

CLASS, RENT AND THE STATE:

UNEVEN DEVELOPMENT IN WESTERN BOOMTOWNS

Ann Roell Markusen

Assistant Professor of Economics
University of Colorado

Staff Economist
U. S. General Accounting Office

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I. Introduction

This paper attempts to decipher the uneven development process that currently characterizes Western U. S. boomtown growth associated with energy. It hypothesizes that two features of this process produce a class configuration that is ambivalent about development: rent that accrues to the production process from various sources, and sectoral disruption that destroys an older economic base. In general, the rural working class will support energy development, while segments of the petty bourgeoisie will oppose it. Gains for the local working class will be short run and may coincide with losses for the U. S. working class as a whole. Much of the struggle over energy development takes place in the state sector, where a populist coalition of organized labor, Western agricultural interests and environmentalists oppose multinational corporations. The future of boomtowns depends on the outcome of this struggle, as well as on local stakes in development in particular cases.

II. The Law of Uneven Development

The cleavage between Marxist analysis of advanced industrial economies and Third World experience under capitalist domination has revived Marx's Law of Uneven Development. The Marxist model begins with the premise that surplus value is extracted from labor by capital in a system of production of commodities for exchange where capital controls production in order to accumulate capital through profit. Of the Third World experience, however, more needs to be said. Theories of imperialism, in addition to identifying the sources of capitalist world-wide expansion, address the effect of that penetration with models of dependency that encompass more than the introduction of wage labor. Capitalism's deformation of Third World societies includes forced cultural degradation, manipulation of reproduction, physical exhaustion of resources and environmental plunder. Comparison of this experience with that of the U. S. is referred to as evidence of the operation of "the Law." (Examples are Hymer and Resnick, 1970; Hymer, 1973; Gough, 1975 and Best, 1960). Increasingly, events in our own backyards resemble Third World uneven development. Boomtowns are a lurid example.

The beauty of the Law is that it evokes powerfully the paradox of destruction accompanying capitalism's drive for efficiency. Its descriptive contribution is thus considerable. However, as a law it remains an assertion: capitalist development must produce such unevenness. It has not been derived formally from the basic propositions of Marxist theory. Instead, it describes particular (and varying) contradictions which are then analyzed with the Marxist method in a given historical context.

Uneven development connotes multiple situations. It can describe different growth rates across sectors or space (industries, regions, national economies, occupations, ethnic groups, households) and it can describe a disruptive experience for any one of these over time. Thus it has at least three important dimensions: sectoral, temporal and spatial. An adequate theory of uneven development would have to address all of the links between capitalist production dynamics and its manifestations in diverse places and times. Development is the growing domination of the

capitalist mode of production. Unevenness is its character, mediated by the state, by culture, by history, by ideology, by differentials in nature, all arenas for class conflict. A rigorous formal theory of uneven development is impossible, because unevenness is the paradox of weaknesses in the capitalist dynamic preventing its drive toward total domination and impossible levels of accumulation. An analysis of uneven development addresses the moments of contradiction in the capitalist dynamic and must include the historically specific features of the people, place and era involved.

This paper attempts to develop more rigorously two roots of uneven development, common to Western boomtowns but perhaps generalizable: spatial unevenness that is tied to differences in rural land and resources, and temporal unevenness that accompanies the incursion of capitalist extractive activities. It argues that land in peripheral parts of the capitalist economy is a prominent feature of the particular form of capitalist incursion and that, because rent view for a large share of surplus value, a very different sort of class conflict occurs than in urban industrial centers. Furthermore, it argues that the supplanting of traditional sectors by energy production further complicates class conflict by fragmenting class unity across sectors.

III. Surplus Value in Land-Based Activities

Extraction of surplus value from workers is the driving force of capitalist production. Production will not be undertaken in any sector if the money capital advanced for wages and constant capital will not command a return, squeezed from labor by paying wages (the value of labor power) less than the value of commodities produced. In land-based activities, particularly the capital intensive extraction and processing in the American west, the role of surplus value extraction is obscured by the appearance that it is land itself - its minerals, water, fossil fuels and soil - that produces value. Differing qualities of land do allow greater productivity of labor in one location than another. But land itself is inert and can only be worked by living labor to produce material existence for society. The illusion that land produces value arises from the existence of private property and land ownership,

which allows surplus value from production per se and from differential productivities to be captured by land owners.

The value of a commodity in the Marxist model is determined by the embodied labor time in the average production location. The mix of commodities produced in any era is the result of socially evolved standards of living and needs embedded in the mode of production. The dynamic of corporate and state manipulation of subsistence needs (autos, etc.) under advanced capitalism has influenced which particular sectors consume land in production. Without dependence on auto transportation, significantly less oil would be needed, and so on. Channeling social needs toward dependence on gas, coal, oil and other minerals, corporate and state planning led to the massive intrusion of capital intensive techniques for extraction, processing and energy production that currently characterizes land-based activities in the West. While working people could rely on quite different forms of production for shelter and mobility needs in the future, currently the social structure holds us hostage to such land-based activities.

Given this prevailing level of social needs, individual capitalist units put into motion production if profit is forthcoming. In all sectors of capitalist production, money capital is advanced for constant capital and wages in anticipation of a return greater than these costs. Surplus value is the excess value produced by workers in that sector over their real wages. Over the entire system of production, the rate of return on capital advanced must be equal, otherwise capital will be channeled to those sectors where profit rates are higher. Thus the values of commodities are transformed into prices by accounting for the average rate of profit; surplus value is redistributed through this mechanism. Highly capital intensive activities can therefore command prices for output that exceed value.

Surplus value is also extracted by land owners in the form of rent. Such rent is, like profit, purely a return to ownership, backed by the power of the state, in this case of a necessary production input. Land itself is not a commodity, since it is not produced. Therefore, in absence of class society, it is free to people, with a positive use value but

no exchange value. However, since ownership of land endows the possessor with the power to withhold land from production, land can command a price on the market and has^a potential exchange value that arises from successful conflict with labor and non-land capital over surplus value. In this sense, it is a form of capital, since money capital can be converted into land in expectation of a return equal to or greater than its conversion into constant capital or wages advanced in production. The return to land ownership we call rent.

Therefore, the struggle over the division of surplus encompasses three main classes: landowners, capitalists and workers. Even in the absence of an identifiable landowning class, separate from the capitalist class, the existence of rent enables certain class members and institutions to act as landowners under certain conditions. Rent cannot exist in capitalist production unless one of three special circumstances characterize the land-using process** If the price that commodities bring includes only enough to cover the costs of production and an average rate of profit, nothing will be left to the landowner; an attempt to impose a rent on a particular location will result in the curtailment of production in that spot. City abandonment and marginal land prices in remote rural places exemplify this case.

Marx identified the three types of rent that accompany rent-generating circumstances under capitalism: differential, monopoly and absolute rent. Differential rent can accrue to land because of differences in quality enhancing labor productivity. Monopoly rent can be captured by owners of land because commodities produced with that land as an input are monopolized and their market price is thus higher than cost of production plus average rate of profit. Absolute rent can be extracted by land owners if land is monopolized by a class separate from the capitalist class as a whole and is withheld from production unless it receives a rent which drives the price of the product above the cost plus average profit level. Each of these cases, with Western energy applications, are modelled below.

** The following discussion draws extensively on the Marxist theory of rent as developed and extended by Marx, Mandel, Harvey and Edel.

A. A General Model of Capitalist Production with Land

Production Function.

$$Q = f(v, c)$$

Amount of commodity Q, produced with a particular combination of inputs of variable capital, v, and constant capital, c, i.e. workers and machines, depends on productivity of labor and the level of inputs.

Variable Capital.

$$v = L(w)$$

The amount of labor power, in dollar terms, in a particular production process is the quantity of labor time (L) times the exchange value of labor power, the wage (w), which is determined by class struggle over subsistence.

Constant Capital.

$$c = K(P_k)$$

The amount of constant capital, in dollar terms, in a particular production process is the number of machines used (K) times the exchange value of that commodity (P_k).*

Exchange Value.

$$C = c + v + s$$

The exchange value of the commodities produced in this process is composed of the costs associated with constant capital and variable capital inputs and of surplus value, s, the difference between the exchange value of labor power and the value of what it produces.

Surplus Value.

$$s = f(v)$$

Surplus value is a function of the quantity and value of labor power, thus the outcome of class struggle over the wage rate. The more labor used and the lower the wage rate, the greater the surplus value extracted.

* P_k is determined exactly the same way that P_q is in this model. I abstract from the inclusion of profit here for the sake of simplicity.

Commodity Unit Value.

$$V_q = C/Q$$

Per unit, the exchange value of commodity q is total exchange value divided by the amount of output.

Average Rate of Profit.

$$r = \frac{\sum_i s_i}{\sum_i (c_i + v_i)}$$

Over all sectors, i , the average rate of profit is equal to the sum of all surplus value extracted divided by the sum of all constant and variable capital advanced.

Total Profit.

$$\pi = r(c + v)$$

The amount of profit, π , required in any sector equals the profit rate times the capital advanced.

Commodity Unit Price.

$$P_q = (c + v)(1 + r)/Q_{\min}$$

Price of the commodity, q , is determined by the costs of production and average rate of return in the least productive plant (Q_{\min}).*

Total Revenue.

$$T = P_q(Q)$$

Total revenue, T , in the sector equals the commodity price times the quantity of commodity q produced.

Rent.

$$R = T - (c + v)(1 + r)$$

Rent is the excess of revenue over costs and average rate of profit, distinguished from profit only if a separate class or group extracts it.

Given the knowledge of the character of production functions, the identification of the marginally productive plant, the exchange value of labor power and constant capital, this model can be used to examine the origins and distribution of rent.

* This formulation of price determination holds only in the absence of monopoly power by the industry or landlords as a class. When monopoly exists, prices can be driven above this level.

An example will illustrate the model. Suppose that there are two sectors (Marx's departments), which we might conceptualize as fuel and autos. In the absence of the three special conditions of differential rent and monopoly, the determination of profit and prices under capitalist production, given hypothetical parameters, might be as follows:

	K	Pk	L	w	Q	Vq	C	s	r	$\bar{\pi}$	Pq	T	R
Fuel	200	\$1	50	\$1	300	\$1	\$300	\$50	.25	\$62.50	\$1.04	\$312.50	0
Autos	100	\$1	50	\$1	200	\$1	\$200	\$50	.25	\$37.50	\$.94	\$187.50	0

The example shows the transformation of value into prices, with the result that the price of fuel, produced under conditions of a high organic composition of capital (c/v) requires a higher price than value while autos command a price slightly below value.

B. The Case of Differential Rent

Suppose that two coal strip mines have dramatically different quantities of overburden that must be removed, so that a given input of labor and machinery on one plot can produce significantly more coal than on the other. In our example, we will represent this as 400 units of Q as opposed to 300 units. The outcome will be as follows;

	K	Pk	L	w	s	Q	C	Vq	r		Pq	T	R
MineA	200	\$1	50	\$1	\$150	400	\$400	\$1	.25	\$62.50	\$1.04	\$416.64	\$104.16
MineB	200	\$1	50	\$1	\$50	300	\$300	\$1	.25	\$62.50	\$1.04	\$312.50	0

Here, with profit and wage rates (temporarily) determined by capitalist production as a whole, the production process in location A receives a greater return because labor is more productive on that plot and because capital is able to appropriate that return. This produces a rent of 25%

of revenue that is available for distribution among workers (w), suppliers (P_k), capitalists (π), consumers (workers as a whole) (P_q), and landowners (R). The outcome of this conflict depends upon the degree of monopoly of various agents, factor mobility, class militancy, and the backing of the state, and the organic composition of capital.

It is important to emphasize the spatial nature of differential rent. Productivity differences may result from locational features such as transportation accessibility or distance to markets as well as from natural land features. Since the location of production may form the material basis for an entire local economy, the possibility of differential rent accruing to state-supported production may encourage antagonistic classes (especially labor and capital) to cooperate in a lobby for state facilities.

We can speculate that class conflicts will distribute rent within the production sector in the following ways. It is improbable that suppliers will be able to discriminate against the production process receiving differential rent, unless they constitute a monopoly, in which case they will resemble the landowner. It is also unlikely that consumers will capture the rent, unless the state intervenes; the debacle of natural gas pricing suggests that the state is apt to support the industry's hold-up tactics for monopoly prices.

Workers, if they are organized, can potentially capture a substantial portion of the rent premium from differential rent. The higher the organic composition of capital, the more likely it will be that workers can extract a large wage increase from rent, since their ranks are small. The less mobile or available other labor, the more successful they will be also. Workers in Western coal strip operations receive higher wages than their deep mine counterparts, which is also the result of company fears that such workers will unionize. The better organized and more militant workers are, the more likely they are to win part of differential rent. They need not award to those workers who are located in particular operations, but as in the UMW pension fund tax on coal, spread it around to all workers in the sector.

Landowners, if they exist separately from capitalists, have a good chance to extract all of the differential rent. If they have perfect information, and are willing to withdraw land from production if they do not receive the full rent (a land strike), they hold a powerful position in bargaining. In the West, however, the lack of a feudal landowning class and the pervasiveness of state ownership of land renders this outcome less likely.

Capitalists, if they can manipulate labor and if they can fool landowners about the value of output, or buy up land at less than capitalized value, can capture differential rent. The weakness of a Western landowning class shifts the battleground over rent toward the production sphere itself, in the battle by labor for wages and pensions, and even into the state sector, where state sanction of severance taxes and state leasing policy determines, in large part, the distribution of differential rent.

C. The Case of Monopoly Rent

Monopoly rent exists when land owners extract part of the monopoly profits from the production sector using its land. This can be conceptualized as follows. Suppose in our original example, the auto industry restricts output and charges a monopoly price for its product that exceeds the cost of production plus average rate of profit. Excess profit in this case could be battled for by the producers of coal if they in turn control a factor of production that is essential to auto production. The figures for a monopolistic auto industry might look as follows:

	K	Pk	L	w	Q	Vq	C	s	r	$\bar{\pi}$	Pq	T	R
Autos	80	\$1	40	\$1	160	\$1.00	\$160	\$40	.25	\$30	\$1.15	\$184	\$ 34

The excess profit, or rent, generated can potentially be captured by the landowning sectors.

If the coal industry has a higher "land composition of capital" and controls the majority of land available to produce coal, it can act as if it were a landowning class and demand the excess profits for autos to be passed on in the form of higher prices for coal, really a hidden form of rent. (If they don't own the coal, producers will try to integrate vertically themselves.) In this case, the struggle over excess profits in the auto industry expands beyond that sector to include the classes engaged in producing, controlling and consuming coal. Conflict between capitals (energy vs. transportation industries) and short run differences in interests between workers in different sectors and regions are real possibilities. As in the previous case, these will tend to manifest themselves as conflicts over state policies and expenditures.

D. The Case of Absolute Rent

A final form of rent can occur if landowning interests conspire to withhold land from production unless they receive a return higher than what the price of production could otherwise cover. Marx contended this could not happen in sectors with high organic composition of capital. Edel suggests that this contention is not adequately supported. While absolute rent is not likely to occur in a situation where a separate, strong landed class does not exist, it may be that some land-based production, such as oil, is controlled by international cartels which do operate as a land monopoly and drive the price up to such levels. This allows all producers of oil to charge that price, and producers of substitutes like natural gas to do likewise, so that absolute rent accrues to U. S. multinationals in all energy sectors as well as to OPEC producers. Such rent can also be the subject of class struggle within the industry and over state policy.

The type of rent prevalent will shape the alliances that characterize class and regional struggles. Differential rent will encourage alliances of capital and labor regionally, producing policy demands that resemble mercantilism. Monopoly and absolute rent will encourage class unity across regions. However, since state intervention can create differential rent, capital will try to forge an alliance with workers locally to secure state capital and to break interregional class solidarity.

IV. Regional Dependency and the Sectoral Competition for Land

An analysis of surplus value extraction is inadequate for understanding the entire set of conflicts that arise when development threatens a particular community or region. Since the local economy is relatively small compared to the size of most contemporary energy operations, the impact of such incursion upon other sectors in the local economy is also critical for understanding class interests. The indirect results include a significant and sometimes irreversible decline in other local production activities that use the same land resources, due to environmental degradation, competition for water and space, and cultural disruption of the community. Other indirect consequences involve the fortunes of secondary and tertiary sectors (services, trade and construction) which thrive or fail as the economic base changes. The class conflicts arising from these changes can best be understood by modelling the economic structure of the local community as a whole.

A fruitful way to do this is to develop the analogy between the rural mountain economy and a third world country. Western mountain towns have been peripheral to capitalist development for most of their history. Their production has been land-based: agriculture (particularly ranching), mineral production and tourism have composed the economic base. The accelerated exploitation of raw materials transforms the economic base of communities involved much the way that raw materials extraction and processing has transformed the economies of third world countries. Despite very different histories, the product of this transformation is the same: underdevelopment and dependency.

Political economists have contributed a substantial literature on underdevelopment in the third world, which equips us with a theoretical framework to borrow. In direct opposition to international trade and development models which use neoclassical concepts like comparative cost, resource endowment, trade equilibrium and economic growth, the Marxist analysis emphasizes the creation of underdevelopment status through disruption of the traditional local economy (Frank), the unequal exchange which characterizes trade relationships between peripheral countries and developed capitalist nations (Emmanuel) and dependence of a deformed economic structure on industrialized economic powers (Sutcliffe).

In the case of a rural Western resource-rich community, the parallels are so obvious that we need not document them here. Such communities cannot attain Sutcliffe's requirements for independent development: growth based primarily on a domestic market, diversified industrial structure, locally generated finance or at least control over finance funds, or substantial locally generated technological progress. Domination takes a form different from third world exploitation; the greater vulnerability of U.S. local communities to events in the capitalist structure of production makes it even less necessary than in other parts of the world for capital to develop a local elite. Personnel can be transported in and out with little regard for the local people. Only to the extent that local communities have any legal powers to obstruct development (zoning, public service provision) do energy empires attempt to develop alliances with community political and business leaders.

Uneven development and dependency are not new experiences for such communities. Three Colorado counties have experienced the following cycles in traditional land-based sectors in the last two decades:

Table 0. Employment Trends (Percent Change) 1950-70 for Colorado Counties

	Routt	Rio Blanco	Moffat
Population 1950-60	- 34.0%	- 6.0%	- 7.6%
1960-70	+ 11.7%	+ 9.1%	+ 18.8%
Agriculture 1950-60	- 33.2%	- 50.2%	- 48.3%
1960-70	+ 3.4%	- 6.5%	+ 2.1%
Other Sectors '50-60	Coal - 50%	Oil & Gas - stable	Mining +up
'60-70	Tourism/ Construction +up	Oil & Gas - down	Mining -150%

(Source: Gilmore and Duff.)

The expansion of the tourist trade in some areas has diversified and strengthened the local economy. Overall, however, despite their residence within an advanced capitalist country with common access to markets which reflect exploitative relationships with other countries, rural residents face their own brand of dependency and exploitation. The following exposition describes briefly the features of this vulnerability.

A. The Subsistence Level of Living

The budget for a four person family in an urban but nonmetropolitan Western community (2500+) with an income of \$9059 in 1974 was as follows:

Table 1.	Food	% 28.9
	Housing	19.5
	Transportation	8.8
	Clothing/Personal Care	11.0
	Medical Care	7.4
	Other Consumption	3.6
	Insurance/ Occupational Expenses	4.5
	Social Security	5.8
	Personal Income Taxes	10.0

(Source: Bureau of Labor Statistics).

Very little of the content of the family budget is produced in the local area. Of food items, only beef is grown locally and even then, it must be exported out of the area for packing. Some housing construction services are produced locally, but most materials are imported; in the case of mobile homes all of the structure is imported. Appliances and furnishings, and the energy to run and maintain them, are almost wholly imported, except for hydroelectric power. Similarly, transportation equipment, namely cars, trucks and recreational vehicles, are purchased from Detroit and its outposts; gas to fuel them comes chiefly from outside sources, despite oil production in the area. Insurance, social security and at least 60% of taxes are paid out of the region and the services they represent therefore imported. While some retail and personal services facilitate the purchase and consumption of the above items, the bulk of their cost flows outside of the area. A rough and conservative estimate of import size is 70% of local income. (This compares with an import dependency of 5% for the U. S. as a whole.)

In addition to the unusual size of the import component, the industries which produce these imports have distinct characteristics which are worth noting. Large parts of a family's budget involves purchases from industries which are dominated by large multinational corporations with monopoly characteristics. This means that prices of those imports almost certainly contain a profit margin that corresponds to monopoly power. Furthermore, it means that the manipulation of supply and demand features of that market (advertising, property struggles over resource supply and scarcity) constitute a large part of those sector's "production effort," financed out of consumer prices. Finally,

the development of technology in those industries is directed by profit-anticipation, not by the needs of people using the products of those sectors. While these are production conditions which confront most working people in the U. S., rural residents face a severe degree of oligopoly in the sectors they import from, while their own production sectors are highly competitive.

B. The Production Sectors in the Economic Base.

The economic base of Western rural and mountain communities has changed substantially since 1940. The following table compares employment in 1940 and 1970 for sectors in the Green River Sub-Basin of the Colorado River Basin. (see Figure 2, p. 25).

Table 3: Ranking of Industries by Percentage of Total Employment
Green River Basin

	1940		1970	
	Rank	%	Rank	%
Agriculture	1	31.3	4	11.0
Mining	2	22.7	3	12.9
Services	3	15.3	1	28.1
Trade	4	12.4	2	19.3
Transportation	5	7.5	8	5.3
Construction	6	3.8	5	7.8
Government	7	3.3	6	6.3
Manufacturing	8	5.5	7	5.5
Comm/Utilities	9	3.8	9	1.3

(Source: Udis and Kraynick)

The major components of the economic base are agriculture, mining and the services and trade (like eating and drinking establishments) that accompany recreation and tourism.

Trade figures to document the magnitude of the export/import nature of the economic base are available from the Colorado River Basin input/output study and subsequent modifications (Udis, Morris). The figures allow us to uncover the capital-intensive nature of

some production processes and the degree to which particular sectors are dependent on high levels of imported inputs.

Table 4. Total Gross Output, Exports and Imports, Green River Basin

<u>Industry</u>	<u>TGOi/TGO</u>	<u>Xi/TGOi</u>	<u>Mi/TGOi</u>	<u>Xi - Mi</u>	<u>(Xi - Mi)/TGOi</u>
Agriculture	6.1%	66 %	6 %	\$ 29.2	60%
Food Processing & Manufacture	2.1	45	15	5.4	31
Oil	19.8	75	56	30.1	18
Tourism	2.6	70	18	4.5	22
Hydroelectric	2.2	48	30	3.3	18
Other Mining	2.9	46	33	3.0	13
Transportation	3.4	31	20	3.0	11
Coal	15.4	28	47	- 24.0	- 19
Construction	6.4	25	51	- 13.6	- 26
Utilities	1.2	5	52	- 4.6	- 47

(Calculated from Morris' 1969 revisions of 1963 CRB data)

In total gross output terms, oil, coal, agriculture and construction are the largest industries in the Green River Basin. Of these, agriculture and oil, along with food processing, tourism, hydroelectric power and other mining all export 45% or more of their output. (The figures for coal and hydroelectric power are misleading, since coal sells a large part of its output to the power plants; coal exports are thus understated and hydroelectric imports are understated.) But neither bigness nor export orientation are enough to reveal the earning power of various sectors for the local community. A big, export-oriented sector may not earn much for the community at all if the inputs into that sector are imported from outside the region. An alternative way to state this is that earning potential does not touch the community if factor payments for materials and profits flow back out of the region.

The trade figures indicate that all of the energy sectors as well as construction and transportation have import dependencies of greater than 20%. In the case of coal, construction and utilities,

import values exceed export values, so that these sectors are net importers. While the intermediate position of these latter sectors might mean that these percentages overstate their importance in the economic base, they are clearly much less self-sufficient and labor-based than the agricultural and tourist sectors.

This import dependency of the energy sector can be illustrated stunningly by the cost figures (and therefore the production function) for a Lurgi Coal Gassification plant.

<u>Input/Cost Category</u>	<u>Percent of Total Value</u>
Coal	30 %
Chemicals	5
Power	10
Machinery	20
Labor	10
Administration	5
Finance	20

(Source: Federal Power Commission)

In addition to the fact that labor costs are only 10% of the total, most of the other inputs are imported. Generously, we might allocate the whole of labor costs, and half of the coal and power costs as income components that would accrue to the local sector. Still, about 70% of the value of gas produced would leak directly out of the local economy. Without too much imagination, we might envision an automatized plant located in Northwestern Colorado which imported all its inputs and exported all its product, thus having no effect on the local economy at all.

There would be no problem if this kind of capital and import-intensive production took place without affecting existing sectors. Unfortunately, such production invades Western rural areas because of the relatively ample supplies of land, minerals, water and clean air that are also the basis for the other components of the economic base. The competition for survival and control over resources among sectors is vicious and often fatal to the traditional sectors. Early 20th century coal mining in southern Colorado removed the (aquifers) that supported agriculture and prompted land subsidence of such massive proportions that barely a trace of previous production or populations remains.

The ghost town is the successor to previous boomtowns of the past. The purveyors of energy development, whether in coastal zones or mountainous ranges, armed with sophisticated economic impact models and projections, are ignoring the most obvious experiences, because large profits can be made in the short run.

The threatened sectors, agriculture and tourism, can be expected to resist the incursion of energy sectors if they understand the substitution process and if they are not divided by anticipated gains (either in the form of rent or new, expanded income opportunities). This sectoral competition, which may unite various class interests within a given sector, complicates the class analysis and conflict over development examined below.

C. Migration and Job Security

Before leaving the macroeconomic view of the energy boomtown, I'd like to note several aspects of job generation in energy sectors that are pertinent to an analysis of conflict over development. Local mountain/rural people, having experienced decades of depopulation and poverty, are always concerned with getting and keeping jobs. Rapid development usually increases employment dramatically, but changes the structure of employment at the same time. If employment opportunities disappear in pre-development industries and are created rapidly in new industries, chances are that newcomers will get the new jobs and locals will be left out.

There is literally no commitment on the part of energy sector developers to retrain local people for new jobs. If the industry requires relatively unskilled labor, then local people may have a fair shot at getting such jobs. This tends to be true in underground mining, for instance. On the other hand, jobs which require work with heavy machinery such as strip or pit mining or power plant construction are often staffed by workers who are brought in by the company from other areas. In the latter situation, the incoming workers are often highly paid unionized workers who have no long run commitment to the community; thus [local resentment of unions is engendered.] In addition, inflation is frequently induced by rapid development. Local people are bid out of their homes or forced to sell by high property taxes. Highly paid

sp. due to
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workers confront equally high costs which erodes the promise that migration held in store.

Maintaining jobs over a reasonable period is a second problem. Energy development and related construction has a relatively short lifespan, as well as a high degree of risk of shut down. Prototypical figures have been developed for various energy projects by HUD (see Figure 1 and Table 6). While these figures stop short of shut-down point, they reveal the dramatic disruption accompanying the construction phase. The uncertainty surrounding the viability of long run production patterns arises from the vulnerability, implicit in the input/output structure documented above, of these sectors to changes in technology, to changes in price accompanying new discoveries, or to change in patterns of energy use and conservation. Mining regions like Appalachia, the Mesabi Range and the Keewenaw Copper Peninsula have histories of intensive exploitation followed by long periods of depression and depopulation, a cycle sometimes repeated.

Figure 1

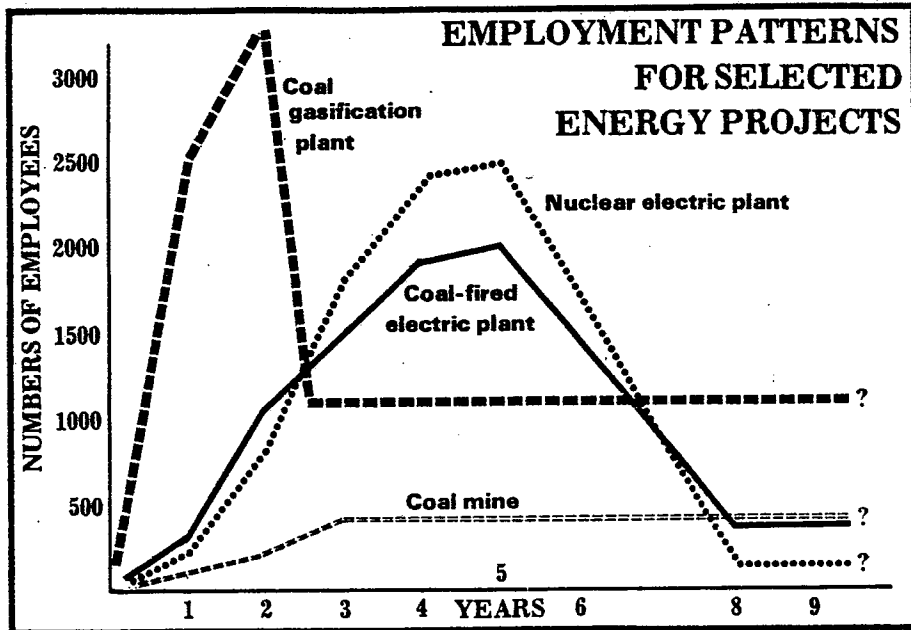


Table 6.

TYPICAL ENERGY PROJECTS

Project	Size	Construction Time	Peak Force - Construction	Operating Force
Coal Export Mine	9M tons/yr	2-3 years	175-200	325-475
Electric Generating Plant (including coal mine)	700 MW	4-6 years	750-950	75-100
	2,250 MW	6-8 years	2,000-3,000	350-400
Substitute Gasification Plant (includes coal mine)	250 mcf/day	2½-3 years	3,000-3,500	1,050-1,250
Oil Shale Processing Facility (includes mining)	50,000 bbl/day	3-4 years	2,400	1,050-1,450
Nuclear Power Plant	1,600 MW	5-9 years	2,500	150
Offshore Oil and Gas Support	Per Rig	3-4 years	175	90
Platform Fabrication Facility	2 platforms/year	5 years	400	1,000-1,500
Deepwater Port	2 mooring spaces	3-4 years	1,250	75-90
Liquid Natural Gas (LNG) Conversion Plant	1,000 mcf/day	2-3 years	300-400	50-100
Oil Refinery	250,000 bbl/day	2½-3 years	3,500-4,500	450-900

Each of these aspects of change in the economic structure - import dependency, sectoral competition and job displacement and uncertainty - will provoke responses on the part of local people whose livelihood is threatened. Sometimes this response takes shape in environmental protest, which has little to do with aesthetics but reflects the destruction of resources for other land based activities. Sometimes it takes the form of social and political resistance: a harassment of newcomers, a refusal to provide services locally, a grooming of frontier ideology. These responses to sectoral and regional interests complicate the class conflict associated with development.

V. Development and Class Conflict in Western Mountain Communities

The above sections lay out the material base of energy production, surplus value and sectoral competition typical of boomtown development. This sets the stage for an exposition of the particular class situation of people in Western communities, along with their sectoral position. Since the specific features of struggle over development vary with the history, topography, resource endowment and economic health of particular communities, the following analysis uses three counties in Northwestern Colorado for a detailed investigation of class, sector and change.

The study area consists of three Northwestern Colorado towns, each in a different county and approximately 35 to 100 miles apart (see Figure 2). Little distinction exists between a town, in each case the only one of significant size in the county, and its rural surroundings.

Table 1. Population for Northwestern Colorado Towns, Counties and Counties, 1970

	<u>Town</u>		<u>County</u>
Craig	4290	Moffat	6341
Meeker	1579	Rio Blanco	4842
Steamboat Springs	2340	Routt	6592

(Source: 1970 Census)

While the population numbers may look amazingly small, such communities are prototypical of western towns on the verge of development and attest to the meager ability of the land to support people. The chief

