Exploring Disciplines
REV. 15/1/13

SYLLABUS
SPRING 2013

All readings listed as core are provided and will be discussed in class. The recommended readings are entirely optional and are also provided wherever possible. Full references are given in the bibliography.

1. INTRODUCTION
(22/1)

Lecture.
Overview of the course, its subject, structure and aims; its rationale and outcomes; readings and participation in seminars; topics. Beginning questions: Why disciplines? What are they? What does a discipline do to and for the student? The imperative of interdisciplinarity from the situation we are in: big problems; open communications; social demands; digital abundance; rampant curiosity. How do we respond most effectively? Is truly interdisciplinary research even possible, and if so, to what degree? If interdisciplinary research is coherent, possible and intellectually worthwhile, then "How thoroughly interdisciplinary is it possible to be?" (Beer 1996: 115). How does one get started, with what sort of undertaking?

Discussion.
The disciplines at play in the course: participants' backgrounds and interests.

RECOMMENDED READINGS (to return to as time permits)
(a) Challenges: Beer 2006 and 1996; Dening 1996: 39-41; Kuhn 1977: 6-10;
(b) Legitimacy: Fish 1989; *contra,* Liu 2008
(c) Process: Geertz 2000/1974;

CASE STUDIES

2. CASE STUDY: PHILOSOPHY
(29/1)

Seminar.
In this seminar we first take up the question of what philosophers do and what (if anything at all other than the proverbial arm-chair) they need in order to do it. Then we consider the outside visitor's dilemma: given an

instance in a long philosophical conversation that seems useful to his or her research, "how to distinguish what's central from what's peripheral in this other zone; how to tap into the hinterland of controversy that lies behind the works on the shelf; how to avoid becoming merely disciples because not in control of a sufficient range of knowledge" (Beer 2006). What do all the things under the rubric of "philosophy" have in common?

READINGS
Core: Nagel 1974; Hacking 1991 (cf Hacking 1995).
Recommended:
(a) Language: Austin 1975/1955: 1-11;
(b) Literature: Danto 1985/1983;
(b) Cognition: Dennett 1981/1978;
(c) Epistemology: Ryle 2000/1949;
(d) Ethics: Wittgenstein 1965/1929-30.

3. CASE STUDY: BIOLOGY
(5/2)

Seminar.
Ours has often been called the age of biology, for example (according to Ernst Meyr) by the then-President of France, Valéry Giscard d'Estaing. In 1943, just prior to the rise of nuclear physics as seemingly the ultimate way of explaining the world, physicist Erwin Schrödinger raised the central question of biology, then and still unanswered by physics, in *What is Life? The Physical Aspect of the Living Cell*. In 1994 the theoretical biologist Robert Rosen pointed to the still lingering reductionist model of the physical sciences – "of looking only downward toward subsystems, and never upward and outward" to the complex phenomena of life – as a fundamental roadblock in our thinking (2000: 2). But biology (or more broadly, the life sciences) have moved on apace. The question to ask here is, how do biologists investigate the complexity of living forms systematically, as a science? What kind of a science is it? What is the science of life?

READINGS/VIEWING
Core: Monod 1972 (chapters 1, 7); Konner 1991; Dame Gillian Beer, "Darwin's Universal Impact" (http://www.youtube.com/watch?v=XuJrEzKHLb0)
Recommended:
(a) Ecology: Shepard 1996: 15-40;
(b) Evolution: Dennett 1995; Beer 2009;
(c) Genetics: Keller 2003/1983: xvii-xxiii, 171-207;
(d) Neuroanatomy: Rose 2009; Lettvin *et al*. 1959 (with journal front-matter);
(e) Theory: Rosen 2000: 1-4; Gould 1971;

(f) Interpretation: Hoffmeyer 2000;
(g) Architecture: Gould and Lewontin 1979;
(h) Ethics: Sachs 2010;
(i) Narrative: Piatigorsky 2010;
(j) Art: Ritterbush 1970;
(k) Computing: Winograd and Flores 1986: xi-iii; 38-53.

4. CASE STUDY: HISTORY
(12/2)

Seminar.
In the late 19th Century, the German historian Leopold von Ranke turned away from the moralizing tendency of his discipline, championed a scientific approach and declared that its purpose should be to demonstrate *was eigentlich gewesen ist*, "what actually happened" (*Geschichten der romanischen und germanischen Völker*, 1874, vii). Much has subsequently been found wanting in his formulation, but it retains more than a grain of truth. The question is, once the historian has decided what *eigentlich* means, how is history written? The vulgar understanding is that it mostly involves assembly of facts; these, as the historian will know, are only the beginning and can be only a minor part of the problem. So the task here is to understand the theory of history-writing (*historiography*): how one writes a history relevant to one's own time that is also faithful to the past. What kind of stories does history tell?

READINGS
Core: Hexter 1971; Mahoney 1996/1993.
Recommended:
(a) Historiography: Becker 1931; Burke 1992; Carr 2001/1961; Collingwood 1994/1946; Hofstadter 1964 (and Jameson 1991/1984: 57, on the theorist's "closed and terrifying machine"); White 1980;
(b) Ethnographic history: Dening 1996 [above, 1(a)];
(c) Technology: Mindell 2002;
(d) History of history: Hartog 2000.

5. CASE STUDY: LITERARY STUDIES
(19/2)

Seminar.
What do scholars of literature do? What do they need to do it, apart from texts to read (which some theoreticians don't seem to need at all)? What sort of

texts do they focus on, what else do they bring into play, how do they justify their practices? Here we specifically focus on the interrelations of critic/reader, the style or theory involved and the text. Indeed, what *is* "text" to the critic? Is it, as some have said, everything? And, if so, what is or where is this everything? Is it strictly words-on-the-page? Something in between? What does the study of literature have to do with life? (See, for example, the range of subjects listed by the King's Department of English at www.kcl.ac.uk/artshums/depts/english/about/index.aspx.)

READINGS
Core: Forster 1978; Geertz 2003; cf also the concerns of the Modern Language Association as evinced by *Profession* e.g. 2004-2006 (in JSTOR).
Recommended:
(a) Theoretical: Culler 1997: 1-41;
(b) Historical: Lewis 1967;
(c) Social: McGann 1993;
(d) Socio-cultural: English 2008;
(e) Practical: Greer 2002/1986: "Contents" page and 24-48;
(f) Editorial: Tanselle 1989;
(g) Technological: McGann 2004.

6. CASE STUDY: COMPUTING
(26/2)

Seminar.
Since the invention of the digital computer in the mid 1940s computing has in one way or another affected nearly all aspects of urban living, commerce, the military, government and academic study. The origins of computer science as a distinct academic discipline date to the 1950s and early 1960s. Since then CS has grown spectacularly, diversifying into all manner of specialisms. Its nature as an "amalgam of mathematical theory, engineering practice, and craft skill" defies any attempt at simple definition but does not appear to diminish its intellectual vigour (Mahoney 1997: 632). In the early 1960s computing spread to the humanities; the first journal, *Computers and the Humanities*, was founded in 1966. The field we now call the "digital humanities" was a beleaguered concern of a small minority, but with the growth of the Web from the mid 1990s, and especially since the early years of this century, it has gained widespread attention and disciplinary self-awareness. In the sciences computational models have become so intrinsic to research that we can no longer say how we might disentangle them from our understanding of the natural world. The humanities are similarly though more slowly becoming dependent on computing, not only for access to basic resources but also for styles of scientific reasoning that the computer has

brought, especially experiment. Our disciplinary understandings are thus deeply challenged.

READINGS
Core: Denning 2000; Mahoney 2005.
Recommended:
(a) Overview: McCarty 2005: 158-98;
(b) Artificial intelligence: McCorduck 1979 (and its review, Mirowski 2003);
(c) Bibliographic habits: *Communications of the ACM;*
(d) Engineering and disciplinary strategies: Hamming 1968;
(e) Design: Winograd and Flores 1986.

7. CASE STUDY: CULTURAL STUDIES/RESEARCH/ANALYSIS
(5/3)

Seminar.
The field that became known as cultural studies may be traced back to the late 1950s, for example to Raymond Williams' justly famous essay "Culture is ordinary" (1958) and to Richard Hoggart's *The Uses of Literacy* (1957). Its roots are in cultural anthropology, critical theory and Marxist literary criticism, hence its commitment to society and politics – to Foucault's argument that all knowledge is political. Its influence has been enormous – thus the "cultural turn" in several disciplines of the humanities, especially perhaps in literary studies. Recently the field known as "cultural research" has grown out of and away from it. At the same time the "creative industries" have developed in a somewhat different direction but with very similar emphasis on contemporary life and politics. The recent *Sage Handbook of Cultural Analysis* indicates in its scope and title an attempt to comprehend the numerous fields affected.

READINGS
Core: Williams 2001/1958; Hanley 2009.
Recommended:
(a) Surveys and assessments: Bennett and Frow 2008; Baetens 2005; Johnson 1986-7
(b) Basic vocabulary: Williams 1988/1976;
(c) Cultural studies: Hall 1980 and 2011 (British); Giroux et al 1984 (North American);
(d) Cultural research: Ang 2006;
(e) Creative industries: Kirchhoff et al. 2009; Pratt 2004;
(f) Stories of ordinary life: Terkel 2004/1972 (selections).

8. CASE STUDY: ARCHAEOLOGY & EPIGRAPHY
(12/3)

Seminar.
A particular feature of archaeology is that its practice destroys a considerable amount of the evidence in the process of bringing it (often literally) to light. How does this fact shape the practice? But archaeology also ventures considerably beyond physical to metaphorical excavation of artefacts from the obscurity of our ignorance about them, to infer long-ago practical, cultural and cognitive contexts. Hence it reaches into other disciplines for help. Epigraphers and archaeologists work together, as their fields overlap, but the former do not destroy in order to discover; rather, they are motivated by the need to report on inscriptions they have seen, so that scholars may know about them and their contents before weather or worse has destroyed them. The text of epigraphic inscriptions may have literary as well as historical interest. Other contingencies on the practice of both are the political and national sensitivities to ancient artefacts in some parts of the world, the varying accessibility one is likely to have to sites and museum collections in some places and their vulnerability in times of conflict.

READINGS
Core: d'Errico 1998; Vermeule 1996.
Recommended:
(a) Archaeology: Renfrew and Bahn 2000; Renfrew 1994; Deetz 1967;
(b) Epigraphy: Reynolds 1966; Blair 1991; Gordon et al. 1997;
(c) The interdisciplinary problem: Isayev 2006.

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