What is interdisciplinarity, and what is the best way of doing it? There are many ways of approaching these questions. This essay will start from some suggested differences in how interdisciplinarity is (and should be) pursued in the humanities as opposed to the social sciences. It will be argued that these differences are exaggerated. In the best interdisciplinary tradition we will instead suggest that these allegedly conflicting visions can be integrated in order to generate a more holistic understanding of interdisciplinarity.

The first and longest section of the essay focuses upon history, a field that spans the humanities and social sciences. Apollonian and Dionysian approaches to the study of history are developed and integrated. The arguments made regarding how these can be integrated can generally be applied far beyond the confines of historical research. Later sections address, in turn: a distinction between philosophical and scientific interdisciplinarities; a distinction between grand theory and integrating theories; a similar distinction between grand method and integrating methods; a focus on flexible concepts versus stable concepts; and revolutionary versus normal science.
TWO APPROACHES TO THE STUDY OF HISTORY

Two broadly distinct approaches to the study of history can be identified. These might be distinguished in terms of a “social science” versus a “humanities” perspective. Yet such appellations would not only legitimate this distinction but would suggest that it is immutable (though the distinction between social sciences and humanities is itself weakening). It is better to borrow from many fields the appellations Apollonian and Dionysian, drawn from ancient Greek mythology, to describe these two approaches.1 The Apollonian approach emphasizes order, while the Dionysian approach emphasizes freedom. History, like civilization in general, should not choose one of these but strive for the best balance between order and freedom. Needless to say, the core precepts of each approach must be defined as central tendencies: few historians may agree entirely with either list. Importantly, this observation suggests that these approaches are not monolithic but can be altered.

The Apollonian discourse can be identified by the following precepts:

- Historians should specify the phenomena they are investigating, how these influence each other, and the particular data, theories, and methods used in the investigation.
- The community of historians should strive to compare the results of investigations across historical cases: individual historians need not always be explicitly comparative, though they should be aware of how the arguments they make have fared in other circumstances.
- Comparisons should be made foremost in terms of the causes (or results) of certain historical processes (though comparisons at the level of theory and method may also be valuable).
- Formal and often quantitative methods are thus preferred.

In the Dionysian perspective:

- It is important to study the meaning individuals attach to the events and processes in which they participate.
• Reality is “created” linguistically. And language is inherently ambiguous, both in historical sources and in the work of historians.
• Style of presentation is important.
• Historical events and processes are unique and complex. Comparison across historical cases is thus likely impractical.
• Likewise, theoretical generalizations will only be made possible by ignoring much that is central to historical processes.

These two approaches can be adjusted so as to become complementary. With respect to the Apollonian discourse, the key adjustment involves relaxing methodological and theoretical preferences: any careful theoretical argument and any scholarly method should be seen as legitimate. It will thus be useful in what follows to argue that comparative research does not presume a particular theoretical or methodological preference. A second adjustment to the Apollonian perspective involves equal flexibility with regard to the meaning of “cause”: any sort of influence of one phenomenon or agent on another should be accepted.

The Dionysian interest in “interpretivist” theories and methods is no challenge to complementarity as long as this is not an exclusive interest. Nor is the postmodern concern with ambiguity of language, so long as extreme versions of this critique are avoided that suggest that different scholarly communities are simply unable to comprehend each other. If language ambiguity is taken as a challenge, then scholars are guided to seek strategies for enhancing clarity. Style must in such an approach be considered as subsidiary to content.

Some elements of a “combined” view of the historical enterprise deserve emphasis both here and in what follows:

• Historians should be open to exploring all causal links and employing all types of theory, method, and data.
• In order for comparative work to be facilitated, historians should strive toward a common vocabulary of phenomena, data, theories, and methods.
• While this “combined” approach does not arbitrarily prohibit
valuable forms of historical research, it is not so broad as to embrace everything: it clearly rejects works that are unclear about the phenomena, causal arguments, theory, and method employed.

Clarity

Clarity is often especially elusive in studies of culture (and not just in historical scholarship), but this need not be so. Arnold (2000) celebrates the fact that historians have often investigated the mentalité of a particular time and place but raises two key concerns: that individuals and groups within a society will differ in terms of mentalité, and if it is assumed (as is often the case) that the mentalité of past societies is totally different from our own then such societies may be unfathomable. Burke suggests that it is best to assume that other cultures differ from our own in some but not all ways, and thus understanding will be possible. Goody is more critical than Arnold, suggesting that the study of mentalités reflects intellectual laziness; historians must instead identify particular elements of mentalité of causal importance, appreciate that all cultures involve internal contradictions, and recognize that cultures evolve. Mahoney and Rueuschemeyer (2003, 23) concur that culture can play an important explanatory role, but that unless causal relationships are carefully specified these arguments are hard to evaluate. Alternatively, Daunton argues that since each culture is unique, historians cannot compare one element in isolation. Yet when he proceeds to describe his own comparative research on censorship he identifies just a few related phenomena (such as literary styles) that he needed to take into account.

Our consideration of clarity has already suggested the importance of the analysis of carefully defined causal links. More generally, the comparative method is only useful if scholars believe in causality (broadly defined), for comparisons show how differences in terms of some phenomena affect outcomes in terms of others.

Labour historians, economic historians, social historians, and cultural historians may all care about how workers viewed the earliest factories. African historians, British historians, and Indian historians may all care about the impact of the British Empire. But they will put different
emphases on these questions, attend different conferences, and publish in different journals. A focus on causal links makes it much clearer when different scholars are talking about the same thing—or not. Economic historians may view the factory favourably because they emphasize its eventual impact on average incomes, while cultural historians bemoan the apparent loss of artisanal independence. They are talking about different links, and an appraisal of the role of the factory in human history should embrace but not confuse these.

Abbott (1994) has worried that any historical event is too complicated to be broken into constituent causal links. To say this is to say that explanation is impossible, for any explanation of a complex event must involve a series of more precise arguments. These arguments will necessarily be specific to a particular causal link. The causal link approach is thus not only consistent with the study of complex “big picture” events and processes, but essential to this. To be sure, different causal links will interact (as food shortages and elite disharmony interacted in the French Revolution), and the historian must be careful of oversimplification. Part of Abbott’s concern stems from a fear that theory-driven historians will ignore the importance of particular personalities. It is thus crucial that the community of historians embrace phenomena, theories, and methods at both the individual (personality dimensions, abilities, mental schemas) and societal level.

Skepticism of the very possibility of comparison across historical cases generally rests on at least one of two misconceptions. The first is that historians should search for recurring patterns in history. It is quite unlikely that similar realizations of a large number of phenomena will be observed across quite distinct historical episodes. In this simple sense, history rarely if ever repeats itself. Scholars can, though, reasonably expect to observe a particular realization of any one phenomenon across a wide array of historical cases (say, a shortage of food, defined by some criterion). They can then ask what effects this is observed to have on another phenomenon (say, the stability of government). Here, the second objection may be that alternative outcomes will depend on the realizations of a host of other phenomena. This conjecture should be established empirically rather than assumed. More importantly, this objection simply means that the rules scholars seek will be complex: food shortages encourage
revolutions, but only in concert with certain (combinations of) realizations of other phenomena. The common but mistaken belief that “causal arguments” must involve an “If A then always B” (that is, a “covering law”) statement has understandably discouraged the use of causal arguments in historical research. Since comparisons across a handful of cases cannot be expected to identify every relevant realization of other phenomena, it is important that the community of historians compare across as wide a range of cases as possible. Nevertheless, individual historians can usefully compare across a small number of cases with which they are very familiar; as long as they are clear in their arguments and definitions, their research can feed into yet broader comparisons.

Lloyd (1993, 7) is critical of “a humanistic form of inquiry into social life that is akin to artistic or literary interpretation.” He accepts, however, the basic insight of this approach: that historians must grapple with the “meaning” attached to events and circumstances by actors, and that those different actors may perceive the same situation in different ways. He objects only to a conclusion often drawn from these precepts that explanation is impossible. Rather, he sees interpretation and explanation as complementary. By attempting to understand how actors perceived events, scholars can try to explain why they acted as they did. Whether a scholar pursues interpretation or explanation will depend on which type of causal link they study: scholars will often want to pursue both within one study.

Like many others, Burke (in Pallares-Burke, 2002, 146–47) celebrates the breadth of modern historical research but worries about fragmentation, and urges the profession to find some way to tie the pieces together. Gilderhus (2002, 126–27) worries not just about the “cacophony of voices” but about the fact that history no longer serves to unify knowledge; he sees no resolution to this problem. An emphasis on causal links establishes that each historical subfield has a place, but also that historians should study the links between these: in other words, do interdisciplinary history. And this is critical for comparative purposes: as noted above, the history of an event or process involves the interaction of many causal links and will thus be misunderstood if the set of links any historian embraces is needlessly truncated. While a particular comparative study may necessarily focus on a subset of relevant links, it should ideally both
be performed in cognizance of the existence of others and written clearly so that it can be incorporated into further research.

**Is History Inherently Idiographic?**

Since the dawn of the past century philosophers have distinguished two types of scholarly effort: a nomothetic approach that seeks generalizations and an idiographic approach focused upon particularities. Historians, it is argued, must delve into details that are unique to a particular time and place, and are thus inherently idiographic. As has been seen, this need not and should not limit generalization. Even the traditional explanation of historical events in terms of the personality of kings, which must seem entirely idiographic given the uniqueness of each individual, can lend itself to comparisons and generalizations: about the role of particular personality types in history, or about how environment shapes personality.\(^7\)

In fact, the stark dichotomy often drawn between idiographic and nomothetic research is itself a chimera. All scholarly activities necessarily mix the two, though the relative balance varies across fields. Moreover, one can imagine a continuum between nomothetic and idiographic argument, depending on how carefully the realizations of each relevant phenomenon need to be specified in a causal argument (Szostak 2004, chap. 3). Different historical works will occupy different points along this continuum.

**Must History Be About Artificial Entities?**

Ankersmit (2001) argues that historians need concepts such as “labour movement” to make sense of history, but “labour movement” is not a real thing “out there.” However, while “labour movement” is indeed an artificial construct, this essay references several of the hundreds of real phenomena “out there” which could and should be the focus of historical narratives and comparisons. Historians should be urged to eschew artificial concepts in favour of the study of causal links between real phenomena.

Ankersmit also raises a philosophical question: What changes in history, since all change presupposes an immutable subject of change? His answer is that reality cannot change but only human representations of it. Thus historians can only seek multiple representations of an unchanging
reality. This conclusion is critiqued below. A superior answer to the original question can be provided here. The phenomena to be studied are immutable, but historians study the changes in realizations of these phenomena. Economic output is an immutable phenomenon, but the actual output of a society changes through time.8

These two related arguments flow in turn from Ankersmit’s emphasis on the use of metaphor. Only by increasing the range of metaphor used to describe a particular period, Ankersmit argues, can historians arrive at a more nuanced appreciation of that period. The reality of the fifteenth century does not change, but historical understanding of whether to view the century as one of continuity or change does, if historians move from thinking of it as “late Middle Ages” to “early Renaissance.” This essay suggests instead that historians should investigate each causal link in turn, finding change here and continuity there, and understanding in detail how and why realizations of various phenomena changed (or did not) over the period of the fifteenth century. In this way, historians are guided (among other things) to define the essence of “the Middle Ages” or “the Renaissance” in terms of realizations of particular phenomena, and to understand why each transformation occurred as it did.

Exploring All Types of Causation
Phenomena can exert influences of many different types on other phenomena. Sometimes a particular realization of one phenomenon may be necessary for a particular realization of another to occur (as in functionalist arguments that a state needs an army or army-like body). Sometimes one realization may be sufficient for another, or both necessary and sufficient, though history is generally more complicated than this. Note that a relationship that is necessary or sufficient in one society might prove otherwise in a different society (especially if the first society sets an example that others follow). In other cases, the effect may be positive or negative, but neither necessary nor sufficient. In still other cases the outcome may be probabilistic. When a family (system) of related links is studied, feedback may be positive or negative or unpredictable. Historians should be aware that causation occurs in different ways and that different theories and methods are best suited to different types of causation.
Likewise, comparative historians can and should appreciate that a realization of a particular phenomenon can have quite different effects depending on the time frame studied. Technological innovation was a fairly imperceptible part of human life for most of the pre–Industrial Revolution period. Yet arguably it nevertheless supported a slow though irregular increase in average incomes and thus affected possibilities for urbanization, the pursuit of art, and a range of other developments. Notably, only historical research can trace these longer-term effects (and only if historians do not overspecialize by period). Sadly, there is a “tendency for scholars to be very casual about time in both quantitative and qualitative analyses”; scholars fail to carefully specify the time that elapses between cause and effect, and often thus provide inappropriate evidence for the sort of temporal behaviour they appear to posit (Jensen 1997, 56). Comparative research can usefully identify and seek to explain differences in the amount of time a particular process takes to unfold in different places.

To what extent are historical processes contingent, such that what happens tomorrow depends on what happens today? Some degree of contingency is inevitable, at least in the short run. Even in the long run it may well be that the innovations of today constrain the paths of future innovation. However, many neoclassical economists would argue that in the long run societies would eventually achieve the most efficient technology or institutions. Early Marxists also envisioned inevitable historical processes. Only empirical analysis of disparate cases can settle the question of how important path dependence is.

If a scholar posits an inevitable outcome, they will seek a very generalizable theory. If a scholar is dealing with a highly contingent historical process, then they will seek a theory(s) that pays careful attention to the conditions necessary for certain causal chains to operate. Since both are possible, it would be a mistake to assume one type of theory at the outset (but not to test one against the other). Social scientists are often guilty of assuming generalizability and/or inevitability, while humanists are often guilty of the opposite. Comparative historians should eschew both extremes.
**Narrative Styles**

Hayden White famously argued that narrative introduces an element of fiction into historical accounts, and proceeded to identify a handful of key narrative styles (romantic, tragic, and so on) that characterize historical writing. Munslow (1997) has urged historians to be reflective of the limitations imposed by the narrative style they use. Ginzburg (1999) argues that the research that historians perform before they write puts strong limits on the narrative they can present. In urging historians to be explicit about causal arguments, this essay further limits narrative bias. Moreover, by emphasizing both links and comparisons, it reminds historians that every historical story overlaps with thousands of others. Elements of tragedy, romance, and comedy commingle in history. Historians should be discouraged from constraining any historical episode to fit one narrative genre.

**Summing Up**

The approach suggested here can be embraced by historians across the methodological divide that characterizes the profession. This essay attacks the false dichotomies identified by Lloyd (1993): that history should be distinct from human science (or exactly like it), that historians should focus only on individuals (or alternatively on societal aggregates), that historians should focus exclusively on explaining events (or drawing generalizations), that historians should only pursue “understanding” as opposed to “explanation,” and that historians should emphasize change (or stability). This essay also disdains arguments for the superiority of any one theory or method. It has argued that historians should indeed test theories, but not exclusively. And it has argued that comparative and case-specific researches are complementary. Indeed, the only distinction that remains important in distinguishing good from bad history is that between historians who are clear about what they are doing and those who are not.
Interdisciplinarity in the humanities often lacks the problem/issue focus of interdisciplinary research in the social sciences. Interdisciplinarians may integrate across social sciences in order to address urban poverty, cultural transformation, or the causes of crime. Humanists are much more likely to focus on theory. This section will look at philosophical theory; the next section looks at scientific theory. Ironically, the philosophical theories championed by many humanists suggest that the sort of grand scientific theories championed by other humanists are misguided. We can again suggest a common ground between seemingly opposed views. Postmodern (and related) concerns should not divert us from the pursuit of scholarly understanding but should make us keenly aware of the biases and errors that afflict scholarly (and especially disciplinary) research. Humanists do an important service in reminding us of these biases and errors, but these warnings should not stop them any more than they stop social scientists from trying to understand better how the world operates.

I have elsewhere (Szostak 2007a) suggested how interdisciplinarity can best integrate “modernist” and “postmodernist” perspectives. Importantly, such an exercise forces interdisciplinarians to confront epistemological issues rarely addressed in the practically oriented literature on interdisciplinarity. Across a wide range of epistemological (and metaphysical) and practical issues, interdisciplinarians need only to step back from the more pessimistic versions of postmodernist thought in order for the interdisciplinary project to be not only salvaged but enhanced. This essay thus backs away from such extremes in order to embrace instead “affirmative postmodernism” (see Rosenau 1992), which argues that human understanding is neither perfect nor impossible, and thus that it is important to perform scholarly research as clearly and openly as possible. Thus, the efforts of social science interdisciplinarians, as well as of those humanists pursuing scientific generalizations, need not be viewed as distinct from humanist speculations on the possibilities of scholarship but rather informed in important ways by these.

It is useful for the present exercise to reprise the “interdisciplinary positions” identified in that essay:

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Proof, and even disproof, is impossible. Nevertheless, supporting argument and evidence can be compiled such that one statement is reasonably judged more credible than another (though interdisciplinarians can and do disagree about criteria for judging credibility).

Science/scholarship is neither perfect nor impossible. Particular types of argument and evidence are especially valuable in enhancing scholarly confidence in a particular conclusion; scholars may achieve consensus. Bias is inevitable but strategies exist for combating this.

As with disciplines, it is possible to integrate across perspectives rooted in social divisions such as gender and ethnicity. These are not incommensurate.

There is an external reality, though humans are limited in their abilities to accurately and precisely perceive this.

The world is characterized by open systems (closed systems are not causally related to other phenomena). Nevertheless, it is possible to identify regularities, although (generally) not laws.

Most/all phenomena are causally connected with most/all others. Interdisciplinarians nevertheless believe that it is possible to identify (albeit imperfectly) distinct phenomena and causal regularities, though the latter will likely be influenced by realizations of many other phenomena. Causality does not threaten human free will.

The world is indeed complex and uncertain, but imperfect scholarly understanding is nevertheless possible.

Language is ambiguous, but ambiguity can be lessened. Integration is a powerful means of doing so.

Different communities are characterized by overarching perspectives that influence what is said and thought. While barriers to communication exist, these are surmountable to a considerable extent.

Texts are created within communities of scholars, and thus scholars reflect a perspective of which they are likely imperfectly aware. Nevertheless, texts reflect the views of this situated agent.
• Different scholarly communities develop incomplete and biased perspectives on reality. Yet these can be integrated into a more holistic and less biased (meta-paradigmatic) perspective. If this is true for every combination of perspectives, then consistency can be sought at the level of the scholarly enterprise as a whole. Yet this will occur not in the form of some grand theory (or theories) but in the form of a complementary set of theories each shedding light on different aspects of reality.

• Interdisciplinarians believe that scholarly judgment is possible and indeed that they can critique disciplinary contributions in meaningful ways in order to arrive at holistic understanding. Implicitly, at least, they have doubted that there is one unique standard of judgment.

• There are many methods, each with different strengths and weaknesses.

• Both reason and intuition have a place in both the acquisition and evaluation of scholarly insights.

• Causation runs in both directions between individuals and societal aggregates.

• Understanding advances best through the integration of diverse types of theory.

• Interdisciplinarians believe that it is both possible and desirable to integrate across different ethical perspectives.

In sum, then, postmodern skepticism—at least once shorn of the extreme skepticism of some regarding the very possibility of scholarly understanding—can support an interdisciplinary exploration of how the world actually works (and should work). It is quite consistent with the emphasis of interdisciplinarians on the limitations of discipline-based analysis. It supports a pluralist outlook: no discipline is perfect but all have something to contribute.

The points made above apply to the humanities just as well as to the social sciences. To be sure, there may be important differences of degree in certain respects: language is more ambiguous in poetry than in engineering designs, and it may be harder to perceive accurately a work of art
than a rock. But once it is accepted that postmodern critiques provide no absolute barrier to enhanced understanding then this pursuit should be engaged as zealously in the humanities as elsewhere. And this is important, for there are important questions that lie primarily within the scope of humanities inquiry.

In literary scholarship, postmodernism has squeezed out attention to the ways in which literature (and art and culture more generally) affects authors, readers, and the societies in which these are situated (and vice versa). The pendulum is hopefully beginning to swing back: these important questions can again be engaged, though with enhanced appreciation of the difficulties scholars face in achieving an accurate understanding. Enhanced understanding here as elsewhere is most likely through the integration of insights from multiple disciplines. Literary theory can be integrated with insights from psychology and sociology. Textual analysis can likewise be integrated with insights from surveys, interviews, observation, and statistical analysis.

GRAND VERSUS INTEGRATED THEORY

Interdisciplinary studies in the humanities often occurs under the banner of some grand theory: Marxian, feminist, psychoanalytic, cultural theory, and so on. The impulse toward grand theory has hardly disappeared in social science (and legions of economists still seem to think that rational choice theory is the only theory), but it has weakened in recent decades as most attempts at the “theory of everything” are perceived to have failed. A few points made (or at least hinted at) above deserve to be repeated here:

• No theory is perfect.  
• Interdisciplinary understanding thus comes from the integration of insights from multiple theories.  
• The main goal of scholarship is to identify which theories are of greatest importance along particular causal links (and under different circumstances). That is, we should seek to identify the (overlapping) range of applicability of each theory. Natural scientists are much more devoted to this task than
either social scientists or humanists.

- Communities of scholars organized around a theoretical outlook are likely to emphasize its power rather than its limitations. Disciplines are often guilty of this sin, of course, but interdisciplinary groupings devoted to a particular theory are perhaps even more prone to this.

- This need not be the case. Such a community could recognize that its favoured theory is not perfect. Indeed such an attitude has strategic value. If a community argues (even implicitly) that its theory is powerful everywhere, then evidence that the theory is weak in any circumstance can be interpreted as evidence that the theory is wrong rather than just limited in scope.

- Scholarship advances best when competing theories are compared, contrasted, and synthesized. This cannot occur if a community refuses to recognize the possibility that alternative theories may have merit.

- Rule (1997) worried that a theory-driven research agenda was inferior to an explanation-driven agenda in two key ways. First, all research done in the name of that theory would be lost when the theory went out of vogue. Second, evidence that lies outside of the scope of the theory is simply ignored. I have used the Rule dichotomy myself to show how economists’ understanding of the Great Depression (among other things) is weaker than it could be because economists focused almost exclusively on testing macroeconomic theories; they thus ignored profound evidence that the time-path of technological innovation during the interwar period was highly unusual (Szostak 2005). Humanists should avoid this error.

Scholars should not be shy of seeking theoretical generalization. But they should not expect any one theory to have all the answers. A fairly simple change of attitude can thus lead to a more constructive and cumulative interdisciplinary scholarship.

We can briefly relate our discussion here back to our previous discussion of historical scholarship. Some historians make little explicit use of
theory. Others draw on some of the better-known human science theories. Historians have tended to emphasize a few social science theories, such as psychoanalysis or feminist theory, while ignoring others (Gilderhus 2002, chap. 3). Being explicit about theory, and investigating how different theories fare along different causal links, will encourage historians to look for new theories when existing theories prove insufficient. Note that a typology of theory can be invaluable here. Since human science itself favours certain types of theory over others, historians may often need to develop their own theories. Note also that there is little reason to use a variety of theories or methods unless some attempt will be made to integrate these (Smith 1996, 141–42).

Postmodernists warn in particular of the dangers of “meta-narratives.” The approach taken here is consonant with that recommendation. Scholars have been urged to examine each causal link in its own right but to remain conscious that each link is related to other links and influenced by a host of other phenomena. Likewise, scholars should be aware of relevant theories but not assume that a particular link is entirely determined by any theory. Historians are right to be skeptical of the meta-narratives of speculative historians such as Hegel, Marx, or Fukuyama. Yet rejecting these raises the question: What is the purpose of history if the detailed analyses of historians cannot someday be tied into a broader story? (Lemon 2003, 7–13). By emphasizing causal links, and embracing theoretical flexibility, historians can add to a coherent human understanding without embracing the simplifications of speculative history.12

GRAND METHOD

What has been said regarding theory can also be said about method. I celebrate the inroads that (non-nihilistic versions of) textual analysis have made in the social sciences in recent decades. Yet it would be just as great an error to treat textual analysis as “the scholarly method” as it is to view experiments or statistical analysis in this way (as far too many psychologists and economists do respectively). The world may indeed be a text, but that does not mean that there is only one way to study it.

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Literary scholars, then, should be interdisciplinarians rather than methodological imperialists. They should celebrate the insights that textual analysis can provide across all fields while in turn appreciating that there are other methods that provide useful insights, even into literary studies. As with theories, there is a real danger that a community of scholars organized around a particular method will be unable to perceive its limitations. As an economist I can attest to the sad inability of too many economists to understand an argument not expressed in the form of a mathematical model. I would not wish such a fate on literary studies.

Moreover, different methods turn out to be good at identifying different types of theory. (I have elsewhere [2004] asked the same five questions of methods as of theories and am thus able to show in detail how particular methods will favour particular theory types.) Emphasizing only one method thus necessarily biases scholarly judgment toward certain types of theory.

**TRAVELLING VERSUS STABLE CONCEPTS**

Bal (2002) celebrates the ambiguity of “travelling” concepts in the humanities. Since concepts mean different things to different groups of scholars, they force novel appreciations as they migrate across communities. As they travel, their meaning and use change, stimulating new thoughts. Bal sees this ambiguity as a major source of creativity in the humanities. I disagree with Bal, though the difference is likely one of degree. Scholarly understanding comes from clarity, not confusion. Of course, it is useful to appreciate the ambiguity of language (see above) and to interrogate how different people interpret a word. And we have celebrated textual analysis above: careful analysis of texts often exposes hidden meanings. But there is a big difference between facing up to ambiguity and celebrating ambiguity. There is a host of better ways of stimulating our imaginations than simply not understanding what other people are saying. Notably, Bal herself appreciates that concepts to be useful must be “clear, explicit, and defined.” I would argue that we can have the advantages of stimulating new thinking without suffering the disadvantages of excessive ambiguity. My difference with Bal is likely (as is so often the case in interdisciplinary
analysis) a difference in degree rather than of kind. Bal sees both advantages and disadvantages in ambiguity. I am much more conscious of the disadvantages, and thus—while conscious that some degree of ambiguity may not only be inevitable but desirable—suspect that in most cases we should push for greater clarity. There are several strategies for doing so:

- The best concepts are those that refer to one phenomenon or a characteristic of one phenomenon. These can be defined quite precisely within a classification of phenomena. Classification and clarity go together: the act of placing a phenomenon within a classification tells us both what kind of thing it is and what kind of thing it is not. For example, I have defined culture precisely as a particular set of values and behaviours; my classification clearly distinguishes these from politics or art.
- Other useful concepts refer to theories or methods or components thereof. Again, classification is the key to clarity.
- It does not seem extreme to demand that all concepts be defined clearly in terms of what they are and are not, and thus all concepts should be tied to classifications.\(^{13}\)
- Concepts such as patriarchy or globalization or social capital that refer to some vague combination of phenomena, theoretical arguments, and/or methods, do not enhance scholarly understanding. These need to be broken into component parts that lend themselves to clarity. Only if it can be shown that there is a very tight relationship among components will it be useful to pursue analysis at the level of the overall concept rather than its components. If we wish to combat patriarchy or globalization we need to understand how these operate internally. We cannot just treat them as a black box or assume that they generate every evil in the world.\(^ {14}\)
- In particular, note the importance of distinguishing concepts that refer to a particular phenomenon (such as gender) from concepts that refer to a particular realization of that phenomenon (such as the gender relations in a particular society). A statement beginning “Men will. . .” needs to be interrogated to see if its meaning is general or specific.
• Julie Klein raises the issue of “boundary work” elsewhere in this volume. Of course when communities begin to interact it is invaluable for scholars to work at establishing common understandings so that conversation can proceed. My response was that this is a very time-intensive process, and many interdisciplinary ventures may be stillborn as a result of initial difficulties in communication. It would thus be better if we could achieve a core set of shared understandings across the academy of at least the phenomena we study and the theories and methods we use, and then each community carefully ground its core concepts in terms of these.

• Several participants in the symposium suggested that the best path to understanding the varied meanings of a word is to research its history. This can be a useful strategy at times, to be sure. Yet human communication would be a troublesome process indeed if we needed to understand the historical origins of every word we use. Moreover, historical analysis inevitably suggests a variety of meanings. As scholars we need of course to beware that words may carry meanings quite different from those consciously intended. Yet, again, ambiguity need not be celebrated but rather opposed: we can strive to limit the present core meanings of a word to a subset (ideally one) of the meanings it has carried historically.

Humanists and social scientists should each pursue both clarity of terminology and careful statement of argument, because these are simply good scholarly practice. The fact that clarity is a goal to strive for but never perfectly achieve should hardly dissuade us from the task, especially in an age when philosophers recognize that no scientific or ethical statement can be proved. It is likely the case that questions such as “How does art move us?” lend themselves to a poetic treatment (but note that ambiguity of word meanings suits the poet much better than the scholar), but this does not mean that the broad outlines of the argument cannot be stated clearly. Likewise, analogies and metaphors may be more powerful in the humanities than in the social sciences, but good scholarly practice requires that analogies be interrogated for potentially misleading associations.

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REVOLUTIONARY VERSUS NORMAL SCIENCE

It is often thought, not without reason, that scholarship in the humanities is more creative than scholarship in the social sciences. The latter at its best can be reproduced, the former perhaps not. As suggested above, the exploration of how poetry moves us may best be served by a more stylish treatment than an explication of how banking regulation affects economic activity. As such, humanists may be attracted to the idea that interdisciplinarity is inherently a creative, even revolutionary act. Social scientists in turn may shun interdisciplinarity if they see it as lacking a shared methodology that allows insights to be built upon through time.

Some have wondered if interdisciplinary research is revolutionary as opposed to normal science (see Szostak 2011). To be sure, scientific revolutions more often than not reflect the integration of insights from multiple fields. Yet to believe that interdisciplinary research is definitionally revolutionary is to suggest that the vast bulk of scholars should attend to specialized research and only the rare creative genius should tackle interdisciplinary research. While interdisciplinary research may well be more creative on average than specialized research, it is critical that it not be (or be perceived to be) necessarily revolutionary.

The challenge, then, is to identify procedures for interdisciplinary research that can guide large numbers of researchers without limiting the creativity of interdisciplinary analysis. Since interdisciplinarity is an antidote to disciplinary biases, it must itself not become narrowly focused. Must structure restrict freedom, or is it possible that “thinking outside the box” can be aided by knowing where the box is?

Interdisciplinary research can be guided by a set of (iterative) steps—some straightforward, others more challenging—that nevertheless encourage researchers to engage the full range of scholarly theory and method. These processes developed by the author and others do not limit creativity within interdisciplinary research. As Repko (2008) has shown—in a path-breaking text on how to perform interdisciplinary research—they are as applicable in the humanities as in the social sciences (or indeed natural sciences).
**CONCLUDING REMARKS**

We need to be careful about reifying observed practices in the humanities and social sciences. These reflect complex historical processes. The world we see around us need not be the best of all possible worlds. Nor are the differences we observe across the humanities and social sciences inevitable.

Humanists and social scientists have much to learn from each other. Interdisciplinarians have much to learn from both. Rather than celebrating observed differences, interdisciplinarians should be guided to integrate these. In particular, interdisciplinarians should urge all scholars toward clarity, causal analysis, comparative research, theoretical flexibility, methodological flexibility, a constructive recognition of disciplinary and other scholarly biases, and an appreciation of the possibility of a cumulative interdisciplinary scholarship that links all areas of the academy (and beyond).

**NOTES**

1 My first exposure to this distinction involved its application by James Welch IV and others to approaches to interdisciplinarity: see Newell et al. (2003). Nietzsche (1872) had popularized the distinction, arguing that tragedy depended on the integrative tension between the two. He at least implicitly argued that philosophy, and scholarship more generally, would also benefit from both. (It was pointed out to me at the symposium on which the present volume is based that Nietzsche occasionally spoke of a third disposition, in which case the Dionysian became a middle ground.) Benedict (1934) argued that the terms could be used to classify cultures. I am unaware of previous applications of the terms to historical methodology.

2 See my *Classifying Science* (2004), which provides both a typology of theory types and a list of the dozen scholarly methods. In both cases their key strengths and weaknesses are outlined.

3 The word “clarity” itself is not free from ambiguity. Clarity is defined here as a situation in which the communicator and the audience share a similar enough definition of key terms that they understand one another. Since understanding is never perfect, we must necessarily engage “degrees of clarity.” That is not a problem: the argument here is that scholars should always strive for clarity even if this can never be perfectly achieved. I have described elsewhere (2003) how the scholarly literature on culture is unnecessarily
vague but in fact involves the investigation of hundreds of distinct causal linkages involving distinct elements of the phenomenon of culture.

4 For Burke, Goody, and Daunton, see Pallares-Burke (2002, 154, 20–26, and 164, respectively).

5 Roehner and Syme (2002) follow the strategy of breaking events into component parts and comparing the parts across events using a variety of methods. They argue that this represents a "scientific" approach to history.

6 The argument is thus similar to Burke (2005), who advocates a Braudelian total history that integrates economic, political, social, cultural, and other forces.

7 Notably, the recent phenomenon of micro-narratives, in which historians engage events or processes of local interest, is grounded in a belief that general lessons can be drawn by comparison across such studies.

8 To be sure, a minority of phenomena, such as personality dimensions, cannot be identified without recourse to human science theory. Scholarly understanding of the nature of these may evolve through time. Cumulative historical understanding will still be possible in such instances as long as classifications are clearly specified.

9 Dow (2001, 61–76) makes a compelling argument that postmodernism is the antithesis of modernism and thus will inevitably be transcended by some synthesis of the two. (Jack Amariglio, in commenting on her paper, notes that this desire for a “third way” is widely felt and can be couched in language that eschews the intellectual baggage associated with thesis/antithesis/synthesis.) Dow argues that (skeptical) postmodernism as “anything goes” is unsustainable, for there is then no good reason to bother with scholarly argument; however, it has brought modernist precepts into question such that a return to modernism is impossible.

10 I have argued (2007b, 69–80) that the humanities are best defined in terms of an interest in the causal relations to/from the category of art (which includes literature). History and area studies have a more complex role to play: seeing whether the scholarly understanding of a diversity of causal relationships allows us to understand how different societies both work and change through time. And philosophy operates on a higher plane altogether. Humanists should use the same theories and methods as social scientists, though there will inevitably be differences in emphasis.

11 I have made this point elsewhere (2004) by placing theories within a five-dimensional typology of theory types: theories that excel in one way (as rational choice theory excels with respect to individuals making rational decisions) must necessarily be weak in others (group decisions, attitude formation, and non-rational decisions).

12 As for grand theories that purport to explain many/most/all causal links, a good working hypothesis is that each of these provides more insight into some links than others. For example, Mahoney and Rueuschemeyer (2003, 5) speak of major theoretical conflicts between structuralism and culturalism. If culturalist theory aids understanding of how cultural attitudes influence certain decisions, and structuralist theory shows how institutions affect those same decisions, why not integrate these approaches?
It was noted at the symposium that there are many ‘bad’ classifications that fail to support clarity because they are organized illogically and/or omit important elements (in which case it is not clear if the elements classified are distinct from those not mentioned). I stress that I am making an empirical argument: that an exhaustive and logical classification can support clarity. The argument can only be evaluated in the context of a particular classification. I have elsewhere (2004) developed such classifications of phenomena, theories, and methods.

Halperin (1997, 71–72) argues that scholars must grapple with six types of relationships between concepts. One of these, “X causes Y,” would be reflected in causal links. A second, “X is part of Y,” is captured by classification. Two more, “X is a characteristic of Y” and “X is an example of Y,” would be important in defining phenomena or characterizing causal links. A fifth, “X is like Y,” might capture certain similarities. Finally, “X is evidence of Y” guides us to distinguish argument from evidence. In all six cases, clarity of the sorts advocated above supports scholarly understanding. See Szostak (2004, 41–45).

Note that when natural scientists are first studying a “new” phenomenon or process, such as genes or DNA, there is perhaps inevitably a great degree of ambiguity in definition, though this tends to decrease over time.

WORKS CITED


