

LOCALIZATION SEMINAR: ADAPTING TO THE COMING DOWNSHIFT

EAS 564 and ENV 462 – FALL 2019 – Wed 5:30-8:00 pm, 3556 Dana Building

INSTRUCTORS

Raymond De Young 2034 Dana Building, 763-3129, rdeyoung@umich.edu
Thomas Princen 2506 Dana Building, 647-9227, tprincen@umich.edu
Logan Christian, GSI loganjc@umich.edu

READING MATERIALS

- De Young, R. & T. Princen (2012). *The Localization Reader: Adapting to the Coming Downshift*. Cambridge, MA: The MIT Press.
- Other readings available on U-M Canvas website

PREMISE

Consider the premise of this seminar carefully. It differs significantly from that of almost every other course in the School. The seminar will not dwell on this premise, but we will return to it frequently as we craft and discuss our response to it. The premise provides the biophysical grounding for discussions.

The seminar anticipates an eventual end to cheap, abundant and easy-to-acquire energy and a significant drop in the availability of high-quality resources during this century. One implication of these historic changes is that everyday life will differ substantially from conventional expectations. There will be reduced consumption, curtailed mobility and decentralized settlement patterns. Life will be much less affluent, likely more agrarian. And yet, as a result, psychological well-being and societal integrity might improve. Fortunately, the many changes will likely emerge slowly, over many decades and throughout all of our individual lives – a persistent, sometimes punctuated, step-wise **downshift** to a new normal, experienced both personally and institutionally.

Evidence for this downshift is abundant, some believe it is already well underway, but discussions as to the timing are divisive. To debate the exact timing, however, is a dangerous distraction because, afterwards, we'd still need to develop a response. It is more sensible to accept the downshift as highly plausible, explore the many implications of resource limits, and then construct responsible and positive responses, and test them. It is prudent to start this transition while we still have surpluses of material, energy and social capital. The anticipated **energy descent** this century within techno-industrial societies will be without precedent. Considering alone the response needed to address climate disruption (i.e., holding constant any biophysical or thermodynamic limits on energy and material resource), the emissions drop needed is over 90% by mid-century with a significant part of this emission drop coming from reduced consumption of fossil fuels. However, independent of climate disruption is the matter of limits-to-growth and energy decent. These are material and thermodynamic issues, not economic issues. Analysis of this impending energy descent is highly contentious but will be briefly outlined in the seminar. We do know that US per capita energy consumption increased by a factor of about 3.5 during the last century (Figure 1). Historically, pre-fossil-fuel energy use in the US was an order-of-magnitude lower than current usage (Figure 1). Never before has the US and similar societies (i.e., the “Global North”) had to prepare for such a large change in consumption.

Certainly, it is possible to live at such a dramatically lower energy and material flux, US citizens once did it. Indeed almost all of human history occurred within a pre-industrial low-energy context and such an existence is commonplace for much of the current global population.

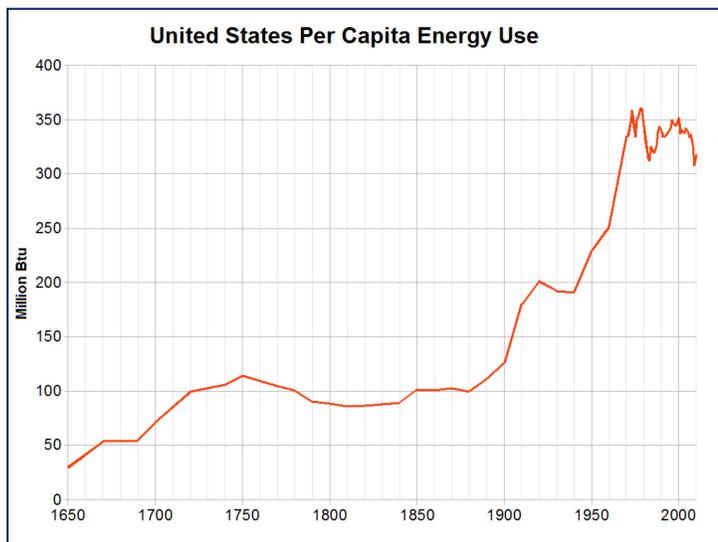


Figure 1 - US Per Capita Energy Use (1650-2010)

However, the astonishing comforts and conveniences afforded by techno-industrial society are unlikely to be possible under the new biophysical context of climate disruption and energy descent. Thus, the focus of this seminar is on helping the citizens of such societies weather their inevitable transition to a more frugal existence and it is the experiences, institutions, and behaviors of those individuals to whom this seminar will refer.

Yet, while energy and resource descent is a key driver, the seminar is not about energy and resource policy. It provides evidence for the premise but does not dwell on it. The seminar presumes that now is the time to envision responses, debate alternatives, and plan for the transition. The seminar focuses on crafting a wholesome, just, equitable, peaceful, and resilient transition. Throughout, members consider the local, regional, national, and even international dimensions of localization.

In summary, this seminar takes as given that high-consuming, growth-dependent societies soon will:

- Be operating on drastically less energy and material;
- Need to make a rapid transition to a presently unfamiliar pattern-of-living;
- Be less affluent, but possibly function with higher levels of well-being.

AFFIRMATIVE INTENTION OF THE SEMINAR

The material covered in this seminar will be unfamiliar to most members yet we hope compelling enough to be pursued at length. It will present an unusual scenario yet one that is totally plausible.

The resources used to construct modern industrial society were vast, but never limitless. Climate disruption, an unanticipated consequence of their use, is intensifying; abundant, high-quality and cheap energy is a gift soon gone; crude oil production will plateau and then slowly decline; other resources will follow in descent during this century; and continuous technological innovation, some of which could ease the transition to a new normal, will not fundamentally change the outcome. A new normal is emerging.

Re-reading the last paragraph, it would be easy to despair. However, the anticipated transition has unexpected features, many positive. First, it likely will not follow what the popular folk mythology of resource apocalypse predicts. It will lack Hollywood's sudden and catastrophic collapse motif and its hero/anti-hero story line. Second, awareness of this change is growing. Some observers are coming to

recognize and accept this simple truth: high-consuming societies are extracting finite resources for which there are no adequate substitutions and no replenishment. These societies must turn from seeking new resources to crafting new patterns of living within the limits of renewable, and primarily *local* ecosystems. The seminar uses the terms **downshift**, **descent**, and most generally **transition**, to capture this situation and rejects the unhelpful yet ever-popular term, collapse.

For reasons to be explained in the seminar, this transition is inevitable, but a positive response is not; nothing about the transition except resource descent is preordained. Yet, of course, a positive response is desirable by sane people.

Localization is framed as a positive response. It is the name the seminar gives to the collection of responses that span the individual, community, region, nation and globe, that focus on place and living within the limits of nearby natural systems. Some aspects of this positive response are unexpected, especially from the dominant perspective of endlessly increasing consumption, speed and novelty, yet will be welcomed.

LEARNING OBJECTIVES

To emphasize, then, the seminar's objective is to develop a plausible positive response to the reality of a people-rich, resource-poor planet. It does not take a doom and gloom outlook, nor does it employ the coping strategies of avoidance, denial, or wishful thinking. It also, pointedly, does not take the business-as-usual, efficiency-driven, greener-and-cleaner perspective so comforting and common among environmentalists. With an eye to the practitioner, the social change agent, the activist, this seminar develops ways to intervene that can hasten the goal of positive localization.

The University of Michigan's 10th president, in an inaugural address, said a public university "*has a fundamental responsibility to be critical of society's current arrangements and to entertain, construct and test alternative visions.*" Now that is a radical and exhilarating thought. It is one that we instructors find is mostly honored in the breach. This seminar, nevertheless, accepts this responsibility. It is critical (in a constructive sense) and entertains an alternative vision to the prevailing one, namely dominating ecosystems and peoples alike. The seminar will:

- Develop principles, guidelines, and rules-of-thumb for the urgent transition from a resource-intensive, growth-oriented society to a resilient localized society.
- Apply insights gained to specific instances of localization.
- Develop the competence and confidence to publicly present principles and practices of localization and collaborate with community officials and citizens.

EVALUATION

Evaluations will involve a combination of numeric and qualitative assessments.

The numeric evaluation will be graded out of 100 possible points and will include:

- Weekly preparation and participation, including attendance (30 pts)
- Weekly written principles (20 pts)
- Final book report (15 pts)
- Comparative observation (20 pts)
- Document re-write (15 pts)

ASSIGNMENTS

The assignments all assume that the premise and intention of the seminar have been fully accepted, even if only for the duration of the term. An exploratory yet affirmative approach should be used in all discussions and writings. It will prove necessary to periodically remind ourselves about the seminar's premise and intention, correcting our own and other's misperceptions.

1. **Preparation and participation** – Thorough preparation of readings and diligent weekly and term writings are essential to the success of the seminar. In-class activities are the core of the course, where active listening is as important as speaking. Attendance at all class sessions is required. There is no substitute for in-class discussions. Since the seminar is an integrative exercise, presenting one's views is essential to its success, but so is active, empathetic, and mindful listening and processing.
2. **Individual weekly principles** – The readings are selected to stimulate thought about localization. No one reading or combination of readings says definitively what localization is, yet each may offer a different perspective or frame for understanding localization. For each week's readings, members of the seminar will write at least two principles (e.g., criteria, guidelines, rules of thumb, propositions) for localization, based on that week's readings.

One principle should derive from a case, the other from the conceptual reading(s). These principles take the form of general statements, not descriptive summaries. They are not a summary, in any form, of the readings; they are to go beyond the readings by making specific suggestions for action. The objective is not to be right, but to be exploratory and synthetic, even, at times, provocative. The broader, long-term goal is to build a conceptual framework for localization and offer guidelines for action. The collection of principles from all members thus serves as a publicly accessible (initially only to the seminar members) database from which anyone can build a conceptual framework of localization. See "Downshift/Upshift: Our Choice," *Localization Reader*, 325-340, for examples of principles.

The readings contain many possibilities for such principles. Sometimes the authors make them explicitly, but more often, only implicitly. Sometimes, we must infer them. A few carefully crafted sentences will generally suffice for each principle. It is useful to indicate where in the reading the principle originated (e.g., page number, a short quote). In each class session a few volunteers will share their principles. This will be one basis for class discussion.

The weekly principles are to be submitted on Canvas (both should be in the same single document you upload to the site) by 12 noon on Wednesday and printed and (physically) posted on the classroom board for everyone to read before the beginning of class (see agenda below).

3. **Book report** – Each student reads an entire book (or a book's worth of related articles) on localization or transition, searching actively for insights beyond those obtained in course readings. A handout with expectations and a list of readings will be distributed in class. If you wish to read a book not on the list, first consult with an instructor (and have several back-up books from the list).

Deliverables:

- (A) Write a 3-4-page, single spaced report that includes:
1. Summary of author's purpose, the larger context of the book (e.g., biophysical, behavioral, institutional, cultural), major themes, arguments, or principles;
 2. Overlap with seminar readings; and
 3. **"Value added" to seminar readings and discussion (this is most important).**
- (B) Write a one-page, single spaced bulleted book summary that includes:
1. The same three points above (summary/larger context, overlap with course, and value added).
- (C) Contribute findings from the book at opportune moments to seminar discussion.

Due dates:

- Mon, Sept 9, 12 pm Submit to GSI via Canvas your top book choice. Assignments will be confirmed shortly after. Acquire the book at UM or local library, via UM's Inter-Library Loan (ILL), or by purchase.
- Mon, Sept 30, 12 pm Submit to GSI via Canvas a one-page bulleted list summarizing your book formatted according to the assignment questions written above. Feedback will be provided on Canvas.
- Mon, Oct 7, 12 pm Nearly final draft of report due. Submit to Canvas. A procedure for getting feedback from instructors and fellow students will be explained in class.
- Mon, Nov 4, 12 pm Final report and updated, one-page bulleted book summary due. Submit to Canvas.
- Weekly, in-class Throughout term, briefly share insights gained from the book.

4. **Comparative observation**

Purpose: Possibilities for positive localization are all around us, "hidden in plain sight." This assignment is designed to examine two possibilities carefully, that is, to engage in the most basic of scientific methods—focused observation—so as to uncover latent, positive action, however inconsequential or improbable it might seem at first glance. One hoped-for outcome is the development of the habit of seeing such possibilities. This would contrast with the prevailing habit of seeing doom and gloom.

Tasks:

- a. Pick one Do-it-yourself (DIY) establishment and one Business-as-usual (BAU) establishment from the list below. If you have a possibility not on the list, check with the instructors.
- b. Observe, with no distractions, for a minimum of 2 hours each (all at once or, say, an hour per visit). Look, listen and get a feel for how customers and store/enterprise/organization people interact, how materials flow, how the money economy and the informal economy operate.
- c. Observation in this case is active, focused; it is directed by the questions and concerns of this seminar. Active observation presumes that the more time one observes the more one sees, however familiar it all appears at first.
- d. Note #1: In some cases you can pose as a customer; in others you will have to get permission.
- e. Note #2: Do not assume that the DIY establishment is "the answer" and that the BAU establishment is "the problem." There will likely be business-as-usual and transitional elements in both. Explore below the surface, be analytic and critical (in the constructive, scholarly sense).

- f. Take notes on:
 - i. what you observe; and
 - ii. what the implications might be for localization and transition, positive and negative.
- g. Contribute findings from the book at opportune moments to seminar discussion

Deliverables: Field notes (e.g., written, schematic, artistic); 7-minute class presentation.

Field sites:

Do-it-yourself (DIY)

Fabric/sewing shop
 Lumber yard
 Hardware store
 Knitting store
 Kitchen/Cooking class store
 Red Cross
 Potters Guild
 Michigan Folk School
 Co-op board meeting
 Argus Farm Stop
 Public library

Business-as-usual (BAU)

Walmart
 Home Depot
 Krogers
 Ann Arbor City Council
 Washtenaw County Board of Commissioners
 Downtown Development Authority
 Emergency Operation Center
 Urgent Care Clinic
 Bookstore

Due dates:

Mon, Sept 23, 12 pm Submit to GSI via Canvas your DIY and BAU selections. Assignments will be confirmed shortly after.

Weekly, in-class Throughout term, briefly share insights gained from your observations

Wed, Dec 4 and 11 7-minute presentations on your DIY and BAU observations (turn in Field Notes after your presentation).

5. Document Rewrite

Purpose: Many of the ideas and concepts we explore in this course are not referenced in mainstream news outlets, academic journals, institutional reports, or other publications. Even when localization is referenced, it tends to come as an afterthought to more dominant paradigms of continued economic growth, resource extraction, and technological optimism. The purpose of this assignment is to practice recognizing the assumptions commonly made in discourses about sustainability, energy, climate change, and other topics of SEAS and PitE.

Tasks: Choose a document from the list below and read the executive summary. You may instead select a news article and read it in its entirety. Look for assumptions made by the author(s) that run contrary to principles you have learned in this course. For example, you may find statements predicated on an ever-abundant supply of energy or natural resources which runs contrary to our course premise. If you select a document (e.g. a long report), you may want to skim the rest of the document to get a better sense of what the author is talking about. Make note of the assumptions that are made and think about how the author might re-write the document knowing what you have learned in this course. Then, rewrite the executive summary or article including a brief summary of the author's purpose and a brief description of what assumptions were made based on what you

have learned in this course. The goal of this assignment is not to critique the arguments of the author but to create an alternative text that addresses the shortcomings you identify in the original document or article.

Deliverables:

(A) Write a 2-3-page, single spaced report that includes:

1. Brief summary of the document's purpose, its larger context (e.g., biophysical, behavioral, institutional, cultural, political, economic), major themes, arguments, or principles; (1/2 page)
2. Rewrite of the document's executive summary, applying course concepts, discussions, and readings. (1-2 Page)
3. Summary of the assumptions made in the document and your rationale for the changes you made, applying course concepts, discussions, and readings. (1/2 page)

(B) Contribute findings from your document rewrite process at opportune moments of the seminar discussion.

Document possibilities (see instructors if you have a document not on this list)

*This is a provisional list; additions will be added during the semester.

Example documents:

[Green New Deal](#)

[EU-UK Withdrawal Agreement Explained](#)

[UMich - President's Commission on Carbon Neutrality - Work Plan Overview](#)

[Energy Innovation and Carbon Dividend Act](#)

[Annual Energy Information Administration - Annual Energy Outlook 2019](#)

[Climate Change: The investment perspective - Ernst & Young LLP](#)

[American Energy: Cleaner, Stronger Agenda](#)

[Investment and Growth in the Time of Climate Change - European Investment Bank 2012](#)

[SMART 2020: Enabling the low carbon economy in the information age](#)

Example Articles:

[The False Choice Between Economic Growth and Combating Climate Change - The New Yorker, Carolyn Kormann 2019](#)

[Why Do Americans Move So Much More Than Europeans? - The Atlantic, Adam Chandler 2016](#)

Due dates:

- | | |
|------------------|--|
| Mon, Oct 14, 5pm | Submit to GSI via Canvas the article you will re-write for this assignment including a brief (4-5 sentence) statement on why you chose this article. |
| Mon, Nov 11, 5pm | Submit your 2-3-page report via Canvas. |

CLASS PROCEDURES

These procedures have been developed and modified over that last decade by previous seminar members, GSIs and instructors.

1. SESSION AGENDA

Seminar begins promptly at 5:30 pm.

Arrive in time to quietly begin the procedure below without further prompting. Sessions follow the order below (with occasional deviations):

a) Principles

- i. **Promptly at 5:30 pm** – Students post principles on the board in the meeting room.
- ii. From 5:30 to 5:40 pm – Everyone reads and takes notes on the posted principles.
- iii. At 5:45 pm – Discussion of selected principles begins.

b) Mini-lecture

- c) **Discussion** of readings (students bring insights, questions, comparisons among course readings; thus written notes on the readings will be useful)
- d) **Activity** (e.g., simulation, debate, guest lecture, field trip, reports on *Resilience.org* readings, reports on book project reading)
- e) **Seminar administration** – We will wrap up all content by 7:40 pm to leave time for announcements about upcoming assignments and other updates.

2. SEMINAR STRUCTURE – BARN RAISING

The seminar sessions are a participative, high-interaction experience. Sessions explore the implications of the week's readings for change agents, citizens, researchers and practitioners. There are many ways to conduct a seminar.

Kahn has discussed the four types of seminars described below (Kahn, 1971; 746 Barn Raising, 2017). Both these readings are available on Canvas for your review. **This seminar will use the barn raising model.**

A. The **FREE-FOR-ALL**: There is a prize out there in the middle of the floor. It may be the instructor's approval or it may be one's own self-esteem, but it's there and the goal is to win it and anything goes. You win by looking not just smart, but by looking smarter. And that means it's just as important to make them look dumb as to make you look smart. The main tool is criticism of the readings and other member's ideas.



Figure 2 - This sort of barn raising.

B. The **BEAUTY CONTEST**: This is the seminar in which I parade my idea to you seeking your admiration. Then it's off the runway I go to get ready for my next appearance while you're parading your idea. Of course, I'm not paying any attention to yours.

C. The **DISTINGUISHED HOUSE TOUR**: In this model someone advances an idea. The rest of the seminar spends some time exploring it. They ask questions, they explore for inconsistencies, they try hard to understand the idea. When they have got a good grasp on it one of the other members offers another idea. It may be a whole different point of view on the same subject. The seminar members then explore that new idea. Outright criticism is not used, but neither are ideas compared. This is a high form of discourse and is apt to produce a good seminar. It also has problems.

D. The **BARN RAISING**: In frontier America when a family needed a barn and had limited labor and other resources, the entire community gathered to help them build the barn. The original family described the idea, the kind of barn they had in mind, picked the site, and the community pitched in and built it (Figures 2 and 3).

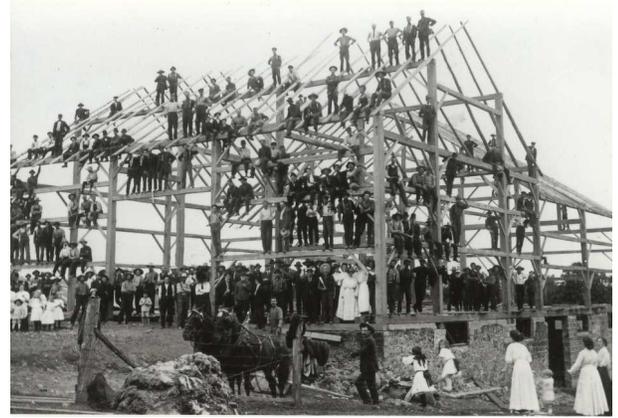


Figure 3 - Or this sort.



Figure 4 - But NOT this sort.

3. **READINGS** – All readings are required; the seminar functions only when everyone has the same baseline knowledge, accumulated over the semester. Most readings are in the textbook. The goal is not to accumulate lots of facts. It is not to memorize. Rather, it is to identify key ideas, concepts, biophysical, psychological and social contexts, and to generate principles, all as they relate to localization. For this, notes should be prepared before each class. Consider the following strategy:
- Approach the readings as an exploration, an active process of making sense of the piece. One resource that aids this process is Fu (2006). *Active reading revisited* (available on Canvas).
 - Most of the authors were not part of a localization seminar. They'd likely frame their piece differently had they been in such a seminar. It will often be useful to reinterpret their work.
 - As you read, takes notes of your own reactions, especially surprises or passages that contradict your previous understanding (or another reading). Share such notes in discussions.
 - Approach the readings, your interpretation and/or reframing of them, and your note taking from a positive and generative perspective. The seminar seeks to build a pragmatic response to the underexplored biophysical reality of limits. Its purpose it not to criticize each reading for its faults, limitations, sources, etc. (what is otherwise the norm in seminars). The purpose is to build upon their ideas and combine them with the works of other authors.
 - Note that some of the readings are older (both in the textbook and syllabus). This is intentional. White (2012) has an interesting perspective on this in her review of the text; "...playing that favourite parlour game where you get to invite anyone, unbounded by time or space, to a dinner party" (available on Canvas, in "Summer readings" and "Additional Resources").

4. **WRITTEN WORK** – Unless directed, submissions will be via Canvas. Principles and final assignments should be formatted single spacing. Drafts that will be read and marked-up by others should be double spaced with ample margins for comments. At a minimum:
- Number all pages (and perhaps number all lines in drafts)
 - Include name, date, mailing address (preferred means of contact), and assignment topic
 - Edit carefully: (1) clearly and logically organized with headings and, as appropriate, subheadings; (2) transitions from section to section and from paragraph to paragraph are clear; and (3) the language is concise and free of typos, grammatical errors, and misspellings. The reader should contend only with ideas and arguments, not with problems of exposition.

Writing assistance:

The instructors also assume, and highly recommend, that all students take advantage of the services of the Sweetland Writing Center on campus (1111-1148 Angell Hall; 764-0429). In fact, those with poorly written papers will be referred to the Center and required to submit additional drafts.

SCHEDULE

The readings are the foundation of the seminar. They should be **completed well in advance** of the session during which they are discussed so as to give ample time for consideration of their content. Thoughtful, multi-day reflection on the content of the readings is essential to successful discussions.

- CASES** – Human societies have long been organized locally, but cheap energy, new technologies and communications have shifted that organization to the national and international levels. Examples of localization are hard to come by, as opposed to “the local” which has become an overused notion. Cases can be useful examples; they demonstrate how to provide for basic needs in a durable and resilient manner. Within the readings listed below, there are cases to help us imagine what the transition could be like. Brief texts of these cases are found in *The Localization Reader* and on Canvas; other cases are listed below (with URL) and more examples will emerge in the mainstream media over the course of the term.
- READINGS** – These can be found in the textbook (*The Localization Reader*) or on Canvas. For example, on September 12th the first four readings are in the textbook, the last three in Canvas. The first assignment is to thoroughly read this syllabus, becoming familiar with all of its details.

SEPTEMBER 4 – PREMISE [Summer readings and Resilience.org website assignment]

De Young, R. & T. Princen (2018). *Localization Seminar Syllabus*. (EAS 564 and ENV 462). [[This document](#)].
 De Young, R. (2014). Some behavioral aspects of energy descent: how a biophysical psychology might help people transition through the lean times ahead. *Frontiers in Psychology*. Volume 5, Article 1255.
 White, W. (2012). Book Review of The Localization Reader. *Economic Record*. Old Dominion University, Norfolk, Virginia
 Princen, T. (2014). The Politics of Urgent Transition. *Civic Society and Climate Change*, 218-238
 25 Downshift/Upshift: Our Choice Raymond De Young, Thomas Princen

Case: Webpage to review: Periodically read *Resilience.org* (www.resilience.org) looking for articles about localization. By the middle of September prepare a one-paragraph synopsis of at least one such article and then a short paragraph with your response to the piece given the premise of this seminar; be prepared to report out to the class. Publish as a **Discussion** item on Canvas website (i.e., enter as new item). Also, review and comment on the other student’s discussion entries.

Optional (but highly recommended):

Brooks, D. (2019). A Nation of Weavers, *New York Times* (18 Feb, 2019).

Holmgren, D. (2009). *Future scenarios: How communities can adapt to peak oil and climate change*. Chelsea Green Publishing, White River Junction, VT. [Book or online, see Canvas site for online link]

SEPTEMBER 11 – INTRODUCTION/PRACTICING LOCALIZATION

Front Matter: Preface and Introduction

9 Civic Agriculture *Thomas A. Lyson*

10 A Whole New Way of Life *Karen Litfin*

Monbiot, G. (2015) Consume more, conserve more: Sorry, but we just can't do both, *The Guardian*, 24 Nov.

Case: Read "Prologue: La Canicule," in Stone, *The City and the Coming Climate*, pages 1-15 (Canvas)

Case: Read only "2000 watt" story in Kolbert, "The Island in the Wind." *The New Yorker*, 2008, 68-77 (Canvas).

SEPTEMBER 18 –PRACTICING LOCALIZATION (continued)

6 Inhabiting Place *Robert L. Thayer*

11 The Decentralist Tradition *Kirkpatrick Sale*

14 Local Enterprise *Wendell Berry*

Case: Box (Planful Shrinkage) – pg 60 [also read expanded case, "An Effort to Save Flint, MI" (Canvas)]

Case: "Ancient Italian Town Has Wind at Its Back," Elisabeth Rosenthal, September 28, 2010

SEPTEMBER 25 – LOCALIZATION IN PRACTICE (cont.)/DRIVERS OF LOCALIZATION

Introduction

7 Locally Owned Business *Michael Shuman*

1 The End of Fossil Fuels *M. King Hubbert*

2 Energy Cost of Energy Gained *Adam Dadeby*

Boyer, R. (2016). Achieving one-planet living through transitions in social practice, *SSP&P*, 12, 1-13.

Case: Box (Localizing Finance) – pg 86

Case: "In a City in Italy, Schoolchildren Walk Where Once They Rode," NYT, 27 Mar 2009.

OCTOBER 2 – DRIVERS OF LOCALIZATION

Introduction

3 The Inevitability of Transition *Joseph A. Tainter*

4 Less Energy, More Equity, More Time *Ivan Illich*

8 Daring to Experiment *Warren Johnson*

Bendell, J. (2018). Deep Adaptation: A Map for Navigating Climate Tragedy. *IFLAS Occasional Paper 2*.

Greer, J. M. (2012). Progress vs apocalypse, *The Energy Reader*. (Pp. 95-101).]

Irwin, D. et al. (2015). *Transition Design Monograph* (Final - 15March2016).

Case: Box (Erie Canal) – pg 110

Case: Box (Belo Horizonte) – pg 118

OCTOBER 9 – PHILOSOPHIES OF LOCALIZATION

Introduction

12 Technology at a Human Scale *Ernst F. Schumacher*

Alexander, S. & P. Yacoumis (2016) Degrowth, energy descent, and low-tech living, *Journal of Cleaner Production*.

Case: Box (The Potato) – pg 338

Case: "Revived paper Mill Brings a Town Back with It." New York Times, 2008.

OCTOBER 16 – BRINGING OUT THE BEST IN PEOPLE

Introduction

- 16 Abundance and Fulfillment *Sharon Astyk*
 - 17 Motives for Living Lightly *Raymond De Young*
 - 18 Enabling the Best in People *Rachel Kaplan & Stephen Kaplan*
- Brooks, D. (2016) The Great Affluence Fallacy, *New York Times* (9 August 2016)

Case: Box (Work less) – pg. 209 - 210

Case: In Bad Economic Times, Are People Healthier? *New York Times*, 7 October 2008.

OCTOBER 23 – PHILOSOPHIES OF LOCALIZATION (continued)

- 5 An Arc of Scenarios *Rob Hopkins*
- 13 Provincialism *Josiah Royce*
- 15 Conserving Communities *Wendell Berry*

Case: Box (Breaking the Fossil Fuel Habit) – pg. 14

Case: “Workers’ Paradise Found Off Japan’s Coast,” *New York Times*, 22 April 2009.

OCTOBER 30 – APPROPRIATE GOVERNANCE

Introduction

- 20 Towards the Regional *Gar Alperovitz*
- 21 Global Problems, Localist Solutions *David J. Hess*
- 23 Promoting a Partnership Society *Lester W. Milbrath*

Case: Box (Energy islands) – pg. 272

Case: “Demand for Wind Spurs Ranchers to Join Forces,” *New York Times*, 28 Nov 2008.

NOVEMBER 6 – TOOLS FOR TRANSITION

Introduction

- 22 Adaptive Muddling *Raymond De Young & Stephen Kaplan*

De Young, R. (2014). Some behavioral aspects of energy descent, How a biophysical psychology might help people transition through the lean times ahead, *Frontiers in Psychology*, 5, 1255.

Case: Box (Corn to Veggies) – pg. 196

Case: “An Effort to Bury a Throwaway Culture One Repair at a Time,” *Amsterdam Journal*, McGrane, 5-8-12

NOVEMBER 13 – PRINCIPLES FOR A RESILIENT TRANSITION

- 19 Ecological Democracy *John S. Dryzek*
- 24 Tools for the Transition *Donella Meadows, Randers & Dennis Meadows*

NOVEMBER 20 – NO CLASS – UM Thanksgiving Recess

NOVEMBER 27 – TBD – Catch up day and discussion

DECEMBER 4, DECEMBER 11 – Presentations