Session 10th March

- 1) Here are six abstracts of journal articles related to the topic of "triangulation". You are not sure what triangulation means as a method and how you could use it in the area of Humanities. Read the abstracts (a-f) and choose which texts are worth reading.
- **a)** The Ordinance Survey techniques of analytical aerial triangulation have been widely reported over the years. The author describes some modifications to that system as well as tests on independent model methods of aerial triangulation and investigations into the cause of image deformation. (Farrow, 2006)
- **b)** Triangulation involves the careful reviewing of data collected through different methods in order to achieve a more accurate and valid estimate of qualitative results for a particular construct. This paper describes how we used three qualitative methods of data collection to study attitudes of students toward graphing, hands-on activities, and cooperative grouping techniques using the triangulation method. (Oliver-Hoyo, DeeDee, 2006)
- c) We show that a triangulation of a set of n points in the plane that minimizes the maximum edge length can be computed in time O(n 2). The algorithm is reasonably easy to implement and is based on the theorem that there is a triangulation with min-max edge length that contains the relative neighbourhood graph of the points as a subgraph. With minor modifications the algorithm works for arbitrary normed metrics. (Edelsbrunner, Seng Tan, 1991)
- d) This paper explores various types of triangulation strategies and indicates when different types of triangulation should be used in research. Our reviews included literature on triangulation and multimethod strategies published since 1960 and research books specifically focusing on triangulation. By triangulation we mean the combination of at least two or more theoretical perspectives, methodological approaches, data sources, investigators, or data analysis methods. The intent of using triangulation is to decrease, negate, or counterbalance the deficiency of a single strategy, thereby increasing the ability to interpret the findings. The use of triangulation strategies does not strengthen a flawed study. Researchers should use triangulation if it can contribute to understanding the phenomenon; however, they must be able to articulate why the strategy is being used and how it might enhance the study. (Thurmond, 2004)
- e) The more recent interpretation of triangulation in social and educational research was summarised and examined with reference to theory triangulation applied in an empirical study. The construction of special educational needs (SEN) from the individual experiences of a sample of SEN co-ordinators and SEN teachers, parents, and adolescents with emotional and behavioural difficulties or physical disabilities were interpreted from the perspectives of personal construct theory, bio-psycho-social model, socio-psychological analysis, bioecological model of human development and a developmental model of self-understanding. Their points of convergence and divergence enriched and extended theoretical understanding. The focus on the 'verstehen' psychological level of analysis and on forging closer theory, concept and data connections influenced the range of theory choice. This instance of theory triangulation casts doubts on the Duhem-Quine thesis of underdetermination. (Ma, Norwich, 2007)
- **f)** The ice movement on the Byrd Glacier, Antarctica, was measured as function of time, on the basis of aerial photography. The method of aero-levelling strip triangulation with a minimum of geodetic control was applied. The methods and procedures were verified over Laufen-Bauma test area. (Adler, 1984)

- **2)** Read the texts below and explain, what the authors want us to believe and how we, if we were non-critical readers, could be confused.
- **a)** There are clear disparities between the treatment of white and other non-white drug users in the USA. A recent survey of the US Public Health Service estimated that 75% of illegal drug-users in the US were white, 13% Afro-American, and 9% Hispanic. Yet, in New York State, 93% of all drug-possession offenders sent to prison were Afro-American and Hispanic; in California, it was 72%.
- b) If an author really wants to make sure that the reader loses interest I recommend that he/she does not introduce the ideas and main findings straightaway, but instead hides them at the end of a lengthy narrative. The techniques can be refined by putting the same emphasis on what is unimportant or marginally important to what is really important to make certain that the writing creates the proper hypnotic effect which will put the reader to sleep. (Snad-Jensen, 2007: 2)
- c) Europe is above all a community of values. The aim of European unification is to realise, test, develop and safeguard these values. They are rooted in common legal principles acknowledging the freedom of the individual and social responsibility. Fundamental European values are based on tolerance, humanity and fraternity. Building on its historical roots in classical antiquity and Christianity, Europe further developed these values during the course of the Renaissance, the Humanist movement, and the Enlightenment, which led in turn to the development of democracy, the recognition of fundamental and human rights and the rule of law. The great currents of culture and art, scientific discoveries and their application for the general good, and the critical analysis of accepted views and perceptions have all had the effect that we can now live and work together in peace, liberty and freedom from want. Europe has spread these values throughout the world. Thus our Continent became the mother of revolutions in the modern world. Europeans have worked to establish freedom, justice and democracy as the principles of international relations, thereby opening the way to a free and peaceful future. (Buamgart, 2003)
- **d)** The fact is that the world is divided between users of the Macintosh computer and users of MS-DOS compatible computers. I am firmly of the opinion that the Macintosh is Catholic and that DOS is Protestant. Indeed, the Macintosh is counter-reformist and has been influenced by the *ratio studiorum* of the Jesuits. It is cheerful, friendly, conciliatory; it tells the faithful how they must proceed step by step to reach -- if not the kingdom of Heaven -- the moment in which their document is printed. It is catechistic: The essence of revelation is dealt with via simple formulae and sumptuous icons. Everyone has a right to salvation.

DOS is Protestant, or even Calvinistic. It allows free interpretation of scripture, demands difficult personal decisions, imposes a subtle hermeneutics upon the user, and takes for granted the idea that not all can achieve salvation. To make the system work you need to interpret the program yourself: Far away from the baroque community of revellers, the user is closed within the loneliness of his own inner torment.

You may object that, with the passage to Windows, the DOS universe has come to resemble more closely the counter-reformist tolerance of the Macintosh. It's true: Windows represents an Anglican-style schism, big ceremonies in the cathedral, but there is always the possibility of a return to DOS to change things in accordance with bizarre decisions: When it comes down to it, you can decide to ordain women and gays if you want to. (Eco, 1994)