER INFORMATION ON *SF*

As one of the major activities celebrating the 50th Anniversary of JGS, JGS (1999) published a book on its history together with a CD-ROM. In this CD-ROM, titles of all the papers published in *SF* and JJGS from 1960–1998 are stored together with the source of data shown in Figs. 7–11. This will prove helpful to researchers who need to search for appropriate papers.

REFERENCES

- 1) JGS (1999): History of JGS—celebrating the 50th Anniversary—.
- 2) Tatsuoka, F. (1999): "39 Years of *Soils and Foundations*," *Soils and Foundations* Vol. 39, No. 5, pp. 1–3.
- 3) Yoshimi, Y. (1999): "*Soils and Foundations* during the 1960s," *Soils and Foundations* Vol. 39, No. 5, pp. 5–6.

Table 1. Chronological table of *SF*

Year	Events on <i>SF</i> and Journal of JGS	Special events in JGS and major natural disasters
1960	Founding Semiannual Journal as “ <i>Soil and Foundation</i> ” in April, 300 circulation	2nd WCEE (Tokyo and Kyoto, July)
1963		2nd ARCSMFE (Tokyo, May)
1964		Niigata EQ:M=7.5 (June)
1966	Special Issue on Niigata EQ.	
1967	Quarterly Journal	
1968	Introducing review system Renaming as “ <i>Soil and Foundation</i> ”	Tokachi-oki EQ:M7.8 (May)
1970	Inclusion of ISSMFE NEWS	
1972	1st Issue of Journal of Japanese Society of SMFE, 1,500 circulation	
1977		9th ICSMFE (Tokyo, July)
1978		Miyagikenoki EQ M=7.4 (June)
1982	Renewal of cover page and layout (2 columns)	Nagasaki flood (July)
1983		Nihonkai-Chubu EQ M=7.7 (May)
1984		Naganoken-Seibe EQ M=6.9 (Sept.)
1987	Inclusion of abstracts of Japanese paper in <i>SF</i>	8th ARCSMFE (Kyoto, July)
1988		9th WCEE (Tokyo and Kyoto, Aug.)
1991		Eruption of Unzenfugen Volcano (June)
1993		Hokkaido-Nanseioki EQ M=7.8 (July)
1994	Renewal of cover page and size from B5 to A4	
1995		Hyogoken-Nanbu EQ M=7.2 (Jan.) 8th ISRM Congress (Tokyo, Sept.) Change of the name of society from JSSMFE to JGS
1996	Special Issue of Hyogoken-Nanbu EQ.	
1997	Inviting international editorial members	
1998	<i>SF</i> Symposium on Hyogoken-Nambu EQ.	
1999	Bimonthly Journal <i>SF</i> Symposium on Geotechnical Aspect of Underground Construction in Soft Ground	50th Anniversary of JGS

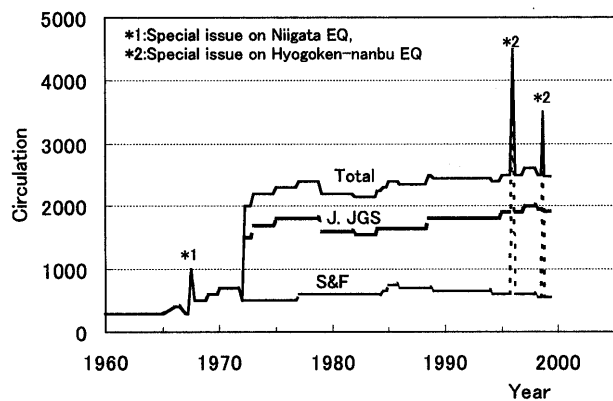
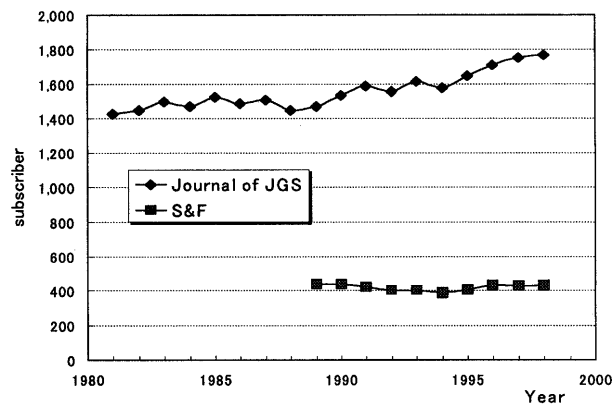
Fig. 1. Circulation of journal of JGS and *SF*Fig. 2. Subscription of journal of JGS and *SF* (from 1981)

Table 2. Chairmen and vice-chairmen of editorial committee

Year	Chairman	Vice-chairman	Number of members
1960	Takeo Mogami (1960-1961)		
	Jyunichi Miyako (1961-1964)		
	Takashi Watanabe (1964-1966)		
1970	Yoshiaki Yoshimi (1966-1971)		8-10
	Takeo Mogami (1971-1976)	Yoshiaki Yoshimi (1974-1976)	14-15
	Hakuju Yamaguchi (1976-1980)	Ryoki Nakano (1976-1980)	16-18
1980	Yoshiaki Yoshimi (1980-1984)	Tsutomu Kimura (1980-1982)	17-21
		Tamotsu Matsui (1982-1985)	19-21
	Kanji Yanai (1984-1988)	Hideki Ohta (1985-1989)	18-20
1990	Kenji Ishihara (1988-1992)	Osamu Kusakabe (1989-1994)	18
	Tsutomu Kimura (1992-1995)	Hideo Sekiguchi (1994-1997)	18-21
	Fumio Tatsuoka (1995-1999)	Akira Asaoka (1997-1999)	18-25
	Akira Asaoka (1999-)	Ikuo Towhata (1999-)	25

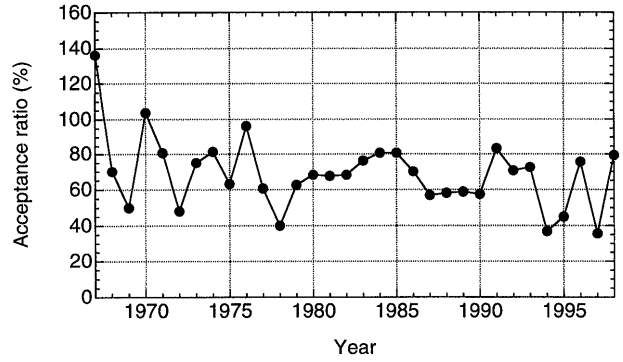


Fig. 6. Acceptance ratio

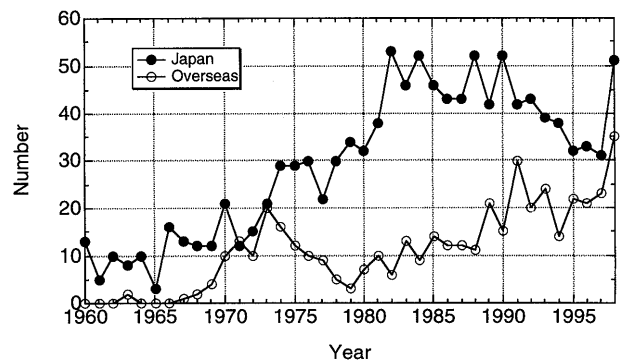


Fig. 7. First author classification 1 (Country)

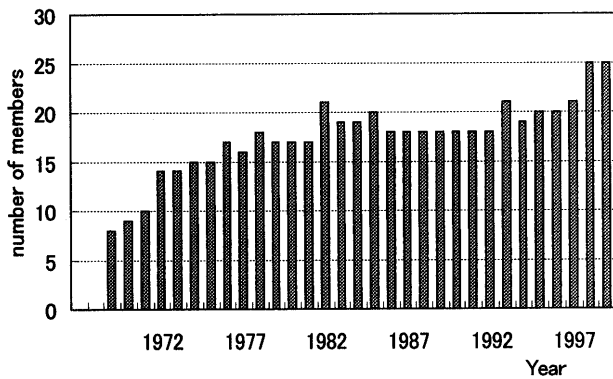


Fig. 3. Number of editorial committee members

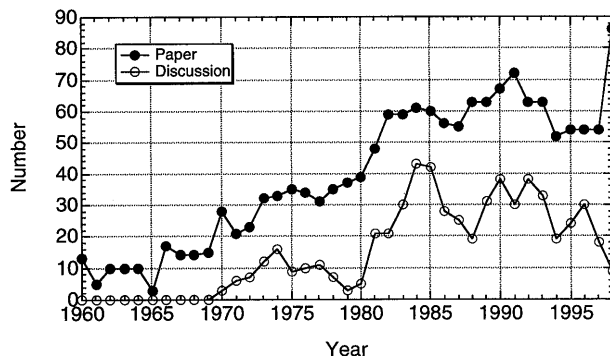


Fig. 5. Paper and discussion

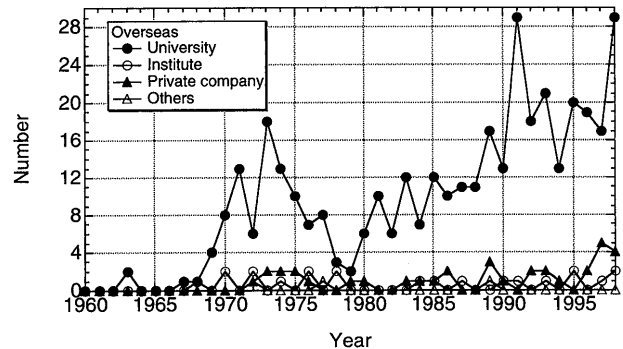
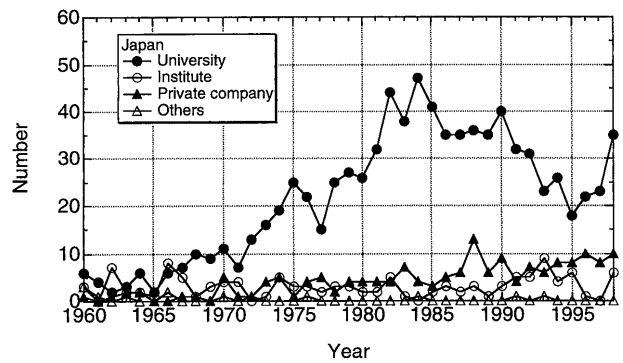


Fig. 8. First author classification 2 (Affiliation)

Soils and Foundations



Journal of the JGS

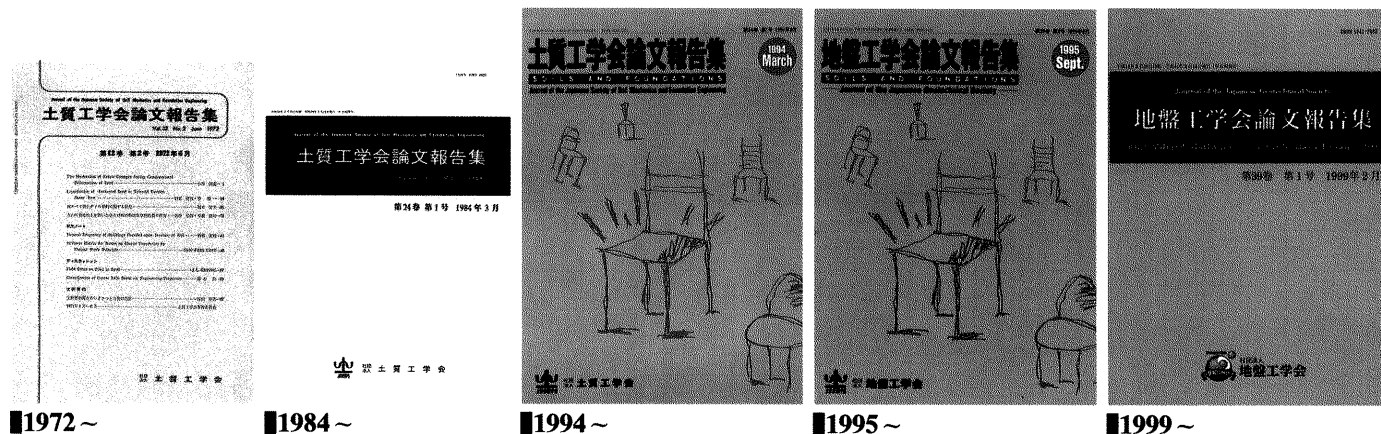


Fig. 4. Development of cover of SF

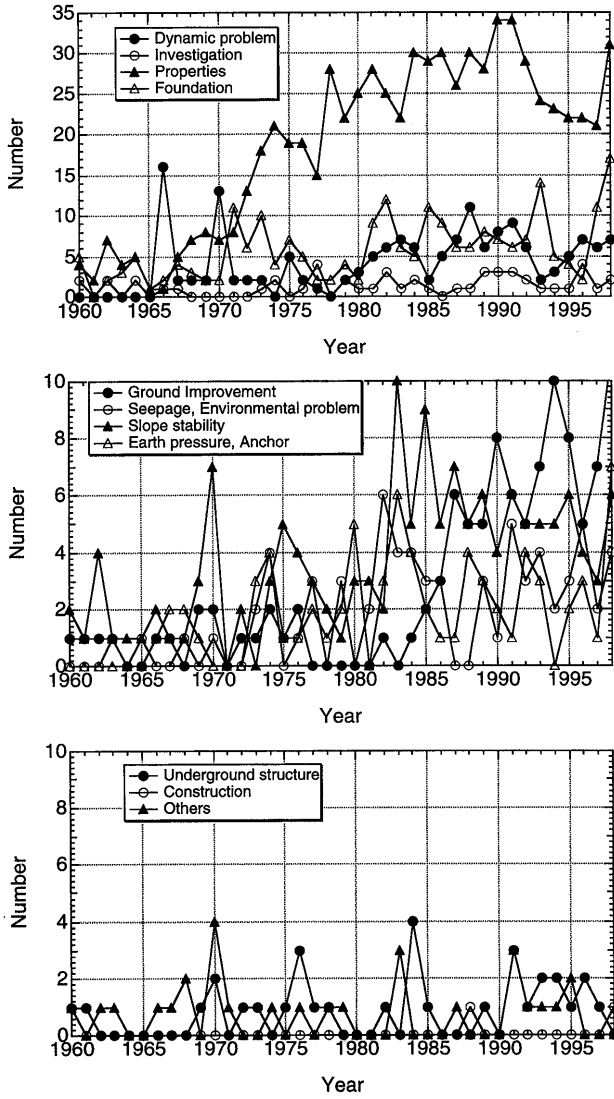


Fig. 9. Paper classification 1 (Research subject)

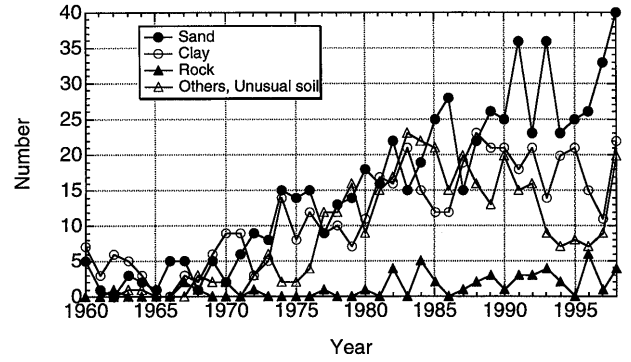


Fig. 10. Paper classification 2 (Ground type)

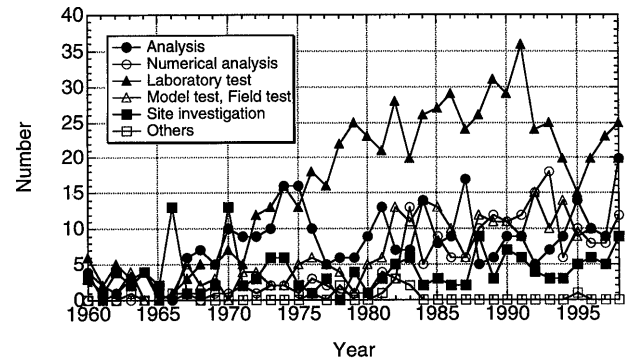


Fig. 11. Paper classification 3 (Approach)