Positive Sum Design and the Economics of Sharing

Ian Gonsher
Brown University, ian_gonsher@brown.edu

Follow this and additional works at: https://digitalcommons.risd.edu/critical_futures_symposium_articles

Part of the Art and Design Commons, Art Education Commons, Curriculum and Social Inquiry Commons, Engineering Commons, and the Esthetics Commons
Imagine a restaurant where the staff create meals that are works of art; where the dining experience is a product of the satisfactions of their labor, and the food is crafted and served with care, empathy, and joy.

The patrons take similar satisfaction in the experience. The food nourishes their bodies as they nourish each other’s spirits in the easy flow of dinner conversation. They consume the meal with gratitude.

Consider the design of the restaurant. Consider the ways it establishes affordances for this kind of experience, for the
behaviors and interactions of the staff and the patrons, for the goods and services that are produced, exchanged, and consumed. The design shapes these experiences by establishing the conditions for everyone to play a positive sum game.

Although positive sum games can be either collaborative or competitive, positive sum games always produce positive aggregate value for all the players. A zero sum game, by comparison, is strictly competitive. The wins and loses are inversely proportional. A gain for one produces a loss for another.

The design question, as well as the ethical question, is what kind of game should be played in a given context. Design processes are a series of choices. Design offers us a choice about the kinds of games that can be played; about the way the stakes are framed and negotiated between players; about the way the rules organize affordances for those behaviors, and who and what are excluded.

Design sets the conditions of possibility by establishing affordances and constraints. Our ethics are grounded in how we orient ourselves towards the mutability of constraints. Positive Sum Design (which is closely related to Positive Sum Activism) is human centered and places a high value on attempts to better understand the motivations of all stakeholders in order to produce positive sum outcomes for everyone. Positive Sum Design includes creative strategies by which agents are empowered to transcend constraints and create value that is not strictly competitive.

Positive sum design, in its most simple formulation, is a design strategy that proceeds from the notion that the best solutions to complex problems are rarely to be found in zero sum games, even though this is often, too often perhaps, the default strategy. Zero sum strategies are limited in their efficacy because they:

1) operate within a strict logic of scarcity, often taking as a precondition assumptions about the given constraints, without
creatively challenging those assumptions. They tend to produce rival and excludable outcomes. As a result, the game plays out competitively within these constraints, and obfuscates opportunities to transcend these constraints in favor of shared abundance.

2) operate within the logic of the excluded Other, which is to say, that the value that is created is dependent on the exclusion of others to produce that value in part or in whole (see the problem of the Other who others another Other).

Now let’s imagine that this particular restaurant is famous for its chocolate truffle cake. But it’s late in the evening, just prior to closing, and there are two parties left in the restaurant who are finishing their meals. They are about to order dessert only to discover that there is just one chocolate truffle cake left. The first impulse might be to divide and distribute the cake equally between both parties. Fair enough. But this strategy assumes that everyone wants chocolate truffle cake equally, when in practice, there will be some who want cake more and some who want it less. There will be those who have enjoyed a full meal and prefer no cake at all. There may be others still who might prefer another option — an unconsidered possibility — such as a healthier piece of fruit or an invigorating cup of espresso.

The outcome of the first strategy, of distributing the cake equally between all the diners, arises from the noble impulse to accommodate everyone equally without excluding anyone. However, this type of strategy also constrains the stakes by assuming that the most chocolate truffle cake for all patrons produces the best outcome, regardless of what the players in the game actually want or need. There is an expectation that a decrease in supply should produce an increase in demand; there is a tendency to want what we do not have without seriously considering why we want what we want. But rarity alone does not produce authentic desirability. When the measurement of value is
limited to a single metric, when the problem is constrained too rigidly, to only chocolate truffle cake let’s say, we fix ourselves within the logic of scarcity and become blind to the opportunity costs associated with failing to discover other ways of satisfying needs. When trying to share things like cake, we usually default to this kind of zero sum strategy.

In his book, “Nonzero”, Robert Wright proposes that human progress arcs towards ‘non-zero sumness’. Our ability to communicate, empathize, and collaborate add value to a given situation by virtue of creatively working through problems together. This idea is commonly illustrated by the Prisoner’s Dilemma, which he describes in the following way:

“Two partners in crime are being separately interrogated. Each will be better off if neither rats on the other than if both do. But, through cooperation is in their mutual interest, there are two great barriers to it. One is a lack of communication; you can’t agree on a join
strategy if there’s a wall between you and your accomplice. And if you overcome this barrier, you face a second one—lack of trust; if you think your accomplice is going to renege on the deal, and rat on you after all, then you’re better off coping a plea and ratting on him. Somehow, this fear of being cheated must be overcome for things to work out well. “ (Wright, 99)

Design strategies such as Human Centered Design and Design Thinking place a high value on engaging stakeholders in order to elicit empathy and better understand the motivations of all stakeholders. Communication among all the stakeholders, even and especially adversarial stakeholders, can change the dynamic, and allow for coordinated behavior. It is always wise to listen closely to an adversary. By better understanding their motivations you may be able to find ways you can collaborate and play a positive sum game; you may discover unexpected insights in their position, but failing that, you are also better positioned to win should you need to play a zero sum game.

By asking who wants chocolate truffle cake and drawing on the combined creative capacity of all stakeholders, space is cleared for other unconsidered possibilities. This kind of coordinated collaboration produces positive externalities by incentivizing conditions for a creative culture. It gives others permission to engage in creative conversations and establishes conditions where there is a greater probability of changing a zero sum into a positive sum. It’s not just getting the biggest piece alone that produces value, but the social capital produced through creative collaboration, and the bonds that are formed by playing the game together that, in part, produce a positive sum outcome.

It is also important to point out that the increased value produced by positive sum strategies may not produce an equal increase in value for all players. Some players may benefit without negatively impacting others. This is called a Pareto Improvement. When a
threshold has been reached where the increased value for some decreases the value for others, the system can be said to be Pareto Efficient. At this point, the allocations of resources tend to shift to a zero sum game.

Consider the way the design of the restaurant creates affordances for these kinds of behaviors and the value and meaning they produce. Our material culture and the built environment set the stage for these behaviors, and these affordances are usually hiding in plain sight. For example, most restaurants are populated with chairs that tend to be of an equal height and of a similar, human scale, affording the opportunity for making eye contact and engaging in intimate conversation. Imagine the absurd and
somewhat humorous shift in the relationships between diners at a table if the chairs were at different heights, with some closer to the floor, and others closer to the ceiling. These affordances set up a very different kind of conversation, and they do so because of the design decisions that are made.

Consider the design of the table and the way it sets the stage for the meal. Consider the layout of the table; of the utensils and the plates, of the salt and the pepper shakers, of the glasses of water each adjacent to a folded napkin that is to be put on your lap when you arrive. These things are put there with intention. Consider how these things and all the other accouterments of the meal create affordances for zero sum or non-zero sum behaviors. Consider the way they are used and consumed, some as rival goods, others as non-rival, and most as somewhere in between.

A rival good is a good whose consumption by one prevents consumption by another. The food that is served at the meal is an example of a rival good, because only one person consumes what is on the plate in front of them. The menus and the tablecloths are closer to the non-rival end of the spectrum because the use by one person does not prevent another from using it as well. The design question to consider is where on that spectrum - between rival and non-rival - the needs and desires of stakeholders are best served.

Anyone at the table may use the pepper and salt, but most people will insist on their own forks, spoons, and knives (just as most people will insist on their own toothbrush and underwear). The design decision to consider, which is fundamental to understanding an economics of sharing, is determining what kinds of things should be designed with affordances for rivalry and what kinds of things should be designed with affordances for non-rivalry. This balance, and the balance between excludability and accessibility, are fundamental considerations for Positive Sum Design.

If it is possible to prevent access to those who do not pay for a
good or service, then that good or service can be said to be *excludable*. On the other end of the spectrum, a good or service that is accessible to anyone is *non-excludable*. A table at an exclusive restaurant is excludable by definition. The redolence of sweet things that waft from the kitchen to the street outside are non-excludable. A design that is both non-rival and non-exclusive is considered a public good.

The problem that is often raised with regard to non-excludability is the so-called “*tragedy of the commons*” in which “free loaders” consume more than they contribute. It may be a problem that is less of a problem than one might first imagine. Steven Weber proposes the neologism “anti-rival” to describe situations where value does not diminish, but rather increases, as more people engage in a non-excludable project, even if the contributions are not equal and most are de minimis. He deploys this term in an attempt to describe the magic of open source where, “the system as a whole positively benefits from ‘free rides’. Some (small) percentage of these free riders will provide something of value to the joint product – even if it is just reporting a bug out of frustration, requesting a new feature, or complaining about a function that could be better implemented”. (Weber, 154)

We are now able to aggregate value and create affordances for anti-rival, non-excludable, positive sum behaviors in ways not possible before. A social network with one person is worthless. A project that emerges from a single perspective is impoverished. Good design can create affordances for new ways of producing and exchanging value and meaning.

Design constructs our experience and organizes our relationships to each other in subtle and conspicuous ways. It shapes the manner in which we choose to collaborate and share, or choose not to. It creates affordances inclusion or exclusion. It frames the way we give value and meaning to the world around us. Not all games are
positive sum, but they are probably far more common than we might expect. The design question to consider is how to create affordances for win/wins. We may come to discover that we can have our cake and eat it too.


photo by Artizone/CC BY