At the IRIS 17 (1994) seminar in Syöte, Finland, we organised a workshop on Infurgy. Infurgy was introduced as a new discipline which was to integrate information and work [inf(ormation) + ergon (work in Greek)].

In the workshop the participants had the Infurgic Manifesto printed on two pages in the proceedings. The manifesto was read out loud by Tone Bratteteig, Oslo. This was followed by a semi-structured interview during which I tried to answer the questions made by Kristin Braa, Oslo. Then a lively discussion followed. Both enthusiastic and critical voices were heard. After 90 minutes the session was finished and the audience left the room. Obviously some of them had difficulties in deciding whether it was a scientific discussion or entertainment. In retrospect we can reveal that it was intended to be both. Now the Infurgic Manifesto is reprinted below.

The workshop was organised by two groups, Laboris and FIRE. Laboris [Labor = work in Latin, whereas IS stands for information systems] is a laboratory for information systems research at the University of Turku, Finland. Laboris continues the tradition of the research project “Knowledge and work” (1985-1989). Empirical studies on IS use at work since 1985 could be the slogan. I was then and I still (1996) am the head of Laboris.

FIRE was a research project (1992-1994) at the department of Informatics, University of Oslo. Its full name Functional Integration and REdesign tells much about its orientation. More informative for infurgically interested is, however, one early organisation of FIRE into
two sub-projects: FIRE-Engine (for technical issues) and FIRE-Works (for issues on work and its organisation).

In January 1994 I started working part time in Oslo. The workshop had its background in my commuting between Turku and Oslo. But there were other sources of inspiration. In particular the anthology Design at Work (edited by Greenbaum & Kyng 1991) must be mentioned. After the seminar the interest in information systems in work situations has continued to attract more people and attention. CSCW has moved from cooperation towards work. Quality in use has been declared as the ultimate goal of the Qualitheque at the Lund University. Et cetera. Yet the thematisation of our discipline has not seriously been affected by the challenge of infurgy. This gives a good reason to revisit the Infurgic Manifesto. I was its main author, and the help I received from the members of both groups, in the form of many useful comments, is hereby gratefully acknowledged.

Infurgic Manifesto

1. Infurgy is a scientific discipline which explicitly addresses any issues which relate work and information (technology) with each other.

2. Infurgy is originated in the concern of the harmful technical bias in the application of information technology. Information systems should be and look like means to be used at work, not as system constructs for their own sake. And their design should take work as the most important point of departure rather than the reified descriptions typical of many methodologies of today.

3. Infurgy aims at inventing new means, methods and techniques for developing better information systems as seen from the work perspective. Any suggestions to such methodologies are grounded in theoretical and practical understanding of the work situation, which is sometimes called the use situation of an information system.

4. Because work is an exclusively human capability, Infurgy does not accept the interpretation that the computer can take the role as the worker or as the actor. For example, research on Artificial Intelligence or on Expert Systems do not therefore belong to infurgy inasmuch they regard the computer as an acting subject (agent).

5. Human actors work individually and collectively. Formal and informal organisation as well as division of labour are important research issues/factors in infurgical research. Management, too, is a work role rather than a profession. For example, CSCW and organisational computing are important infurgical research areas.

6. Infurgy is context-sensitive. Even if information systems and work organisations may be regarded as generalisable phenomena, they always have unique, situational factors which must be taken account in the use and design of them.

7. The knowledge worker must have a double competence: in the substance area of the work tasks and in the uti-
lication of information technology. This implies the need of mutual learning of ‘users’ and IT experts. It also implies new types of requirement to the interface and functionality of information systems.

8. *Infurgy* has two main directions according to the answer to the separability issue: can the information be separated from the work (work context, working actors, etc.) or not. In other words: what is the legitimate domain of regarding information technology and work separately from each other. An example of the *separability fraction* may be found in Socio-Technical approaches which are based on the concept of distinct social and technical subsystems. This separability is one particular form of Taylorism. The inseparability fraction is, strange enough, a minority, and it has not (yet?) been established strongly. Many approaches inspired by the philosophy of Wittgenstein (later), Heidegger and Leont’ew seem to belong to this fraction (Design at work, Göranzon).

9. *Infurgy* is not satisfied with the one-way explanation exemplified by the discourse on the *impacts of computerisation* on work and organisation. While Infurgists realise the broad spectrum of factors related to the IT change processes, they try not to be victims of megalomania. If people are not able or willing to assume new rules to promote non-distorted communication or double-loop learning, it is not always caused by information technology. Thus, it is not realistic to expect that such problems could be solved by means of new information systems either.

10. A *historical approach* to the issues addressed by *Infurgy* is therefore of special interest. Information systems and technologies have existed before computers. The impacts of computerisation can be understood primarily by analysing the emergence and evolution of different information systems in different socio-economic contexts, not as an information technology problem, but as a human activity problem.

laboris@utu.fi
fire@ifi.uio.no