Collapse in early Mesopotamian states: what happened and what didn't
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Introduction

In recent years some historians and archaeologists have become interested in social

science approaches, such as are considered at the Santa Fe Institute, to issues of cultural

selection and individual choice (often called "agency") and how social institutions are

shaped by these choices and in turn shape the domain in which choices are made. At

least this is how I unpack a phrase in a paper of Sam Bowles that discusses how

"individual traits and social institutions are mutually determining."

For example, in a review by David Gilmour (in the *NYRB*, Nov. 2, 2006), the

reviewer comments "that events are easier to understand if you treat people as individuals

rather than as members of a class (acting in unison), a crowd (rioting for the same

motives), or, worst of all, a list of statistics" (with some changes in tense by me). The

book reviewed by Gilmour, Maya Jasanoff's *Edge of Empire: Lives, Culture, and*

Conquest in the East, 1750-1850, declares that "empires are a fact of world history. The

important question for this book is not whether they are 'good' or 'bad,' but what they

do, whom they affect, and how."

In the following paper, the core of which was not written for this working group, I

do not explicitly discuss formal issues of "co-evolution"--selective pressures,

evolutionary success, sociality, values as strange attractors, the cost of behaviors, and so

forth. I do not simulate social change by means of mathematical expressions. Indeed,

most of the literature on "co-evolution" of human behaviors, it seems to me, has focused

on a scale of human interactions and social change, such as the evolution of food sharing, language, hunting and gathering, that is very different from that discussed in this paper. (Although Sam Bowles writes of the "spread of Islam" as an appropriate example of "co-evolution," this is not discussed in the sort of detail that is likely to convince or even pique the interest of historians).

Nevertheless, I argue that my work on "collapse" in Mesopotamia may well be a relevant case study of culture change that is amenable to new kinds of theorizing that may be appropriate for this working group. The paper presents examples of macro-societal change, the nature of social interaction in highly stratified societies, and principles of stability and instability in hierarchies, and it discusses the choices that humans, of high status and low, made and which affected their lives in the most profound ways.

I (NY) wrote this paper for two conferences last summer and revised and abridged it as part of a session on the works of Jared Diamond at the American Anthropological Association meetings of a week ago (at the time of this writing). Last year I met, serendipitously, Paul Hartzog, a Political Science grad student at the University of Michigan, who is interested in complex systems in modern institutions, and who wondered how I was using concepts about complexity in the study of the collapse of ancient states. I invited him to contribute a section of this paper (which is identified below). He also read the entire paper and has commented on various parts. Hence, this jointly authored paper, although I maintain the first person singular expressions of the original drafts of this manuscript as well as some newly introduced animadversions.

Preface

I shall not recapitulate the history of collapse studies (for which you may see my *Myths of the Archaic State: Evolution of the Earliest Cities, States, and Civilizations* (2005) but do wish to underline a few themes that are relevant for this paper: cultural and political transformations are not the same thing, even if they are not unrelated, and it is a mistake to conflate them. Also, collapses are not the "end" of anything; indeed, they create new patterns of social life that often explicitly display nostalgia for the past, which then has a new life in the present. Ironically (for some), when we study collapse, we must also study what happens after collapse.

I do want to offer a few words about why "collapse" flourishes in the academy today. Archaeologists became interested in collapse, which was mainly the collapse of ancient states, because of the perceived failure of neo-evolutionary social theory. Neo-evolutionism, as is well known, ranked all societies in their process of becoming states, spiraling upward, as it were, no matter whether the process was actually fulfilled. Among other criticisms (Yoffee 2005), new studies of the failure of states require that states and cultures be broken down into institutional groupings of partly overlapping and partly opposing fields of action that lend the possibility of instability, as well as stability, to societies. These modern archaeological studies challenged views that assumed that human sociocultural systems inherently tend to persist or expand. Naturally, these are subjects that are at home among the friends of the SFI.

Although studies of collapse have seemed appropriate for archaeologists and ancient historians for the very good reason that states and societies that once lived have indeed vanished, and the reasons for this can be explored, we must be wary of taking inexorable decline for granted. Obviously, anything that does not last forever has a

beginning and an end. Collapse studies, like those of rise, have to ask why certain things happened at certain times, and also why something else did not happen instead. The earliest states of the Maya, Teotihuacan, dynastic Egypt, Shang China, Indus Valley cities all changed in various ways, but they did not "collapse" into social oblivion or in historical memory.

Today collapse studies are part of everyday conversation in the public. Jared Diamond's book on collapse has sold hundreds of thousands of copies in English-speaking countries, and its translations have made it an international best-seller. Obviously, the success of Diamond's "Collapse" is due to our modern concern with global warming and the possible destruction—the collapse--of the global ecosystem. Although Diamond is not an archaeologist or historian, but a professor of geography and biogeography, journalists and scholars alike have become extremely attracted to his studies of ancient societies. We find titles, for example, like *The Winds of Change: Climate, Weather and the Destruction of Civilizations, Field Notes from a Catastrophe, The Weather Makers: How Many is Changing the Climate and What It Means for Life on Earth*, and Al Gore's *An Incovenient Truth* that cite Diamond and are widely discussed.

Diamond's message is that collapse occurred in the past because of inattention to troubles, especially the management of the environment, and this has resonated emphatically with all who are worried about global warning. Diamond's scholarship, however, which is a journalistic rendering of archaeological research, depends on a highly debatable assumption, namely that we can learn from the past how to live in the present because the past is more or less just like the present. Since societies in ancient times collapsed, so could our own society.

Some archaeologists have been more environmentally deterministic than Diamond himself. In the summary of a conference held last year at Arizona State University that was published in an issue of *Nature*, an archaeologist wrote that "it is clear that large-scale environmental degradation is almost always a factor is social collapse." However, in a very recent essay in the *Annual Review of Anthropology*, Joe Tainter concludes that there are "no confirmed archaeological cases of overshoot, resource degradation, and collapse….There are no cases…of pure ecological collapse."

Now, considering the case of collapse in Mesopotamia, some journalists have paid attention to Harvey Weiss's and his colleagues' research into period of aridity at Tell Leilan in Syria, dated in the late 3rd millennium BC, and his claim that Leilanians, and Amorites (West Semitic speakers), migrated from Syria into Mesopotamia and caused the destruction of the Third Dynasty of Ur. Although there is some data about desiccation on planet Earth at about this time (most of the scientific data are from deep-sea cores), nearby sites contemporary with Leilan show no signs of extreme aridity. Regional climate change in West Asia at the end of the 3rd mill. is unconfirmed, and even if present, its effect of societies in the region remains to be measured.

In the same essay of Joe Tainter I have mentioned earlier, the author regards cause of the collapse of the Ur III state in Mesopotamia, which lasted less than a century, not as the result of an ethnic migration, but as an example of a mismanaged irrigation system. The consequent salinization effectively destroyed the state's resource base, and it collapsed. Although Tainter inexplicably writes that the Ur III period is "poorly known," in fact there are about 100,000 texts known from this time, ca. 2100-2000 B.C., and, it seems, almost as many books and articles on the period.

Tainter's view of this collapse commits the same fallacies of ignoring history and culture that he rightly identifies in Diamond's work. The collapse of the Ur III state was not due to environmental degradation, but to the various city-states of Mesopotamia being able to reassert their time-honored autonomy from a tyrannical dynasty whose fragility was rapidly exposed. The Ur III state failed for wholly explicable political and socio-economic reasons, and Mesopotamian society became more complex, not less, as a result.

Now, there are certainly good examples of severe climate change in the past and human responses to it. Since we are in Santa Fe, it is appropriate to note that in the prehistoric Southwest, there is the well-known 75-year drought that caused the abandonment of prehistoric Anasazi pueblos. The collapse and abandonment of Anasazi pueblos around 1200, however, was followed by the foundation of new pueblos and the formation of new cultural traditions, many of which are intact today. The Anasazi did not disappear, and the reasons they moved to new sites was far from mysterious. Similarly, in the Maya area where the existence of droughts has been posited (but hardly convincingly), some Classic Maya city-states collapsed, and sites were abandoned, whereas other city-states persisted into the so-called Post-Classic. It is dubious that climate change, for whatever reason, had anything to do with this collapse, and some argue there was no precipitous collapse in overall Maya population.

To return briefly to the Ur III case, it was once common to think that political goals set by kings of the Third Dynasty of Ur, ca 2100-2000, including the need to feed thousands of bureaucrats, caused abandonment of the local systems of fallowing and the consequent salinization and ruin of southern Mesopotamian agricultural fields led to the
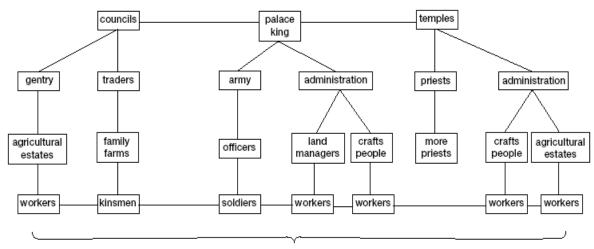
end of the dynasty. This was the basis of Tainter's claims. However, Robert Adams, about 25 years ago, showed that this was not the case. In fact, Mesopotamian states were not so centralized and rulers were simply not powerful enough to engineer the wreckage of traditional Mesopotamian agricultural practices. This only occurred in the first millennium AD, when Sasanian rulers and then early Caliphs built canals from the Euphrates to the Tigris, ordered huge amounts of grain to be produced in the south and shipped to their capitals in central Iraq.

The Collapse of Assyria

Assyria is the northern part of Mesopotamia, and the Assyrian language is a "dialect" of Akkadian, which also includes Babylonian. Both Babylonian and Assyrian dialects can be divided into historical phases, called Old, Middle, and New (or Neo-), and these linguistic terms also connote historical periods, e.g., Old Assyrian period, Middle Assyrian period, and Neo-Assyrian period.

Old Assyrian hierarchy
(hypothesized and simplified)


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  councils ————————————— palace ————————————— temples
  /      \                 king                /        \
 /        \              /      \             /          \
gentry   traders      army    administration  priests   administration
  |        |            |       /      \        |         /        \
  |        |            |      /        \       |        /          \
agricultural family  officers land    crafts   more    crafts    agricultural
estates    farms            managers people   priests  people    estates
  |         |           |      |        |        |        |          |
workers — kinsmen    soldiers — workers — workers       workers — workers
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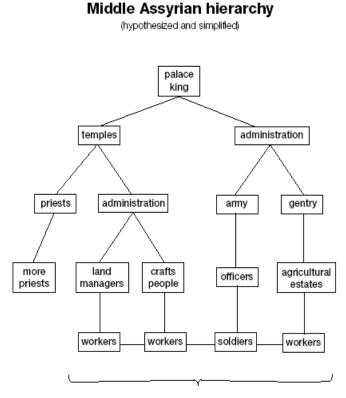
Assyrian culture, identity, belief-systems

In this hypothesized and simplified diagram I attempt to depict the hierarchical
(or, of you will, the heterarchical) organization of the Old Assyrian state, from about
1950 BC to the reign of the usurper, Shamshi-Adad, about 1800 BC. For the non-
Assyriological among you, this is the period we know from Old Assyrian documents that
mainly come from the trade colony, Kanesh in central Anatolia. This was a colony in the
absence of colonialism, since Kanesh and other Assyrian colonies were under the
political control of local Anatolian palaces and royalty. Although there were kings and
administrators and armies in Assyria, there were also councils of "great" and "small" and
a "city-hall" that shared power with the crown and its bureaucracy. The elite consisted of

eminent traders and presumably gentry, land-owners, who included rich merchants. Assyrian traders did not make money from their control of any resource but on their ability to move goods from where they were plentiful to where they were scarce and to keep transport costs and taxes low. Assyrian kings established treaties with the potentates of polities in which traders visited and lived, and the Old Assyrian state profited from the successful trading missions. For the purposes of my argument, note that this Old Assyrian hierarchical system is built from the bottom up. That is, the workers in the land were Assyrians, and they were supervised in their various hierarchies by other Assyrians and responsible to Assyrian traders, landed gentry, the royal administration, and the temple organization (of which in fact we know little).

The Old Assyrian state collapsed just after the reign of Shamshi-Adad, who had seized power in the land from his base on the middle Euphrates. His short-lived empire was resisted from various quarters, and its demise the Old Assyrian trading system also disappeared. For all its immense prosperity, the mercantile arrangements were extremely fragile. The Old Assyrian merchant colonies and the Assyrian political economy were dependent on the relatively unrestricted passage of traders over long distances. When constraints were imposed on this passage by the rise of strong centralized governments in Anatolia, Babylonia, and elsewhere, foreign trade and the political system that was built upon it were jeopardized. When the artificial state of Assyria collapsed after the short-lived rule of Shamshi-Adad, the Old Assyrian political and economic system seems to have been reduced to the essentially rural Assyrian countryside that was its original base (that is, the lower two levels of the hierarchy in which horizontal ties of kinship were
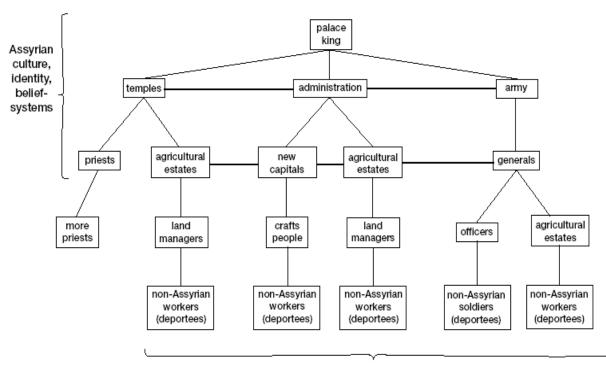
strong). Only as a response to military pressures 500 years later did a new centralized

state rise in Assyria.

Middle Assyrian hierarchy

(hypothesized and simplified)

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                          palace
                          king

              temples                administration

        priests    administration       army       gentry

  more      land      crafts      officers    agricultural
  priests   managers  people                  estates

           workers   workers    soldiers    workers
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Assyrian culture, identity, belief-systems

In the 14th century BC Assyria experienced a political renaissance, substantially in

response to new states on its borders that were threatening it. By creating an efficient

military regime to combat these enemies, which included the Kassite state to the south in

Babylonia, the neighboring state of Mittanni, and the Hittites to the north, Middle

Assyrian kings began to centralize their power at the expense of the traditional Assyrian

nobility with whom the kings had shared power in the Old Assyrian state. The nobility,

however, was far from toothless. When an Assyrian king built a new capital to house his

new administration, in order to distance his rule from the elites from whom he was bent

on seizing power, and also committed the sacrilege of sacking Babylon and Babylonia, the cultural heartland of Mesopotamian civilization, Assyrian nobles assassinated the king. In this idealized diagram, note how Middle Assyrian kings, in contrast to the Old Assyrian system, streamlined and simplified the administration of the land, and tried to bring the army, temples, and gentry under their direct power. Although Middle Assyrian royal power was temporarily curbed by internecine struggles about 1200 BC and the various changes in governments and societies throughout Western Asia at the time, the process of centralization in Assyria continued unabated into the first millennium.

Neo-Assyrian hierarchy
(hypothesized and simplified)

The expeditionary forces launched by Neo-Assyrian kings (in the early first

millennium B.C.) resulted in the creation of an enormous, professionalized, and battle-toughened army. The highpoint of the Neo-Assyrian expansion was around 700 BC and in the following years when Assyrian hegemony extended to the Mediterranean coast, Egypt, and Babylonia. This highpoint, however, was short-lived, and conquered territories soon won their freedom. The Assyrian army was successfully met by foreign enemies: Medes, Babylonians, and others. With the exception of a few outposts and individuals mentioned in later Babylonian documents, after 600 BC the existence of both an *Assyrian* political system and most *Assyrian* social and cultural institutions vanished.
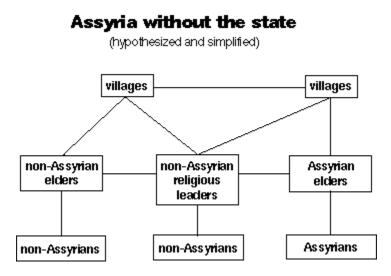
Why did the Neo-Assyrian state collapse, and more importantly why did it not regenerate (as so many other defeated and "collapsed" Mesopotamian states did)? One salient reason seems to have been the policy of Assyrian kings themselves. In the diagram we can see some of the policies of extreme centralization that Assyrian kings pursued, including the construction of new capitals and the promotion of generals into offices close to the king. Thus, in system-terms, the upper levels of the hierarchy were closely coupled horizontally, while the vertical bonds connecting the upper levels to the lower ones were increasingly tenuous. That is, the close interconnections of the palace, the army, and the elites, who no longer owed their status to their place in a kinship network, but whose rank and power derived from their state offices, made the top levels of the system "disarticulated" and vulnerable to being comprehensively erased.

The policy of deporting conquered people (like the "ten lost tribes of Israel") into the old and new imperial cities and into the countryside as agricultural workers and canal workers on lands that were given to loyal generals created a base-class of laborers that was strongly coupled horizontally but only loosely connected vertically to the upper

levels of the hierarchy. Normally, in Mesopotamian collapses, when the top of the hierarchy was removed, it would be rebuilt by the lower sections of the system. This was not possible in the Neo-Assyrian case, since the inhabitants of villages were increasingly non-Assyrian and had little interest in reconstructing anything that was "Assyrian."

One interesting cultural aspect of the Neo-Assyrian policies of political centralization was the so-called "cultural struggle" (Kulturkampf) or the "Babylonian problem" of the Assyrian kings. It is apparent that Assyrian royalty and others regarded Babylonia as the heartland of Mesopotamian culture, as I've already noted in characterizing certain adventures in the Middle Assyrian period, although they also regarded Babylonia as chaotic and even decadent. When a rebellion in Babylonia was put down by Sennacherib, and the king sacked Babylonia, this was regarded in Assyria as an act of impiety. Sennacherib was assassinated, and his son, Esarhaddon, repented of his father's deed. Thereafter, each of the sons of Esarhaddon ruled respectively Assyria and Babylonia. The Babylonian king rebelled against his brother, and after a 4-year civil war, Assyria conquered the south. This civil war cost Assyria in soldiers and in lost tribute that were necessary to administer other conquered provinces. The civil war was mainly a Pyrrhic victory for the Assyrians, which soon succumbed to superior forces of its enemies.

Our last diagram shows why the Assyrian state was not rebuilt after the defeat of its king and army in the latter years of the 7th century BC.

Assyria without the state
(hypothesized and simplified)

The removal of the horizontally connected top layers of the Neo-Assyrian hierarchy did not proceed to a level of landed gentry and Assyrian nobility since these traditional, local elites had been systematically and intentionally removed by Assyrian kings in their drive to establish a centralized government that was propped up by a military force. In the countryside and in ruined royal capitals lived many, perhaps mostly, non-Assyrian workers, who had little connection to Assyrian culture or even the Assyrian language (since they were predominantly Aramaic speakers deported from the West). Although the Assyrian kings were defeated by foreigners, it was only the Assyrian rulers themselves who could have destroyed the very qualities that made Assyria Assyria. Gibbon famously described the fall of the Roman empire to the "triumph of barbarism and religion." When we describe the collapse of Assyria, it is the disappearance of the religion of the Assyrians, the "old order," that is, Assyrian culture in Assyria, that is most significant and explains why Assyria did not rise again. Gibbon would have understood this perfectly. People continued to live in Assyria, and remnants of the most ancient city in Assyria, Nineveh, are cited in a variety of sources, but Assyria was gone.

This "collapse" did NOT result in a "drastic decrease in population size and/or political/economic/social complexity," which is Jared Diamond's definition of collapse. Social change, yes, dramatically, but no collapse in the way as Diamond has unfortunately delimited the subject.

Collapse as a type of co-evolutionary change (basic text by Paul Hartzog with emendations by Norman Yoffee)

Explorations of both networks and complex adaptive systems yield insights that are useful to understand collapse in Assyria. For example, Per Bak's investigations into punctuated catastrophes in ecologies, earthquakes, and economics led him to conclude that "fluctuations and catastrophes are unavoidable" (Bak 1996: 258). Punctuated cascades are indicators and redistributions of stress or strain in a tightly coupled system, such as in the Neo-Assyrian case. Such systems can exhibit many small catastrophes which can "cascade" into a larger one. Also, catastrophes can be extremely rapid and can result from small proximate inputs. Howoever, insufficient responses to these proximate circumstances cannot explain collapse. Rather, we must analyze the historical causes of overly tight-coupling and systemic vulnerability.

So what made the Neo-Assyrian hierarchy vulnerable? As we have seen, the topmost or central nodes of the hierarchy, by progressively eliminating competing social organizations, jeopardized the viability of their structure. Charles Perrow (1999:99) explains tight coupling as an instance of when "there is no slack or buffer" between elements in a hierarchy so that what happens in one directly affects what happens in other elements. (By contrast loose coupling can buffer the magnitude of effects throughout a hierarchical system). Robert Keohane and Joseph Nye (2001: 12-14) characterize

hierarchical interdependence as exhibiting either "sensitivity" or "vulnerability" to inputs from each other and also from outside forces. The first condition can lead to new adaptations, while the second tends to lead to thoroughgoing and qualitative change, or what some have called "collapse."

Stuart Kauffman (1993, 1995), working at the SFI, points out that systems that are too highly connected (or hypercoherent) can suffer a "complexity catastrophe" because the parts are too interdependent such that the impacts to one or some will cascade into others, an "avalanche of coevolutionary changes" (in a phrase echoing Bak's avalanches of piles of sand). "Robust" systems for Kauffman are those which are flexible enough to maintain "structural stability." The significance of the example of collapse in Assyria to this systems perspective is that we can trace the evolution of tight-coupling and hence hierarchical vulnerability. *It was the very policies that made Assyria imperially successful that ultimately imperiled Assyria's existence.*

In epidemiology, the group of highly interconnected individuals that makes the entire network vulnerable is called a "percolating cluster" (Watts 203, 185, 239). "Only when the network becomes dense enough do we see the percolating vulnerable cluster appear." If we can transfer this language from epidemiology to Assyrian history, we might argue that it was only in the Neo-Assyrian empire that the dense network of royal information processors was constructed to handle complex military strategies, large quantities of goods (tribute and booty), and to shift conquered peoples throughout Assyria. The top levels of the Assyrian hierarchy thus possessed the properties of "single highly connected cluster" (Callway, Newman, Strogatz, and Watts 2000). In systems terms, we suggest that there resulted "congestion" at the top, namely that Assyrian kings

and generals, made all necessary decisions, but there was "delay" at the bottom since agricultural workers and unfree laborers, especially in Assyrian capitals, contributed—or could be persuaded to contribute—few resources to the top. When external forces—Medes and Babylonians and others—attacked Assyria, "delay" became the occasion for liberation. The close-coupling at the top resulted in vulnerability, but since the upper echelons and the base were only loosely coupled, the collapse of one did not cascade in every respect into the other. Assyrian culture disappeared, but the population of Assyria did not diminish and the culture of the local population, which was non-Assyrian, was reproduced and reformed.

The Assyrian case, therefore, is an example of a system that was "simultaneously robust, yet fragile: robust to common disturbances the system is designed to handle, yet fragile to rare events [civil war, strong enemies] and flaws in the design" (Zhou, Carlson, and Doyle 2002). This behavior is seen in some network structures, which are known as "scale-free" or "power-law networks," which are robust to random failures but vulnerable to targeted attacks against regions with higher connectivity.

Furthermore, one kind of robustness is the ability to regenerate damaged portions of a system after a perturbation. "Some organizations are even indestructible; they regenerate themselves from any component. The reason for this robustness is the existence of generators … whose repeated interactions rebuild piece by piece the entire organization; if they are retained, the system regenerates" (Fontana and Buss 1996; Casti and Karlqvist 1996: 17). As we have seen, the removal of the topmost (core) levels of the hierarchy in the Old Assyrian period, did not affect the "generators" of the system that reproduced kingship and indeed promoted it in order to defend itself against enemies. In

the Neo-Assyrian case, however, the removal of the core of the hierarchy left the system without "generators," which had been removed by the Assyrian kings themselves.

In Perrow's terms (1999), the collapse of Assyria can be characterized as a "normal accident" insofar as it occurred in a system whose structure made it vulnerable to change. Although historians tend to rank causes of change as mainly external or mainly internal, the value of this systems' perspective is to show that the collapse of Assyria can only be analyzed in terms of the relations between the internal structure and the external perturbation that determines the likelihood of collapse: this is an example of co-evolution in an ancient state and presents a new appreciation of the phenomena of collapse.

The decline and fall of the city of Kish: co-evolution and the collapse of Mesopotamian civilization

I now move to another collapse in Mesopotamia and from the perspective of one city, Kish. Although the history of the city of Kish covers more than 3000 years and ought to inform us about how people lived and how lives changed over this span of time, one feels like Italo Calvino's character Kublai Khan in *Le città invisibili* (Invisible Cities) who "reflects on the invisible order that sustains cities, on the rules that decreed how they rise, take shape and prosper, adapting themselves to the seasons, and then how they sadden and fall in ruins." Calvino, however, does not tell us more about this "order" and those "rules," and my own discussion of principles of "co-evolution" in the history of Kish is metaphorical and inchoate. Perhaps participants in the workshop will be able to help.

Like Calvino's "Berenice," Kish is "a temporal succession of different cities…wrapped one within the others, confined, crammed, and inextricable." I cannot

pretend to write a history and archaeology of Kish, describing sights and smells of the city. Rather, I strive to write a "biography of Kish." This biography (namely, the book on Kish that I am working on) will include other biographies, of some significant scholars who have studied Kish and also an account of my own research on the city. Although such a "history" might seem "post-modern," reflecting on the "recursive" strategies and biases of the author and the hermeneutic limits of narrative, my biography is conditioned far more by the nature of the sources, which require a good deal more of imagination that historians normally allow. My biography is perhaps a form of epistemology, a reflection on how we can know about Kish, Mesopotamia, and the meaning of social change.

For this paper submitted to the working group on co-evolution I depict some of the social changes at Kish and consider the causes of collapse. Studying collapse in early Mesopotamia from the point-of-entry of one city allows or even forces us—as it did for Gibbon on Rome--to speculate on why people moved into cities, how people lived in domestic quarters and with what accoutrements, and how the great institutions of palaces and temple affected their lives. Kish is perhaps not the city richest in data for these examinations, but it presents a unique case for having exercised great political power early in its history and then persisting without such power for centuries thereafter. I begin the story with some chronological, historical, and archaeological observations (which I shall illustrate in Santa Fe).

The early history of Kish (in the 3rd mill. B.C.) is known less from the archaeology of the site or from the texts that were found in the site than from references to Kish in literature and from other sites, for example in the Sumerian King List, the poem of Etana, the title "King of Kish," borne by kings of other cities, the so-called

"Kish civilization," the possible references to Kish in Ebla texts, if this is the Kish of central Mesopotamia and not another one, and the rise of power of Sargon from his position as an officer of the king of Kish.

Kish was excavated twice, (if we do not count the aborted Japanese campaign in the early 90s), by the French in 1912 and from an Anglo-American expedition from 1923-33. The methods and records of the excavators are in disarray, but the museum salvage operations were successfully undertaken by a new generation of scholars, McGuire Gibson in Chicago and Roger Moorey in Oxford. The site of Kish consists of many mounds (which I shall show you at the SFI), the two major ones, Ingharra—East Kish, Hursagkalama in antiquity, and Uhaimir—West Kish, always called Kish.

Although there seems to be a little (or no) evidence of a late 4th millennium BC occupation at Kish, Kish seems to have been an insignificant place, perhaps two nearby villages, until around 2700 B.C. In the late Early Dynastic II-early Early Dynastic III period, about 2500 B.C., (and I cannot pause to debate the dating) Kish grew explosively and was the home of kings and palaces. In Ingharra (Hursagkalama), excavations revealed two ziggurats and also a monumental building, "the plano-convex" building, usually interpreted as "a fortified residence or arsenal." I suppose that that Ingharra, the center of the city-state of Kish in the early and middle of the 3rd millennium B.C., was the scene of a "processional way" in which ceremonies of state were celebrated. Although I have still have to work out the exact geography, I am reminded of the great processional way, the "Street of the Dead," at the site of Teotihuacan in south-central Mexico, dating to the early 1st millennium A.D.

The impressive architectural remains at Kish and especially the textual references to the great city have led some commentators (Steinkeller 1995) to propose that Kish was the capital of a great empire in central Mesopotamia, and this contrasted to the system of city-states in the south. The argument encompasses claims that the environment in central Mesopotamia was different in the two regions, with practices of extensive landholdings by temple estates characterizing the south while central Mesopotamia was "dimorphic," in which an exchange of goods between pastoral and settled peoples occurred. Furthermore in this argument, the central and southern part of Mesopotamia were ethnically different, Sumerians in the south, Semites in the central region. Sumerian gods were "territorially bound," that is, gods of city-states, while Semitic gods of central Mesopotamia "were not bound to any single place, which is typical of a nomadic population."

I do not think that the data from Kish support these claims. The first written documents in central Mesopotamia come from Jamdat Nasr, about 20 kms from Kish, and do not differ in style from the Sumerian documents in the Uruk III style in the south, both documenting activities of temple estates. (It was only after the abandonment of Jamdat Nasr that Kish grew so explosively). In the south in the 3rd mill., rulers attempted to achieve hegemony over their neighbors, and this was true for rulers of Kish, as well, who participated in the internecine warfare of the early and middle of the 3rd millennium. In Kish the patron deity was Zababa, not a universal Semitic deity, but only at home in Kish. Indeed, although the settlement patterns in the two regions (of the south and central part of Mesopotamia) are different, striking cultural and material similarities overarch both regions in lower Mesopotamia: whatever the differences in languages in the two

regions, the same gods were worshipped, the same school texts were copied, and the same salient material culture types were used.

One incidence of cultural similarity between the two regions can be cited from the Old Babylonian period, about 2000-1600 B.C. Now, to set the stage before jumping to this period, it is useful to know that Kish was an important provincial city under Sargon and the Akkadian kings, and the city was also a provincial outpost of the most distant empire of the Ur III kings. Kish was on the outskirts of direct political control in Ur III times, having an ensi (governor) as ruler, on the fringes of imperial taxation and control. At the start of the Old Babylonian period, Amorite princes competed with other Amorite princes for control of Kish and other cities in central Mesopotamia, just as they did in southern Mesopotamia. When kings of Babylon finally conquered the central region and then the southern one, Kish, only about 15 kms from Babylon, became an important provincial capital.)

The story I now want to tell begins after the short-lived reign of Hammurabi and the early years of his son and successor, Samsuiluna, in the Late Old Babylonian period. At this time, a little-known dynasty of rulers, called "kings of the Sealand," fought rulers from Babylon for control of their homeland. Now, since kings of the Sealand are also known from the mid-first millennium B.C., about a 1000 years after the Old Babylonian period, I must use these data in my short story. In the first millennium B.C., the Sealand is a geographical term for the marshlands where Chaldeans lived and which they used as their base from which to fight northern Mesopotamians, the Assyrians. "Sealand" alternates with Bit Yakin, the foremost tribe in the Chaldean confederation. In this battle with Assyrians, the Chaldeans also fought the Babylonian rulers, puppets of the

Assyrians, who were appointed by them. For example, the Chaldean Nabu-ser-kitti-lishir, attacked the pro-Assyrian governor of Ur, Ningal-iddin. The Babylonians loyal to Assyria were almost overwhelmed in the rebellions against Assurbanipal, before the Assyrian king won in the bloody Mesopotamian civil war, I alluded to earlier in this paper (652-648 BC).

Now, our Old Babylonian references to kings of the Sealand come from the end of the Old Babylonian period. Sealand kings names Ilimailu and Damqi-ilishu fought against Samsuiluna, Abi-esuh, and Ammiditana in the 18th and 17th centuries B.C., as we know from later chronicles and laconic references in the year-names of the Babylonian kings. Partly on the basis of the events a millennium later, I want to venture a speculation on the activities of these kings of the Sealand who fought the Old Babylonian successors of king Hammurabi.

What we know of these activities depends on an unusual set of texts that show that the personnel of the temple of Inanna/Ishtar in Uruk, which was the most famous center of worship of the goddess, migrated from Uruk to Kish, about 175 km to the north. These devotees included lesser goddesses, priests, and all manner of attendants, including kezertu-women, who played roles in ritual dramas held outside the city and which were of a sexual nature, appropriate to the goddess of women's sexual nature. Kish was, after Uruk, one of the most venerable centers of Ishtar worship.

We know the proximate causes of this remarkable migration: the city of Uruk, along with other cities of the south, were abandoned late in the reign of Samsuiluna, son of Hammurabi. No texts from southern cities exist after Samsu-iluna's time, and

archaeological surveys of the cities—especially by the German team at Uruk—have not revealed one sherd dating to the late Old Babylonian period.

Reasons given for this regional abandonment have been that the Euphrates changed its course at this time, or that Babylonian kings engineered water diversion projects in their battles with kings of the Sealand. I am not persuaded by these arguments, for which there is little or no data, and the southern cities were indeed quickly reoccupied after the collapse of the Old Babylonian dynasty and managed to persist for a subsequent 1500 years.

I reckon that this abandonment was rather a conscious tactic of local resistance in the south against the domination of the city of Babylon, which had conquered the region under Hammurabi, who along with his son Samsuiluna had oppressed it greatly. The local leaders in the south were not governors of cities, since these were appointees of Babylon, but were the rural kings of the Sealand. Just as Chaldeans from the Sealand nearly 1000 years later fought guerilla actions from their marshy home, Sealand kings were hard to confront, and they eventually won the day.

My speculation is that these Sealanders represented the disaffected part of the local population who fought against their own people, essentially the urban elites who found it profitable to ally with their Babylonian conquerors. The victorious Sealanders then depopulated the cities, the base of their urban enemies, forcing the folk out of their cities, either into the countryside they controlled, or to more distant cities like Kish.

Conclusion

The questions of collapse as part of social change in Kish, of course, continue beyond the temporal outline of this paper. If Assyria collapsed such that its culture

essentially vanished at stroke, Kish remained as a city or at least a village into the first millennium A.D. Mesopotamia, vulnerable to the "penalty of taking the lead," becoming embedded in the Persian and Greek worlds, in empires in which kings did not identify themselves as Mesoptamian and in which new belief-systems and philosophies replaced Mesopotamian ones. Gradually it became of no longer useful, socially or economically, to be "Mesopotamian," and Mesopotamian identities were abandoned, signifying the final collapse of Mesopotamian culture.

There is, however, as we've repeatedly learned, little finality in collapse. Today, modern Assyrians and Chaldeans (the first Nestorian Christians, the second Roman Catholics) who live in their 100,000s in my home-state of Michigan, émigrés from Iraq, celebrate their historical connection to ancient Mesopotamia, in part to affirm their own identities in America, not as Iraqis or Muslims. And in Iraq itself, modern rulers have displayed their connections to Mesopotamia, and scholars learn Mesopotamian languages and cultures, in part to understand modern issues of sustainability and the meaning of historical change. Pride in Assyria and Babylonia can be traced directly to the nineteenth century archaeological investigations in Iraq that disclosed the palaces, temples, artifacts, and written documents of ancient Mesopotamia.

Today, Kish is used as a military base by the current occupiers of Iraq and tens of thousands of texts –I have no idea if some are from Kish--are being robbed from Iraq and sent outside modern Mesopotamia, mostly to Europe. From preliminary reports of salvage Assyriologists, who are not all unscrupulous minions of antiquities dealers, the history of Mesopotamia is going to change greatly in the next years from the substantial

amount of new information that is being accumulated, in the most inglorious of modern circumstances.

The connections of modern Assyrians and Chaldeans is not much told by Mesopotamian historians, but it is a lesson that collapse can lead to rebirth, even after millennia. This account of culture change is centered on people, both ancient and modern, normal citizens as well as political leaders, how they lived and how they participate in the creation and destruction of their cultures.

In archaeology (which in the US is part of anthropology, and anthropologists are very politically correct folk), collapse studies have often been romanticized, tales of resistance against tyrants and central state controls, and these stories fit the rhythms of our own times. However, these stories miss the point that the earliest states, such as in Mesopotamia, were far from totalitarian systems, monolithically ruled by all powerful kings. Furthermore, in most collapse studies, narratives about the disintegration of states lack any sense of the terror, suffering, bloody warfare wrought by savage or civilized invaders, and severe dislocations of beliefs and values. Most Mesopotamian historians are still mesmerized by the declarations of the kings themselves that they are all-powerful, rule by the grace of the gods, and are the lawful, good shepherds of their subjects. Collapse happens when external threats overwhelm them—in many a history of Mesopotamia.

Even a relatively mild (and not especially well informed) co-evolutionary perspective allows us to see stresses, fault-lines, and structural properties that can lead to "collapse."

As we observe the various cases of collapse I have in Mesopotamia that I have reviewed in this paper, we might conclude by agreeing with a famous phrase of Walter Benjamin: "There is no document of a civilization that is not at the same time a document of barbarism. They are cultural treasures, but one cannot contemplate them without horror."