

FRAMEWORKS: EMPOWERING PLACE
IN THE FACE OF A UNIVERSAL WORLD

by

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ABSTRACT

The Flathead Valley stands on the edge of a precipice, staring down the destruction of its culture, ecology, landscape, and economy as it is quickly being filled to the brim. This destruction has become apparent to many locals and visitors and is starting to generate serious concerns.

The problem of irresponsible rural development is one that has frustrated conservationists since the first skeptics of the industrial revolution. No one really wants to be a part of the systematic destruction of small town charm, open and natural landscapes, or functioning ecosystems; but, so many people want to live a life surrounded by these qualities. And right there is the problem. Traditional solutions to this problem have been regulations through zoning which, if actually protecting these qualities, slows economies. The other alternative is the short-term-minded capitalization of open space into money by means of developments. Neither of these solutions actually address the problem.

A strategy that I would like to propose in place of these largely unsuccessful strategies is one that asks the question, why can't the forces that drive the demand for development also drive the sustainability of everything that is that place? A solution that recognizes the plight of locals and the desires of immigrants. Through clever and creative planning and design, entities can be introduced into a rural area and prove to embrace local culture, open space, and ecology, while being economically sustainable.

INTRODUCTION

The Flathead, when I contemplate its future, is summed up by the painfully blue Willie Dixon song Goin' Down Slow. Just about every verse of the song stings me as it describes a man that is looking back on his life as he slowly dies. I see and hear the incredible enjoyment that generations have had in this beautiful place and it makes me sad to think that there is an apparent attitude of acceptance or maybe more likely a naivety to the fact that the Flathead is indeed going down slow. The development of the valley is initiating the inevitable ruin of this rare landscape and culture. Everything that makes the area so enjoyable to live in is directly threatened by irresponsible development.

First, let me make this very clear, development is not a bad thing. The Flathead is not a place that needs to be completely conserved in order to protect it. But, what is very evident is that the way in which the Flathead is being developed is detrimental to its future. The means and end goals of each individual development will eventually bring about a terrible end for the valley as a whole; the collapse of its ecology, small town culture, open space, and its economy.

Before delving into the actual problematic issues of development, it is important to have a basic understanding of the valley's history and therefore the mechanisms that have led it to the edge of this precipice. Its history leads down a path that explains the complexities of the region culturally, economically, and ecologically. It reveals the fundamental flaw behind its development. It expresses the incredibly balanced give-and-take relationship between conservation and capitalization, the logger and the banker, the

multi-million dollar home and the trailer court; it expresses the forces and the people that make this place so unique and so desirable and the forces that threaten to destroy that.

AN INTRODUCTION OF THE FLATHEAD

The Early Flathead

The last icy fingers of the final ice age retreated from the valley nearly 12,000 years ago leaving behind the gem of gems, the perfectly pristine Flathead Lake within a massive, forested valley. It was not long before humans came across these unspoiled resources and began to live among the dense fir trees and sparkling lakes.

Archaeology in the region suggests human inhabitants arrived at least 5000 years ago. These people were the Northwestern tribes of the Salish, the Kootenai, and the Pend d' Oreille (Flathead County 1). These tribes lived a fairly peaceful and serene life in the valley reasonably protected by the mountains of the continental divide from the ferocious tribes of the Great Plains. Unfortunately, the tale of the Flathead Indians ultimately ends like all other tales of the Native American.

European influence came to the valley by the same means that it did through most of the west. Trappers eked their way North from Missoula through the Mission Valley pursuing the untouched bounty of furs in the Flathead. The first settlements of the valley popped up in the late 1850s as pioneers grabbed their piece of earth in the frontiers of Western Montana (Trippet 74). According to the Flathead County, the real breakthrough for the settlement of the region came from the discovery of gold in British Columbia (1). Eager miners would ride a train to Polson then go by stage along the West shore of Flathead Lake, and then up the river grade of the Whitefish River to Canada. It did not take long for the entrepreneurial spirit of the frontiersmen to capitalize on this.

One particular frontiersman did. T.J. Demers came to the region to start his own mercantile business in the mid-1880s. After being shut out of all previously established settlements, he decided to make his own. In 1887 Demers established his business and town. He chose to build on the highest navigable point of the Flathead River (Eckeleberry 3-5). Needless to say, with the arrival of the steamboat on Flathead Lake, Demersville, and the precursor of Kalispell, exploded with popularity.

As the small settlement grew, new opportunities presented themselves in the valley. The first paradigm shift of the Flathead Valley's economy was starting to take shape. A well established trade settlement allowed farmers to justify the incredible effort required to clear the thick forest that at one time covered the entire valley. It is hard to imagine the Herculean effort required to remove trees and stumps from acres and acres of land by hand! So, in the latter part of the 19th century the valley started to take its present day (forest-less) form, one, hand cleared, forty acre plot at a time.

As this land was cleared the first industry of the Flathead began to establish its dominance. In 1884 the first lumber mill was established, the Foy's Mill, (Trippet and Bain 23) and with the founding of Demersville and a population of workers, this industry boomed. So much so that the town of Whitefish was originally referred to as Stump Town and the town of Somers developed solely because of the Somers Lumber Company. (This company, in particular, was called upon for resources to build the Great Northern Railroad line across Northern Montana.) And so, the age of extraction in the Flathead began.

As quickly as Demersville flourished, it died. It was decided that the Great Northern Railroad would pass only a few miles away from the town as it made its way

across the valley and into the Cabinet Mountains. In 1887 Demersville was founded, in 1891 the Kalispell Town Site Company began selling lots, and in 1892 Demersville was quite literally picked up and moved to present day Kalispell to meet the first train on New Year's Day (McCurdy 59). With the train came the numbers of people to truly settle Kalispell and the surrounding Valley.

At the turn of the century, a very interesting development set the tone for a struggle in the valley that continues today. Despite massive protest from the mining and timber industry, George Grinnell and other naturalists were able to convince the state legislature to set aside the area that is now Glacier National Park as a forest preserve. And in 1910 President Taft signed a bill declaring Glacier Park as the tenth National Park in the United States (National Park Service). The popularity of the park has been incredible since its inception and it has been one of the greatest assets of the Flathead Valley.

Another opportunity developed in the Flathead valley - but on the other end of the naturalist spectrum. It was realized that farmers - from the Flathead to Eastern Oregon - and the great power producing dams of the Columbia could benefit greatly by regulating the Flathead River drainage. The history of the Hungry Horse dam, as described by the U.S. Reclamation Bureau, starts in 1921. Originally, the plan was to create a large dam at the outlet of Flathead lake. However, by 1943, local resistance coupled with the urgency of war time power production made the Hungry Horse site the best option. So, in 1944 construction began on the South Fork of the Flathead near its confluence with the main-stem. The completion of the dam, in 1953, hugely increased the productivity of the Flathead's farms and it opened up many more industrial opportunities in the valley.

With the increase in locally generated electricity, the Anaconda Aluminum Company jumped at the opportunity to be near this new power plant and on a main freight railway. Only three years after the completion of the Hungry Horse dam, the plant was producing aluminum (Trippet and Blain 31). Another industrial giant developed during the same time frame. D.C. Dunham brought his small Minnesota lumber company to Columbia Falls in 1945. Plum Creek Timber Company started modestly in the Flathead Valley and has now subsequently grown to be one of the most significant land management companies in the United States (Plum Creek). It is hard to wander the great forests of the Flathead without experiencing Plum Creek land.

In many instances directly adjacent to Plum Creek land but philosophically opposite to it, the massive wilderness complex to the Southeast of the valley illustrates, again the give and take relationship of the area. According to the U. S. Forest Service, the Bob Marshall Wilderness Complex (including the Great Bear, the Scapegoat, and the Bob Marshall wildernesses) was created by congress in 1964 and now totals over 1.5 million acres. The Forest Service describes the area very effectively:

Here is one of the most completely preserved mountain ecosystems in the world, the kind of wilderness most people can only imagine: rugged peaks, alpine lakes, cascading waterfalls, grassy meadows embellished with shimmering streams, a towering coniferous forest, and big river valleys.

It is truly an adventurer's greatest play place.

At this point in the valley's history, the 1970s, we see a shift into another paradigm. One that is more exciting and potentially more rewarding for residents and visitors alike. With this exciting potential comes a grave danger that the valley is currently flirting with.

The Contemporary Flathead

Another economic paradigm shift came with the modern development of the Flathead; this era starts in the mid-1970s when the valley was “discovered.” At this point, people moved to the area in an unprecedented way. According to a Decennial Census Report created by the U.S. Census Bureau, there were 39,460 residents of Flathead county in 1970. By the year 2000 the county had swelled to 74,471 (U.S.Census Bureau QuickFacts). That is an enormous growth of forty-seven percent. The significance of this is very apparent when compared to the state and the nation, twenty-three percent and twenty-eight percent, respectively. What is just as impressive is that it did not let up. The U.S. Census Bureau projected that the population would grow 14.7 percent from 2000 to 2006. Again, compare that to the state and the nation: 6.4 percent nationally and 4.7 percent in the state (QuickFacts). Within Montana, during this time period, the growth of Flathead County was outpaced - and not by much - only by Gallatin County. Anyone that is familiar with the Bozeman area’s growth in the last ten years knows how drastic that was. This very fast development of the Flathead certainly was not a bad thing and has moved the valley from an extraction-industry based society to service based.

This population explosion, in fact, saved the Flathead Valley and its residents a lot of hardship through the eighties and nineties. This population explosion gave the valley the opportunity to develop a more sustainable economy before its extraction economies failed in the nineties. As the valley was inundated with people, workers who

would normally be landing on hard times were integrated into a very successful service-based economy. What is even better is that the switch to a service economy not only saved people from hard times but, elevated the quality of lifestyle. Dr. Larry D. Swanson et al. of the University of Montana explain in a report (which draws conclusions from three extensive studies of Flathead County's economy) that the valley's economy has seen a boost simply from the increase of people. However, Swanson continues by explaining how this influx of people did not create only a quantitative boost but, also a qualitative boost with an increase in per capita income, median income, a lower poverty rate, and a lower unemployment rate (13). This population boom was enough to set the Flathead up for economic success when an innovation of the nineties multiplied this success even more.

The 1990s saw the internet come to fruition. And the Flathead was among one of the great beneficiaries of that. With the internet came a freedom from the metropolis. A company no longer needs to be in a city to be super-successful. This increased the number of people and the skill level of the Flathead population. As the extraction industry took its place as a smaller wedge in a diversifying economy the new assets of the valley become very apparent. Instead of timber, gold, and farmland, it became the culture, the landscape, and the ecology that stepped to the front as the sole assets that make the valley so successful. In a very interesting study of the Flathead's business owners, Jason Lathrop, then a graduate student at the University of Montana, explains his findings for why business owners choose the Flathead: "With near unanimity, these business leaders say they live in the Flathead because they value the outdoor recreation opportunities and the community of people around them" (5). What is also very

interesting is the consensus among business owners that they are giving up pay in order to work in such a beautiful and fun place. Lathrop continues by explaining that “on the whole, [business owners] believe they have ‘given something up’ economically for the amenities and community they so highly value” (5). So, to the people that live in the valley, it is worth a cut in pay to live the Flathead lifestyle. Ironically, this fact, which has made the valley’s economy so successful, is what is so very troublesome for the future of the valley.

A PHYSICAL PROBLEM

The Mining of Assets

As I have eluded to, the Flathead stands before a dire problem that, if left unchecked, will destroy much of its beauty. The landscape, the ecology, and the small town culture are not only parts of the valley's beauty, but they are a part of the values that are appreciated by residents and visitors alike and are essential to the Flathead's successful economy.

Before diving into the problem with the economy, there are individual attributes that, if degraded by themselves, would be unacceptable. The first, and the most obvious is that development fills in open-space and degrades the valley's landscape. During the nineties, seventy percent of start-up homes were built outside of city water districts (Swanson 25). This means that the development of the Flathead is happening in the open rural spaces of the valley, filling in open space. While this is a necessary side effect of any sort of development, it does not need to degrade the landscape.

Another problem, one which is a little more subtle, is the breakup of animal ranges. Thanks to the massive National Forest around the valley, Glacier National Park, and the careful efforts of Fish, Wildlife, and Parks, the Flathead Valley is a part of an incredibly effective and largely natural ecosystem. Glacier Park has such a healthy Grizzly population because of these factors as well as established migration corridors and limited human development within their habitat. However, the valley's irresponsible development threatens the animal ranges not only of the Grizzly, but of all of the wildlife

which makes the area a very special place. Again, this seems like a necessary sacrifice for development, but, maybe only if that development is done irresponsibly.

Finally, and most subtly, this type of development promises to slowly eat away at the incredible culture that has formed in the valley. As the open space and wildlife ranges are divided into the typical American suburb, the towns lose their charm and the people lose their identity. This irresponsible, and universal development will flatten the barns for barn dances, the classic Montana bars, and the overall feeling of being somewhere special.

These three attributes of the valley being threatened - open-space, wildlife, and the valley's unique culture - is enough to worry me and make me aware of the need for a solution to the problem of irresponsible development strategies. No one really wants to be a part of the destruction of these great things, but there are those that stand to gain from developing the valley and they have a completely legitimate right to that. However, the problem in the valley is much farther reaching than these environmental and cultural issues. Those that have something to gain from development are balancing on top of these attributes as a part of the valley's successful service economy.

This economy will, if development continues in this way, have the metaphorical rug swiftly pulled from beneath it. The reasons why people have brought their high paying service businesses to the valley are directly threatened by rash development. "Visitors and residents alike are drawn by the friendly atmosphere, rural feel, clean water, wide-open spaces, wildlife, scenic beauty, and outdoor recreation opportunities," explains Dr. Swanson in his report on the valley's economy (17). These attributes are what bring service industry workers to the valley as well as their customers. It is easy to see that the

reasons for a very successful service industry in the Flathead Valley are an exact mirror of the attributes that are threatened by irresponsible development. Here is the painfully ironic problem facing the valley. The assets that have made the success possible are being systematically dismantled by that success. If the valley continues to develop irresponsibly, it will not just see the collapse of its ecology, culture, and landscape - each one of those things completely priceless - but it will see its successful economy and relatively high standard of living collapse with those things. A complete and inexcusable travesty.

Unfortunately, there is evidence that the degradation of these assets has already begun. In Dr. Norma Nickerson's report on resident and visitor opinions of the Flathead Valley, she explains that return visitors have noticed a degradation of open space (21 percent of return visitors), a degradation of wildlife (12 percent), and a degradation of the overall environment (11 percent) (4).

This is not an issue that naturalists and capitalists should sit opposite on. This is an issue that can potentially unravel every beautiful thing that is the Flathead Valley *and* erode what makes the area so desirable for the businesses and the customers that have increased the valley's standard of living. It is an issue that scares me very much and should scare every person that has been held enchanted by the valley's benevolence or has been supported by its economic success.

A FUNDAMENTAL PROBLEM

The Misunderstood Intention

The physical problems of the valley are fairly easy to quantify and to observe. The difficult task is the one of explaining why these things are happening.

The problem with the development of the Flathead is one of end goals. Development and design, as architect William McDonough points out, is a signal of intent for mankind (“The Wisdom”). Since the development and design of the Flathead is becoming a problem - culturally, ecologically, and economically - we need to reevaluate what that intent is.

Many of us do not know or have an intention regarding the valley’s development. That is just as dangerous. In a TED lecture, McDonough continues with his point of intentions: “I didn’t intend to cause global warming by coming here, it is not part of my plan,” McDonough explains, regarding the average person’s response to their intention, “Then we realize that it is a part of our de facto plan.” That begs the question, what is our de facto plan? And, how is this plan or intention for design and development inherently flawed?

As I will explain, the goal of development in the valley, which is directly related to the intentions of its development, is of a nature attributable to old fashioned industrial mentalities and, unfortunately, prone to the detriments that that thinking causes. It is a method that originated in manufacturing and industry but, because of its effectiveness was adopted, strangely, by industry’s opposition. Industrial design, development, and thinking has an inherent problem of being single-goal orientated. Multiplying this

inherent problem is the achievement of this goal by linear means - which William McDonough and Michael Braungart refer to as “brute force” (30). What is important to note is that this concept of “brute force” has nothing to do with ideologies. The problem with the Flathead does not stem from one side’s principles or the other, the problem stems from the “brute force” means to a singular intention whether you are a developer, environmentalist, or concerned neighbor. There is little consideration for other goals or means except the relentless, straight push to a single end. This industrial concept of production, design, and development is essentially mining the values of the valley without considering the entire system.

There is a very interesting and very exact parallel between the philosophy of development established by Industrial Revolution, and the apparent philosophy behind the development of the Flathead Valley. There are many great things that came out of the Industrial Revolution (for example, a higher standard of living) and there are great things that have come from the development of the Flathead (also, a higher standard of living) but, both ideas overlooked a very troublesome aspect - the multi-dimensional, diverse demands of true sustainability.

For a quick exploration of this paradigm in development, manufacturing, and designing we will leave the Flathead and look at how these concepts have played out in other parts of western society.

The one-dimensional idea of design and development has its roots in the Age of Enlightenment and truly came to fruition with the Industrial Revolution. The Enlightenment was an incredibly optimistic movement in science, philosophy, politics, and human rights. It was a reemergence of the idea that man can, through rational

pursuit, become perfect. Particularly in the United States - a country based on Enlightenment ideas - a beautiful culture emerged that allowed the individual to pursue his or her own desires. Author Thomas Mautner defines this period as being “characterized by belief in the perfectible man and in progress [...] (“Enlightenment” 187). A very exciting idea indeed.

One of the great developments of the Enlightenment was the scientific method. The highly rational, highly linear process for developing a hypothesis, testing that hypothesis, and then creating a conclusion. This development is a wonderful illustration of the essence of the Enlightenment. The rational, the individual, and the freedom that came with those concepts pushed humanity through massive barriers. Unfortunately, this era laid the ground work for a paradigm that would imbue American culture with the mentality that threatens so much of today’s world.

It was not a vast leap from the rational, scientific, and individualistic philosophies of the Enlightenment to the strict efficiency and capitalistic mentalities of the Industrial Revolution. This revolution, inspired by the liberties and optimism of the Enlightenment, was fueled by a new notion that mankind was the keeper of the world. Man was set against the world and would overcome through sheer might. It is no coincidence that mountaineering as we know it emerged in the same time-frame or that “manifest destiny” was the motto of the American pioneer. Man was out to make the world his.

At its heart, the Industrial Revolution was a revolution in economy. The impetus behind this economic movement was simply the desire to gain capital and the leverage that that allowed. With this end solely in mind, the acquisition of capital was done with

the most efficient and profitable means available. This led to a design philosophy that was very linear and pointed towards one goal, making money.

The Universal, the Industrial, and the Effects

This way of thinking has manifest itself today, in a very appropriate term, as universalism. Again, just like industrialism, this movement is an advancement of mankind in many regards. But, concerns have been raised about how it is undermining cultures, ecosystems, and landscapes at both a large and small scale. Universalism, as its name implies, is the idea that -within design and development - a universal idea can be effective in many places and that diversity is a force to be subdued (which goes hand in hand with industrialism and modernism). We see that concept play out in the design of suburbs around the U.S., in the movies watched around the world, and in the products sold around the world. Paul Ricoeur, one of the great philosophers of our time, describes his concerns regarding this phenomenon as constituting “ a sort of subtle destruction, not only of traditional cultures, which might not be an irreparable wrong, but also of [...]the creative nucleus of great cultures, that nucleus on the basis of which we interpret life” (qtd. in Frampton 16). Ricoeur is explaining how this universal method and idea degrades how man creates, designs, and develops things, which - as I explained earlier - is the intention of mankind and as Ricoeur sees it, the basis of our interpretation of life! Needless to say, both are very big and important things. This degradation stems from the lack of diversity in goals and means (thus universal) which is attributable to the linear processes that is our de facto means of design, production, and development.

This concept of design is a very dangerous one and the one that is attributable for many of the problems of the developed world. There are countless examples through history of how this type of thinking has created ruin and human strife. What is more frustrating is that so far we have failed to learn from this mistake; we use the same mentality that got us into the problem to try to get out of it.

The obvious example of the impact of this problem is the environment. I am going to spare you the lengthy explanation of how we have and are despoiling the natural environment. So, to put it simply, most industry has left the condition of the natural environment out of its consideration as an end goal. (Except for when the environment can make them money. Seemingly multi-variant but still a “brute force” method of achieving capital acquisition). By doing this, industry has taken advantage of natural resources both as a supply and as a dump without considering the implications other than the acquisition of capital. Now it is starting to take a noticeable toll on the world that we live in. Fortunately, this issue has been brought to a level of awareness that will allow significant progress towards a solution. Unfortunately, the solution is based in the same kind of thinking that produced the problem.

The mainstream solution for the environmental problem is very linear with a single goal. Sound familiar? The green movement is pointed towards the end goal of slowing or stopping industry’s detrimental effects on the environment. The means of this movement are simply the inverse of industrialization. But how can this movement that stands opposed to industrial destruction be bad?

The answer to this question is actually quite easy. By the intent of this movement being solely the opposition of industry, there are many parts of this complex world that

are not considered. The goal of this movement in being the opposition of another movement is not even considerate of its own effectiveness. So, the green movement - besides not considering people's livelihood, the quality of architecture, or the positive points of industry - does not even consider its own goals and means. Meaning, that the goal of the green movement is not an effective one, it is only set on slowing industry instead of actually improving the environment. William McDonough and chemist Michael Braungart make an interesting point in Cradle to Cradle that the "eco-efficiency" model of environmental sustainability (the model that stands in opposition to industrialism) can actually cause more damage than doing nothing at all:

Simply put, eco-efficiency only works to make the old, destructive system a bit less so. In some cases, it can be more pernicious, because its workings are more subtle and long term. An ecosystem might have more of a chance to become healthy and whole again after a quick collapse that leaves some niches intact than with a slow, deliberate, and efficient destruction of the whole (62).

By stepping back from the green movement and observing its actual effectiveness, it is easy to see that this movement is not striving for an actual effective solution, but instead a band-aid of "eco-efficiency" that really only stands to slow the destructive nature of industry.

What is worse is when you pit the singularly, capitalization-goaled industry against the singularly, oppositionally-goaled environmental movement. What we get is an ineffective form of either idea. Since each of these ideas are built on principles, compromise, either direction, becomes a liability to only one of the sides. "In any compromise between food and poison it is only death that can win," states Ayn Rand in an article titled "Doesn't Life Require Compromise?" (70). (To clarify here point: She is

not referring to a normal compromise in the form of a business deal. She is referring strictly to the sacrifice of one's principles to another's.) When an entity compromises its principles, there is nothing to gain from that, only something to lose. As the number of LEED (or sustainable building) certification applications increase - from 573 in 2000 to 16,000 in 2008 (McGuigan) - and the size and influence of these two thoughts become more equal, I am afraid that we will see a solution develop that is almost entirely mediocre compromises of each side's noble goals.

On that note, the motivation of the green movement and the nobility of its end goal is not what I am questioning. (I feel that as stewards of the earth, which we have become, ironically, through industry, this must be one of our principle concerns.) Also, the motivation and the nobility of the end goal of industrialism is not what I am questioning. The advances in our culture that stem from the motivation of capitalism and industry are absolutely worthy achievements. What I *am* questioning is their ability to be completely effective within the entire web of entities that they are a part of, not just within their own linear intentions. To be fair, in the current paradigm of design and manufacturing, this is the most effective means of finding a development or design solution. But, this begs, what if the current paradigm is wrong?

There is another great example of this predicament which also emerges from the same paradigm of industrialization, and therefore the same thought and intent. It travels down a very similar road and has met very similar problems.

The worker's struggle with industrialization is very similar to that of the environment. Through the Industrial Revolution, industry - focused on the one goal of acquiring capital - left the laborer out of its consideration. Some of the greatest travesties

of America's history occurred in this era. Slavery, child labor, ridiculous working hours in ridiculous conditions were some of the most horrendous acts of cruelty in America. Naturally, with these kinds of injustices a counter group formed to stem the tide of industry's abuse of the laborer.

Unions became firmly rooted in America during the 1820s and 1830s. The unions formed as a force to counter the injustices of industry towards the working man. Once again a singular intent largely inconsiderate of anything outside of its own goal. In fact, during the 1860s, when unions first started using political means to achieve their goal, congress limited the number of Chinese immigrants in order to shore up jobs for union workers ("Labor Movement" 160). While this is a ridiculous intention that unions have moved beyond (as they now try to work with immigrants and with companies for reasonable ends) it is still an example of the result of linear goals. The singular intentions of both the unions and of industry still have the inherent problem of strict efficiency or mediocrity.

As the years of tug-of-war continued, the inconsiderate nature of both entities has led to a very unfortunate end, particularly and recently, for the American auto-industry. The troubles with the American auto-makers is not entirely attributable to the effects of the United Auto Workers (UAW) but this relationship was very influential with the near failure of this entire industry. The big three American auto-makers claim that they pay, on average, twenty-four dollars per hour per employee more than a foreign, non-union auto-maker pays their American workers in American plants (Landon 25). This incredibly inflated payroll coupled with the essentially non-option of layoffs has created a nightmare for these companies. What is so ironically painful about this situation is that

the auto-workers union just about brought about their own destruction by being inconsiderate of the needs of their industry.

Again, to make something very clear. Ideologically, there is nothing wrong with what unions are trying to achieve. Advances in worker's rights and many human liberties as we know them today are a result of the efforts of unions. But, again, by being inconsiderate of the entire network that they are a part of (which was instigated by industry doing the same), they threatened to bring about not just the destruction of a particular industry but their own livelihood as well. Bringing to question again, are these ideas causing the problem or is it the framework that they exist in? Why can we not strive for complete effectiveness instead of simple efficiency?

The Linear Intention in the Flathead

A jump down in scale brings us back to the Flathead and to another tangible example of the destructive nature latent in this type of thought. In taking the concepts just discussed and applying them to the development of the Flathead Valley it is easy to see how the industrial attitude of development has led us to where we are; it starts with the interaction of Europeans and Native Americans, continues through the battle of extraction and conservation, to the problem at hand today. With the physical problems listed previously - culture, ecology, and landscape, which are easy to attribute to development - it is safe to assume that there is a fundamental problem with the way that the Flathead is being developed. And this problem is of a similar if not exact nature as the problems just outlined. The problem with development in the Flathead is one of singular intentions and linear processes.

It is not much of a stretch to imagine the developer as the industrialist and the community coalition standing in opposition as the environmentalist or union. These comparisons are not supposed to be ideological but, are supposed to be comparisons of how these two groups view their goals and by what means they achieve them.

The developer is largely focused on the leverage gained by increased capital through any cost effective means; he pushes for that goal without much consideration of culture, landscape, or ecology. (Particularly, as I already explained, a dangerous situation in the Flathead since the developer's livelihood is threatened by the neglect of those things.) However, let us not forget that the developer serves an important positive service. Like the industrialist he provides the economic stimulus that has increased the quality of life in the Flathead Valley but, leaves out the values of many residents and visitors.

The community coalition is largely focused on opposing the development. The coalition pushes for this singular goal of opposition without considering their own effectiveness or end result, like the environmentalist or the labor union. By using the same broken process as the developer, these entities do not create an effective solution to the detriments of development. Again, their principles are not inherently wrong, it is just the end goal or the means for that goal that are skewed.

Let us take for example a handful of controversial developments proposed in the Flathead Valley. The minutes of Flathead County Planning and Zoning Board meetings (ranging around the valley and ranging from 2006 to March of 2009) highlight perfectly how linear intentions create an unsatisfactory design solution. By having two opposing, singularly orientated factions squaring off, the result is one of ineffective solutions.

The typical process for approval of a development in the Flathead Valley generally only requires review with the planning board if it is over five lots. The project is first reviewed by the planners in the planning and zoning office, then by the planning board, and finally it goes to a public meeting. In this meeting the developer presents his project, then relevant government agencies comment on it, followed by comments from the public. The planning board will then decide to make a recommendation to the county commissioner or not. These meetings provide wonderful insight into how linear means and singular goals have shaped the valley for the worse.

Within this handful of contentious developments there are countless examples of how the single intentions of the developer take away from the environment or culture, as well as many examples of where the community coalition's intention takes away from the developer and the economic success of the area. It is important to note that this is not a discussion of which side is right or wrong, it is a discussion of how, despite the noblest of motivations, the means and the singular nature of their intentions lead to an inherently unsatisfactory solution.

A great example of this effect emerges from the Flathead County Planning Board meeting of March 8, 2009 to approve for the county commissioner a development in Kila. This meeting shows how, through the process of approval, the Flathead is being developed.

First thing on the agenda of the meeting, the representative of the applicant describes the project being submitted and the changes made since the last meeting. The representative explains the project and how it has been reduced from seventy-four lots to seventy lots. While this seems like a simple change to appease concerns of density, there

is a lot more behind this fact. Developers expect that their projects will be met with resistance and will need to be cut back. So, to counter this, they simply propose the maximum number of lots in the first place in order to achieve the goal of capital gain. Therefore, before the first pen hits paper in designing the development, it is already inherently flawed in regard to the ecology, landscape, and culture of the area. This fact is not entirely the fault of the developer, this strategy has been developed to counter the automatic response of the opposition of community coalitions.

After the presentation by the applicant and comments by relevant government agencies, the community has its chance to be heard in the discussion before the vote. Particularly in this development, the community members, represented by the Kila Smith Lake Community Development Coalition, came with many oppositions from fire safety, to drainage issues, to wildlife issues. Some of them legitimate, some of them not. Strangely, neighbors that supported the project were left out of the community coalition (5). This marks the coalition (as if the title of “coalition” did not either), pretty obviously, as being solely oppositional to the development. In this regard the coalition is very much like the environmentalist or union in that their goal is not one that is effective, but is instead simply to oppose and to manifest an “efficiency” based solution. Their opposition, in this paradigm, is very warranted but, their effectiveness is, as the development of the valley takes shape, in question.

As these two express themselves, the board continues building their opinion of what their recommendation will be. This is not an easy task, and it is a task that I am sure has been carried out with the absolute best of motivations by honestly caring people. But, the process demands many solutions that are quite ineffective, as this quote points

out regarding the setback from wetland for wildlife corridor: “It was an attempt to affect something that was better than nothing and it was a compromise between the applicant and the natural environment” (19). This compromise was to create a forty foot corridor between building lots and wetland areas. Who won here? When the wildlife discussion was centered around elk bedding down, what is the significance of forty feet to one of the largest North American herbivores? How much developable land did the developer just lose? Both sides sacrificed their principles in order to achieve their singular end. This compromise leads to an entirely unsatisfactory solution; the lack of an effective intention allows two independent, singularly goaled, linear processes to compromise for a solution that is essentially ineffective. Yet this decision is hailed as a great and successful compromise. Building a development to the great end of both entities! This is the attitude and goal that will lead to the demise of the Flathead.

To sum up this fundamental problem, the pursuit of a single goal by linear means is detrimental to the system as a whole by not considering other parts. Diversity in goals and means is fundamental to the success of nature and, as it is becoming more clear, to man-made ventures as well. For the current paradigm of design and development, diversity in goals and means is considered a hindrance.

Under the existing paradigm of manufacturing and development, diversity [...] is typically treated as a hostile force and a threat to design goals. Brute force and universal design approaches to typical development tend to overwhelm (and ignore) natural and cultural diversity [...] (McDonough and Braungart 33).

By ignoring or overwhelming the diversity of nature and culture, single goals and single track means are the exact processes that are so detrimental. The removal of diversity by linear means has created a universalism within the developed world which threatens not

only environment - through means already discussed - but threatens uniqueness in culture as well. So, brute force, universalism, compromising principles, or linear intentions are inherently problematic by not considering repercussions within a vast scope. The lack of diversity in intentions not only undermines natural systems but, undermines the systems that are created by man as well.

A FUNDAMENTAL SOLUTION

The Sustainable Web of Intentions

Now that I have thoroughly ruffled the feathers of everyone, by criticizing capitalists, industrialists, environmentalists, unions, developers, concerned citizens, county planning boards, and, essentially, every person in the developed world, this problem is not necessarily the fault of these entities or their ideologies, it is the fault of an overall linear process that is inherently ineffective. This linear process takes away from the noblest of intentions.

No matter how noble or just, if the process or nature of the goal is ineffective then the overall intention is ineffective. It is time to develop an *effective* intention. It is time to stop looking at design and development as a line segment but as a network or web of important issues that can work together towards an effective solution. Since the exploration of intention in the Flathead Valley has revealed that it is not necessarily the *ideological* intention that is causing the problem, how do we create a frame work that these ideologies can become effective? Or, how do you reach an intention of true sustainability?

In order to reach a sustainable intention we need to broaden the scope of that intention. Commerce and industry's intention (as already discussed) lies in the acquisition of capital or the achievement of prosperity. The ability of commerce and industry, in a free-market system, to quickly and effectively create solutions has been unparalleled through history. Creativity, honesty, and effectiveness are inherent qualities of this system but, since they are pointed towards one end (that is inconsiderate of the

overall system), they produce an ineffective or simply efficient solution for overall sustainability. Since there are these great attributes inherent to capitalism, I am suggesting that we still use this system as the means for development, but add a few more variables to the system. McDonough suggests that we add the intention to “love all children, of all species, for all of time,” in a TED lecture. Just take a moment and really think what that means. For me there are two things that really stand out: the notion of love, and the idea of “for all of time.” Love is a very clever way to describe what needs to be done in order to achieve sustainability, particularly if that love is for everything. Love is a notion that, while very ambiguous and hard to really describe, is understood by everyone, fundamentally. Add to that “all of time” and there enters sustainability that everyone can enjoy. Combine love, all of time, and the power and efficiency of capitalism and you have a new paradigm in design and development that is no longer destructive, no longer merely trying to be “less bad,” but, is striving for a completely effective sustainable society. This concept inherently protects ecology, landscape, culture, and economy (the list of problems in the Flathead Valley).

This is about as broad of a solution as possible. However, if every design decision was made by this paradigm of intention, a true solution would emerge.

Here is the good news, this type of intention is starting to catch on. The developed world is at the brink of realization that linear intentions are detrimental. Companies are starting to design, manufacture, and develop using processes that are based in a web or network rather than a single line. A great place to start looking is at how commerce or industry has married with the environment to make an effective solution.

The Ford River Rouge factory in Dearborn, Michigan is a great example of the effective potential that a multi-dimensional intent will create. The project began at the end of the 1990s and was hailed as the new form of modern environmental sustainability. The renovation of an old factory which had become a completely toxic site on the River Rouge created a compound that has - instead of only cleaning up the site - created something that *empowers* the local ecology. A truly effective solution.

In this project the roof is particularly developed with this intention. Essentially, the assembly lines are housed under pieces of prairie. The roof was planted with Sedum, which blooms white, yellow, red, and purple in the spring. The green roof is expected to last two times longer than a conventional roof because of its obvious resistance to UV radiation (actually, its usage of UV radiation) compared to poly roofing. This decreases the life cycle cost of the roof, making it more cost effective, as well as providing more plants to convert carbon dioxide into oxygen. The 10 acres of green roof also regulates interior temperatures much more efficiently both when it is hot and cold. This decreases the cost to condition the massive space by conserving energy and therefore fossil fuels and carbon emissions. The roof is capable of absorbing 4 million gallons of rainwater a year and then slowly release into a wetland created on site. This saved Ford 5 million dollars since they did not need to build a storm water system (Litt). So, now the building takes precipitation, keeps it completely clean, returns it to a wetland (which is now home to Mallard Ducks), and saves millions of dollars. Even more, according to Steven Litt in an article for Architecture, within days of completion Killdeer were nesting in the Sedum. Now, to compile the effectiveness of the roof: It is beautiful, as only a prairie can be in bloom, it turns CO₂ into O₂ using UV radiation as an asset rather than a liability (like its

alternative - plus no harmful chemicals that stem from the poly production process), it regulates interior temperature, it safely absorbs and returns water to the environment, saves the company millions of dollars, and provides a niche for animals like the Killdeer to fill. A very nearly perfect solution, and one that is certainly *effective*.

The actual execution of a plan based in a diversity of goals is expected to pay great dividends for the Ford Motor Company. So, as naysayers might mention, how is this not simply a stunt to make Ford appear environmentally caring to the public, and therefore increase truck sales? First, I would say what is wrong with increasing sales? But, the real difference to me is that this was not a band-aid to a broken system in order to turn a profit. This new factory was designed with the intention of a complete integration of economic goals *and* ecologic goals. Since the attitude from the get-go was one pointed towards a multi-faceted, sustainably effective goal we find a project that can make money, sustain an ecology, lessen fuel consumption, increase environmental awareness, and provide a work environment that increases employee efficiency. This attitude was largely brought to this project by Bill Ford, the chairman and chief executive of Ford. "If the Rouge is only an interesting showpiece, it will have failed," (qtd. in Associated Press) he expressed in an interview. We can see how the right intention set within the right framework can produce truly effective developments.

Another example, related to workers rights discussed early, also happens to be based in the auto industry. In the recent financial crisis, the companies that fared better were the ones that had established an intention that was more broad than capital acquisition, at least when it came to their employees. The Toyota company has a proud history of being considerate of their employees. Making the care of their employees a

part of their overall intentions (by providing comfortable work environments and security in hard times) unions have not been required to form in opposition to unfair strategies. Since there are no unions, they have been able to operate much more flexibly with how they spend their money while keeping their employees satisfied (again, this is not a jab at unions but a showcase of how broad considerations eliminate the inherent damage of linear considerations). Since there is not a system of bargaining and compromising between two entities (because there is an honest consideration of the whole) the compromising of principles is not necessary. Instead of striving for an end goal of inherent with mediocrity, the company through a diversity of intentions is striving for the best possible outcome for everyone as a whole. A solution meant for effectiveness.

The Toyota company, thanks to its added flexibility while still maintaining employee satisfaction, is not staring bankruptcy down. In fact, despite assembly lines shutting down through the U.S. they have not laid off a single employee (part of their consideration). They have put their employees to work in the classroom, learning how to be more efficient when the assembly lines start up again. According to an article in Workforce Management, “they will relearn how to pick up screws. They will study safety practices. They will take classes on workplace diversity and ethics, study corporate history, clean up the mess of urban vandals and probably even plant flowers” (Chappell). Obviously, this is a risky endeavor because keeping employees on the payroll without producing things to sell will not last forever, but because of its diverse intention it has already proven to be more successful than their counterparts based in universal strategies. Again, like the Ford plant upgrade, this is not being done for a shallow look-how-good-we-are motivation. There is something to gain from this. “We’re not just keeping people

on the payroll because we're nice. At the end of all this, our hope is that we'll end up with a more skilled North American workforce," says the general manager of Toyota's Team Member Development Center, Latondra Newton (qtd. in Chappell). Newton expresses how the goal of Toyota is not just to be kind to their employees - even though that is one of their goals - but, that their goal is to acquire capital by being kind to their employees. A very interesting take on capitalism which shows a lot of promise for future design, development, and production.

The unfortunate requirement of this strategy is that it is still dependent upon people doing the right thing. I am very optimistic regarding the good nature of mankind. Despite this optimism, I have a hard time denying that there are people that simply intend wrong. This is something that is out of my control and generally everyone else's. I feel that one can generally only make a difference by one's own actions, and this is the type of design and development that can carry those people with good and honest intentions past the inherently flawed system that has led us to so many problems.

The beauty of this type of design and production is that it works to maximize an intention that is rooted in a network of goals, not just one. By changing the scope of our intention from the de facto, linear scope, to a broad one - which includes the idea of acquiring capital, with love for all, for all of time - and by basing design decisions within that scope, there is a lot of hope that the problems established by yesterday's thinking will be solved by today's creativity and broad intentions. Albert Einstein famously states that "the world will not evolve past its current state of crisis by using the same thinking that created the situation." By moving past linear intentions we would be making, at the very least, a step in the right direction to leave behind and rehabilitate today's problems.

A SPECIFIC SOLUTION

The Liability Turned Asset

The success and effectiveness for this type of design is not a given nor is it easy to achieve. It requires an incredible amount of creativity and hard work - luckily, things that are inherent in capitalism. So, since capitalism seems to be a natural carrier for these two necessary elements, how can we start to make a sustainable and diverse intention that is effective in our incredibly multi-variant world.

In order to make diverse intentions successful, we need to develop a method that will allow it to be as effective economically as the inherently detrimental, single-tracked intention of the present paradigm. Here is where creativity enters again. One can look at a force that is causing harm and find a way to twist it in order to produce something that becomes an asset. We need to start taking detrimental forces - development in the Flathead - and change them to produce an opportunity that can *empower* landscape, ecology, culture, and economy instead of degrade.

Now, how do you do that?

This is really a new way of looking at problems much like the diversity of means is a new way of looking at design and production. In fact, these two shifts in perspective go along with each other very well. By twisting normally detrimental forces to a good cause it automatically takes a force that is producing something with an unwanted cost into some sort of a resource instead of a liability.

Take for example the problem of littering. Either for marketing, packaging, or as the product itself, eventually it will be of no value and will be thrown away -

unfortunately, many times right onto the ground. It is hard to pin down the exact force behind the desire to litter, but one thing is clear, that desire is strong. Despite the best effort of government imposed fines or public campaigns to reduce littering it continues to be a problem in many places. So what can one do? A very exciting and effective solution to this problem is becoming quite popular now. There are many companies now that make a paper that is completely biodegradable within weeks if the conditions are right. This makes the litter that someone threw onto the ground benign within weeks. However, many companies did not stop there. For example, Botanical Paper Works makes a paper that has flower seeds imbedded in it. Now, the litter is not just benign to the environment, it actually improves it when, a month later, flowers sprout from the Wendy's bag thrown in the ditch. Maybe, a technique for affixing nitrogen to the paper can be developed, making the litter turn into fertilizer and plant. An absolutely beautiful solution which not only effectively mitigates the problem of littering, but actually makes littering a good thing! Go ahead, throw that on the ground, it's good for it.

Also, the renovation of Ford's Rouge River assembly plant can be seen in this light (though I think this is more accidental - it is effective all the same). The simple fact of changing the roof membrane from some sort of poly, to a living organism that feeds on sunlight is doing the same thing. One of the largest liabilities for roofing is the sun. The UV rays quite literally eat up anything short of slate shingles that are put on the roof. The sun can therefore be viewed as a destructive force on a roof. By putting plants on the roof, it changes that destructive liability into an asset that converts CO₂ to O₂, provides habitat, mediates water runoff, and so on. With these precedents in mind it is very easy to see how a change in design can flip a destructive force into a productive force.

Something that needs to be noted: within the twisting of forces and diverse intentions we still need to respect the diversity of a place because a universal system of diversity is not really diversity at this level of production. So, distributing seed paper of a new species to a new ecosystem would be detrimental, so would introducing more nitrogen to regions experiencing the greening of lakes and rivers. The Rouge River Plant's Sedum roof would not be very effective in the Sonora Desert. The denial of universal means needs to be top to bottom. Even the means produced by this new paradigm of thinking need to be diverse and specific to localities. It is sort of like the old saying, "everything in moderation. Including moderation." Everything diverse, including diversity.

The Definition of Networks

In order to effectively judge a force's influence on a locality, entity, or system, we need to have the ability to define those forces and their relationships. A very interesting and recently compiled social theory is very relevant to this task; it is the assemblage theory.

This theory has its roots in many of Guille Deleuze's writings even though he never put his ideas together into a cohesive theory (Link 2-23). Luckily, there have been a few philosophers, particularly Manuel DeLanda, that have picked up Deleuzian social ontology and have turned it into a theory to describe entities, relationships, and forces within the framework of society.

Despite this being a very thorough and complex social theory, its essence is actually quite easy to understand and use practically. In understanding assemblage

theory it is easier to grasp when compared to its counterpart of Realism. Realism describes individuals as agents (an acting thing) within a structure of relationships. DeLanda describes a “seamless structure” of relationships needs to be formed in order to describe an entity within Realism. Assemblage theory, on the contrary, describes agents as entities with *capacities* to interact with other entities. The difference in these two ideas is fundamentally how they view relationships. Realism describes individuals by their relationships therefore making an agent’s relationships internal to that individual (or a defining part of that individual). Whereas, assemblage theory describes entities as having capacities to perform certain things, therefore making any relationship between entities external (meaning entities exist independently but interact through certain capacities). This means that within assemblage theory, society is viewed as an assemblage of many entities that have capacities of doing things, some capacities filled others not. This is a great way to look at any sort of multi-variant system because this definition of entities works on all scales with any assemblage of entities without preconceptions of relationships.

Within assemblage theory, entities fulfill capacities through two means. DeLanda describes these means as territorializing or deterritorializing (12). These definitions do not necessarily mean good or bad. A territorializing capacity works to strengthen the stability of an assemblage. Whereas, a deterritorializing capacity destabilizes an assemblage. Let’s take the Flathead Valley, and its physical problems as an example. The valley has existed as an assemblage quite successfully through the years. However, as new entities are added to the assemblage (developments) they start to take up capacities that deterritorialize the valley by consuming open space, ecology, and culture.

In this model of the Flathead's society, you can pick out shared capacities between entities that are causing a destabilization of the valley as a whole. This means that you can start to eliminate deterritorializing capacities of development and start to integrate territorializing capacities by designing with diverse and multi-variant intentions, therefore stabilizing the culture, open space, ecology, and economy of the valley into the future.

Within a complex assemblage, focusing on linear intentions and misused forces will lead to a tragic end (or, at best, a mediocre one). An end like the one taking shape in the Flathead. The deterritorialization of the beautiful Flathead is attributable to development. It is necessary to take the deterritorializing force of development in the Flathead and turn it into a force that accomplishes a multitude of territorializing tasks. Tasks that become deterritorializing, but in a good way, making the valley *more* beautiful, *more* economically sustainable, *more* ecologically diverse and natural, and *more* culturally local. No more efficient solutions or ineffective results, now it is time for developments that advance the beautiful attributes of the Flathead.

At this point it seems very appropriate to call on McDonough's thoughts one more time. In a lecture, he describes a design problem that is probably impossible to achieve but absolutely necessary to strive for:

Imagine this design assignment: design something that makes oxygen, sequesters carbon, affixes nitrogen, distills water, accrues solar energy as fuel, makes complex sugars and food, creates micro climates, changes colors with the seasons, and self replicates("The Wisdom").

Of course, he is describing the task of designing the functionality of a tree. An assemblage of entities that, within their functioning capacities, takes a force, that is essentially the most powerful and potentially the most damaging force in the solar

system, and works towards a multitude of end goals with equal vigor in order to sustain and improve a system that is much larger than itself in an elegant and beautiful way.

Now, what if we built developments like *that*. Imagine the force of capital acquisition as the “sun”, with potential to be helpful or harmful. (Interestingly, a frequent comparison to the result of development is cancer. At a broader sense, things come with labels saying that “Within the State of California this is known to cause cancer...”, just like the sun). And imagine an individual development as a “tree”, capitalizing on the benefits and mitigating the detriments (meeting complex demands to territorialize an assemblage). If the power of capitalism could be harnessed and put to work by a new type of development, then development would no longer be viewed as the spread of malignant blight, but as the beautiful growth of a forest.

In an exploration of human thought, Martin Heidegger refers to the German word to build - *bauen* - with an interesting connotation. Through a rabbit hole of German etymology, Heidegger expresses a relationship between building, dwelling, and cultivating; the idea of building, not just as construction of an edifice, but as the cultivation of dwelling. By building (or cultivating) each “tree” which is now inherent with multiple goals and redirected forces, we will see a much more beautiful and sustainable Flathead, well into the future. It is necessary to quit looking at production and development as inherently detrimental and to start finding ways, through existing forces and diverse intentions to cultivate this tree from an entity that does overall damage, to one that empowers the beautiful essence of the Flathead Valley. In other words, initiate the cultivation of a new “forest” in the Flathead Valley.

A VERY SPECIFIC SOLUTION: ONE STRAND IN THE WEB OF SUSTAINABILITY

The Design Intention for the Flathead

Now, for the really hard part. It is easy to find errors and deficiencies in developments and products once completed. The difficult task is moving past those examples to produce products and developments that, through the fundamentals and intentions described, create a solution that is truly effective and sustainable. This type of development begs different and very refreshing types of questions. How can the degradation of the Flathead's values be addressed through development? How can developments in the Flathead become assets rather than liabilities?

The values of residents and visitors must be quantified and made into an intention. Ralph Johnson writes that "Rural communities must, through a local participatory process that builds consensus, determine their vision of the future landscape [...]" (19). Essentially, in order to keep a rural area feeling rural, it is necessary to know what the people of that area desire. Residents and visitors are people that appreciate the assets of the region and are therefore natural stewards of that region. Residents, because they live there. Visitors, because the assets have drawn them there. According to Dr. Swanson's report on the Flathead, it is the landscape, wildlife, recreational opportunities, and small-town charm that are so highly valued by residents and visitors of the area (17). This is a great insight into what makes this region desirable.

Diversity of housing is essential, particularly to fringe developments. By providing housing for the young, the old, the single, the family, the blue-collar, and the

white-collar, you establish a much more sustainable development (through diversity and redundancy), a more rich and interesting culture, and a very safe development because of more and varying “eyes on the street” (Johnson 15). Diversity - within housing - is therefore a very important intention for the Flathead’s development as it not only preserves but empowers the culture of the area.

Creating an effective solution for environmental problems is completely necessary for the Flathead Valley. With so much riding on the natural appearance of the valley, it is important to not just protect this aspect but, perhaps add to it. Therefore, the intentions of design and development need to consider the environment in a way that will promote it, not just damage it less.

Open space is an attribute that is crucial to the Flathead’s beautiful landscape. Open space is a problem that seems impossible. How can you develop anything without filling in open space? Through very careful design I think that it is possible to create large developments that not only protect open space, but empower it. Maybe bring a new understanding of what open space even is.

Recreation opportunity in the Flathead Valley is probably the glue that holds all of these attributes together in making the area so desirable. It is an absolute must to respect natural resources and the public’s access to them. However, just like open space, recreation within private development hardly seems possible. Also like open space, through very smart design the Flathead could redefine what recreational opportunity even is.

Finally, making money still needs to be a part of the intention network. As the currency of capitalism, money is absolutely necessary to motivate creativity, honesty,

productivity, and most importantly, effectiveness. The potential for making money, luckily, in the Flathead will increase if all of the other considerations just listed are held as equal.

In order to avoid the inherent and unfortunate efficiency of policy making, I would like to look at this problem through the eyes of a developer. How can I take this site and make capital within this new framework of intention. Interestingly, in the Flathead, capital (when defined as assets available for the production of more assets (“Capital”)) is the landscape, the ecology, and the culture since its service economy is based in this capital. So, by pursuing this multi-variant capital acquisition (instead of capital solely as money), within the context of the Flathead Valley, you are actually pursuing the network of values and goals of residents and visitors through the means of what was once detrimental development. This is the beginning of a sustainable valley, one development at a time.

The Making of a Stand

In order to create developments that will act to territorialize the beauty of the Flathead, there must be a site to develop specific intentions (based on specific requirements, forces, resource cycles, ecosystems, et cetera) that will plug into the valley. In order to create an effective, sustainable Flathead Valley, it is necessary to create intentions specific to every entity (therefore specific site conditions) for how to develop the overall assemblage.

The town fringe condition is becoming a troublesome area. This zone of the valley has been incredibly compromised through recent development. This region is one

that should be handled very carefully as it is the transition between a very beautiful landscape and very nice townscape. Recently, it has been developed as a quasi-industrial/light commercial zone with a little residential mixed in. This creates a mushy, ineffective, unappealing transition. This zone contains potential, if developed correctly, to allow for continued economic success and the preservation of the Flathead Valley's key attributes (which are, again, interconnected. Also, this area can potentially shore up the boundary of urban space and encourage the urban centers of the valley to increase density, therefore allowing more people to live in the valley without filling in open space. Since this is the welcome mat of the city coming from the landscape (or the landscape coming from the city) it needs to be dealt with very responsibly.

The “fringe” condition presents the most potential for quickly righting the development in the Flathead Valley. According to architect and planner Ralph Johnson, the most growth in the Rocky Mountain region, both by acreage and population, has been in this transition zone between rural and urban (83). Effective design and planning towards a sustainable Flathead will be most beneficial, right now, in the fringe condition.

The Site

The perfect site to make a stand against the creep of Kalispell's sprawl is one located on Ashley Creek and Highway 93 roughly three miles South of Kalispell. Set behind grain silos, composed of mostly hay fields, bordering Ashley Creek, with highway frontage, and bisected by old railroad grade, this site holds so much potential to interact with entities of the Flathead Valley. Normally, developing a site like this would mean certain doom for its open space, wildlife, and water quality, but with a new set of

intentions forming the right design parameters, there is a new potential to make this site better through development.

The Making of Intentions into Parameters

To design a development that is truly effective in protecting and enhancing important values of the Flathead Valley, a set of design parameters needs to be established. These parameters will serve as a framework to design within. The list of parameters will be derived from my design intention and will work towards creating a development that works with the various resource cycles of the area in order to territorialize the beautiful Flathead.

The parameters for effective development need to be developed by the analysis of many variables at many scales. By looking at how, for example, wildlife habitat works in the valley as a whole, then how the site works into that assemblage as a whole, and then how an individual building works into the site's assemblage as a whole. (Delanda describes these relationships within assemblage theory as coded and uncoded). By analyzing the relationship of individual entities within the change of scale, and not just across a singular scale, a development can become actually effective in *improving* the Flathead Valley.

Since effective parameters have already been created for many aspects of development and building - energy use, safety, et cetera - I am going to focus on the parts of my intention which are going to promote the attributes of the Flathead Valley. The parameters of this new development will work to increase the value of wildlife, open space/landscape, recreational opportunities, and small town charm.

Wildlife

The ecosystem of this site needs to be very carefully considered in the design process. Since wildlife, as I have already pointed out, is one of the cornerstones of the Flathead's service economy a healthy habitat needs to be maintained by development.

This development in particular contains a very interesting riparian ecosystem. The site supports a very diverse group of animals. According to Montana Fish, Wildlife, and Parks, Ashley Creek contains many species of fish including popular game fish such as Brook Trout, Rainbow Trout, and Northern Pike. And, a study conducted for the EPA expresses the fact that the Flathead River drainage riparian zones are incredibly diverse terrestrial animal ranges. The report points towards the fact that the diverse habitats of the area provide for these creatures (Wright et. al 48-50). Since this site is a diverse riparian region, the opportunity to protect wildlife in the Flathead needs to be factor in this development.

To go beyond simply protecting this ecosystem, is there a way to in fact improve it within this network of goals? By choosing certain species to highlight, this development can improve ecology as well as create more recreation and draw more clientele. By managing certain habitats, for example deer, osprey, and rainbow trout, not only are these native species (minus rainbow trout) encouraged to thrive, but they also provide more recreation opportunity (fishing) and encourage more people to come watch wildlife (clientele). As long as this development does not stomp out other less "desirable" species, spotlighting these three crowd pleasing species would be a great

method for weaving the Flathead Valley's values together into one diverse development goal.

Open Space and Landscape

There is little need to explain this issue. Simply, buildings take up open space and that space is a rapidly dissolving, yet very important part of the Flathead Valley's character. There is another side to this issue regarding usage. If there is no access to the open space there is little need to have it. While untouched and unspoiled land is fantastic what good is it without being able to enjoy it. (Remember the Flathead used to be a giant untouched forest. It would not be nearly as fun or popular if it was still like that.)

In regard to open space and landscape, this development will first focus on decreasing its footprint and, perhaps, where a footprint is required, find a way to mitigate its effects. I have already mentioned the River Rogue Ford factory and what their solution to a large footprint was. It is easy to imagine a strategy along those lines creating a development that empowers open space, as well as wildlife (grazing), recreation (park space), and small town charm (agriculture). The largest effect that a development like this can have on open space is its ability to dam up the sprawl of Kalispell while allowing this area to continue flourishing in all of these aspects.

Secondly, this development will take the protected open space and multiply its value by creating recreational opportunities and access to this very important resource of the Flathead Valley. So, instead of simply leaving the farm as it is, this development will encourage people to go to that farm and truly take in the landscape with wildlife,

recreation, and the town charm. By considering a network of ends, open space can work hand in hand with other attributes in order to develop a better Flathead.

Recreation

Recreation in the Flathead is a big deal. Residents and visitors alike enjoy recreating in the outdoors of the Flathead and it is hard to imagine a Flathead Valley without abundant recreational opportunities. Swanson's report shows that from 1990 to 2000 the amusement and recreational services industry has increased by nearly 100 percent and makes up one of the fastest growing sectors of the valley. Also, Montanans hunt six times more than the national average and fish at a rate of three times the national average (12, 16). In order for a development to successfully enhance the Flathead, recreation must be a large consideration.

This development will set a new tone for the Flathead by incorporating public access to Ashley Creek, a bike path into Kalispell, and a park for the enjoyment of everyone. This move alone connects so much of the valley in a positive way with this site. It gives residents and visitors a place to enjoy the landscape, wildlife, and small town charm in a place that empowers those things. Exactly what the Flathead has done for hundreds of years.

Montana Town Character

The Montana town character is the hardest to quantify and to design for. The attributes that this development are already striving for are certainly important components of the Montana feel. However, there are many places in the world that have the same attributes and there is still something about this area that sets it apart. That extra

thing, or things, are the people of the area. After staying and chatting with Jim Harrison in Livingston, Montana (an area that feels very much like the Flathead) TV host, chef, and writer Anthony Bourdain explains his take on what makes this place special: “[...] you’re just as likely to see a cowboy foraging for fresh morels as an ex-hippie in a pick-up with a gun rack.” It is this mixture of people that makes the Flathead so interesting.

What is more interesting, as this last piece falls into place, is how all of the attributes that make the Flathead so desirable come from the values of the people that live there. So, by protecting or enhancing the ideas and values of the people in the Flathead you are protecting and enhancing the people of the area and therefore the last of the most important attributes of the Flathead Valley.

It is possible to empower this attribute within the design of this development. There are many ways to encourage the diversity and laid back lifestyle of the area from the down home to the city slicker. Providing services for farmers, wildlife viewing, protecting open space, or encouraging recreation allows for this interesting group of people to slow down and connect with each other no matter what brought them to the valley (especially since it is likely the same thing).

The Proposal

I am proposing a fringe development that will create an assemblage of entities which will territorialize each other as well as the entire assemblage of the Flathead. The development will include mixed income housing and light industrial/commercial space, all built with “empowerment” space (regarding the valley’s key attributes). These three pieces will provide services for each other internally as well as create assets for the

valley's overall culture, landscape, and ecology. By tapping into the right forces, this development - conceptualized in a new framework of intention - will establish one strand in the web of effective sustainability in the Flathead Valley.

By moving wildlife, open space, recreation, and the Montana town charm to an equal importance with making money all of these things will benefit locally as well as regionally (since all of these things are very largely related in the Flathead). Basically, since wildlife needs open space, recreation in the valley is done largely in open space and with wildlife, since the Montana town charm comes from all of these things as well as the unique people that value these attributes, and since these people bring their money to spend in the valley, this new framework of intention becomes very sustainable in every sense of the word.

These intentions and this site are great places to develop businesses and housing that can provide a barrier for further mushy development of the fringe zone. Being a hub of so many physical things (Ashley Creek, railroad grade, highway 93) it is the perfect springboard for service based business. This centralized site is also very convenient for commuting workers of Kalispell, Whitefish, Bigfork, or Columbia Falls.

By creating a housing development and commercial space - connected to each other in concept, intentions, transportation, and site conditions - a sustainable entity will emerge with all of the potential to plug into the rest of the valley and start to right the ship before certain doom.

This project will bring forsaken issues to the fore-front in the Flathead Valley and pursue them, not just to mitigate problems, but to empower desirable attributes. Founded in a complex web of intentions pointed towards sustainability in every realm, motivated

by typically detrimental (but powerful forces), this development will fill a very important and highly visible site with an entity that will take up a mutual role in the resource cycles of the valley. Then, one project at a time, the valley can start to build beyond the magnificent glory of its past and into an even brighter future.

Specific Program Spaces:

20,000 square feet of business and retail space

100,000 square feet of mixed residential types (approx. 100 dwellings).

fishing access

animal habitats

park space

bike path

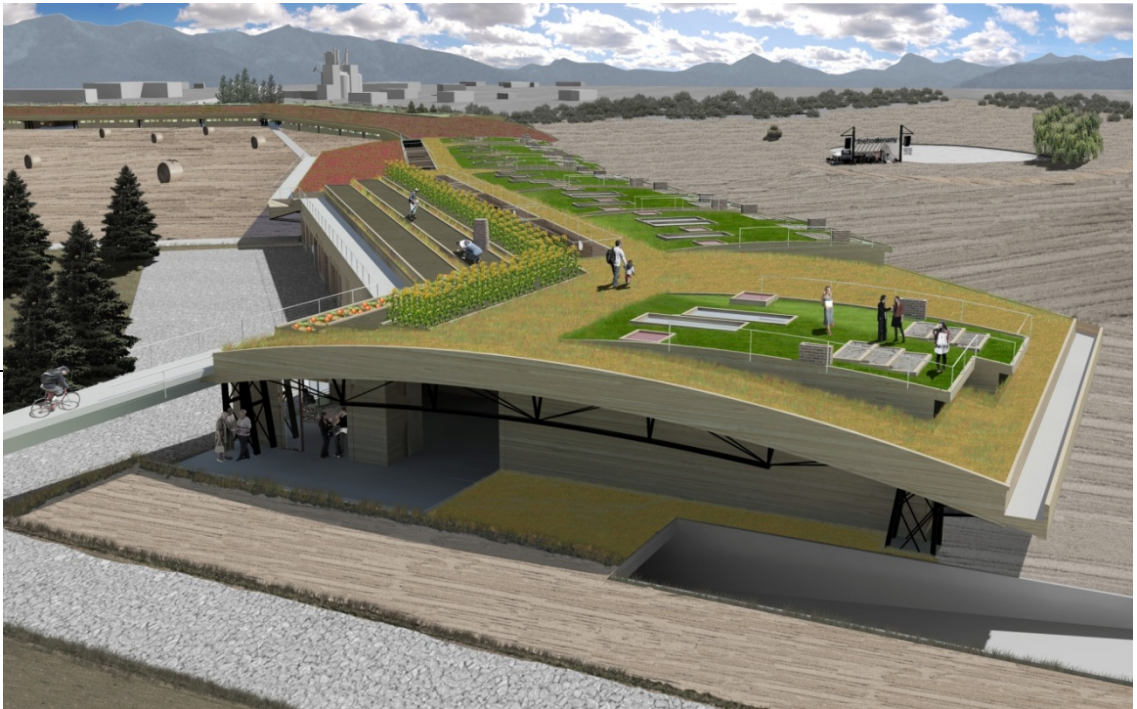
swimmin' hole

working farms

Building Strategies

There are many important considerations that work very well with the previously outlined design intention. By minimizing the footprint, maximizing the roof space potential, designing to embrace natural cycles, allowing wildlife corridors, mixing many types of people, and by creating spaces that can have many functions (particularly when associated with natural cycles) a building, a development, a city, or an entire region can become truly sustainable. These, and many more strategies are just stepping stones on the path to completely effective design, but design and development are iterative processes.

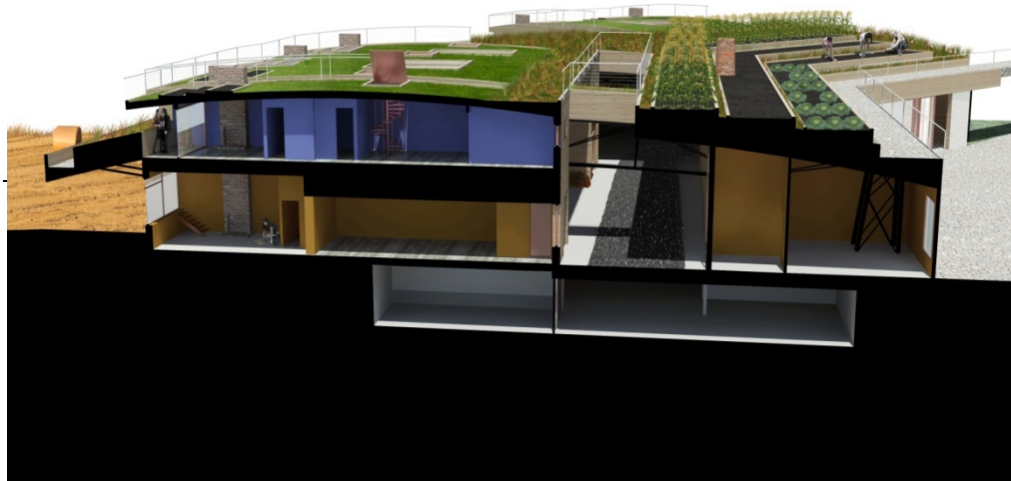
A View From The North



Winter and Summer Comparison



Section



Interior Spaces



Code Analysis304.1 - Business Group B.

Business Group B occupancy includes, among others, the use of a building or structure, or a portion thereof, for office, professional or service-type transactions, including storage of records and accounts. Business occupancies shall include, but not be limited to, the following:

310.1 - Residential Group R.

Residential Group R includes, among others, the use of a building or structure, or a portion thereof, for sleeping purposes when not classified as an Institutional Group I or when not regulated by the International Residential Code in accordance with Section 101.2.

This project will be considered R-2 since R-2 Residential occupancies [are occupancies] containing sleeping units or more than two dwelling units where the occupants are primarily permanent in nature.

Section 419 - Group I-1, R-1, R-2, R-3

419.1 General: Occupancies in Groups I-1, R- 1, R-2 and R-3 shall comply with the provisions of this section and other applicable provisions of this code.

419.2 Separation walls: Walls separating dwelling units in the same building and walls separating sleeping units in the same building shall comply with Section 708.

419.3 Horizontal separation: Floor/ceiling assemblies separating dwelling units in the same buildings and floor/ceiling assemblies separating sleeping units in the same building shall be constructed in accordance with Section 711.

Table 503 - Allowable Height and Building Areas

Type I A construction - Building group B and R-2, can have unlimited height and area square footage.

Type II A construction - Building group B can have 5 stories and an area of 37,500 square feet. Building group R-2 can have 4 stories and 24,000 square feet

Table 1004.1.1 - Maximum Floor Area Allowances per Occupant

Business - 100 square feet per occupant per gross square foot

Residential - 200 square feet per occupant per gross square foot

Residential occupant load - 100 people

Business occupant load - 200 people

Total occupant load - 300 people

Table 1005.1 - Egress Width per Occupant Served

Business and residential occupancies, with sprinkler systems, are required to have .2 inches of exit stairs per occupant and .15 inches of exit corridor per occupant.

Project requirements:

60 inches of exit stair

45 inches of exit corridor

Accessibility

This building will comply with the requirements of the ADA.

A CONCLUSION

Looking back on this processes there are many specific conclusions that I can draw from this project's design and development. Many ideas that worked and many that did not. But there is one idea that has stayed constant through this entire process that I feel provides hope and substantiation for the fundamental solution that I have proposed.

Since I set a *network* of intentions that are founded in the ideas and character of a particular place before I started designing, it is easy to imagine this developments many successes at many scales in the Flathead valley. The fact that this development's success is apparent at the individual scale, at the community scale, and the regional scale is cause for me to believe that diverse goals set in a network of means will begin to establish a sustainable Flathead. Looking beyond the Flathead, the beauty of designing with this diverse intention is that developments, anywhere, will start to be a completely integrated part of that region's fabric. Someday, after many iterations I completely expect and hope for developments that empower a region's identity from the plan of each individual unit, to the master plan of the development, to the networks that it engages locally and regionally. Perhaps this is a new paradigm in design that can pave the way for a diverse and a truly and effectively sustainable society.

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