

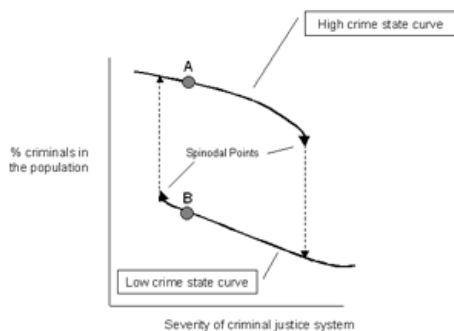
## Why some can do no wrong, yet others have to pray for the spinodal point

You may have noticed that your 'gas' lighter actually contains liquid - until you open the nozzle and it escapes as a gas. The reason for the difference is pressure. The unusual behaviour of liquids and gases (fluids) at molecular level provides some interesting lessons for marketers, where consumers behave in eerie similarity to fluid under pressure.

 By Sid Peimer 20 Sep 2005

Although we may argue that a gas is devoid of personality, whether it becomes a liquid at a certain pressure depends very much on what it has been doing up to that point, as well as the influence of its neighbours. Very much like consumers.

Philip Ball, in his book *Critical Mass*, illustrates an extension of this with a model of society in two states: high or low crime. The pressure comes from the severity of punishment. So, for two countries having exactly the same degree of pressure (punishment), they can still exist in different states of criminality. However, we cannot just jump from a high crime to low crime at any point - we have to wait till we are at the end of the line (or near it), and we jump to the other state. This end point where we see the sudden change in state is the spinodal point.



*How to read this graph: Start anywhere on the curve, and just follow the arrows in a clockwise direction, reading your position on the x- and y-axes.*

*When you get to the spinodal points, you jump to another state.*

*At point A and B we have two different amounts of criminality (the y-axis) for the same amount of justice (x-axis). The difference depends on what curve you are 'on'.*

New York City jumped phases from a crime-ridden and dirty city in the 1980's to a proud and neighbourly place in the 90's. Although Mayor Rudolph Giuliani's 'zero-tolerance' policy received much of the credit, Malcolm Gladwell, author of the *Tipping Point*, attributes the sudden change to a number of factors: "All of the possible reasons why New York's crime rate dropped are changes that happened at the margin; they were incremental changes." It seemed as if the accumulation of pressure took the city to a point where it could take it no more - it snapped into a low-crime state.

Although this model finds application in other social phenomena (such as high/low marriage countries), we could substitute the high and low states with any undersired/desired set of attributes - even brand affinity, because the underlying agents/molecules are the same: people.

There are some examples where brands have jumped from uncool to cool overnight. The Adidas tracksuit being one example. However, for most of us, the battle is incremental, where we persevere on numerous fronts to change the state of our brand from unpopular to popular. Although the model described above explains why the same promotional strategy can have a different effect (depending on the state the consumer is in), there is an interesting phenomenon that happens at the individual molecule/consumer level that can facilitate a more rapid jump from one state to another: nucleation.

If we freeze water below zero degrees, and it does not turn into ice, it is considered metastable - i.e. it could become ice at any time. What causes it to begin freezing is that one tiny crystal of ice begins to form somewhere, which then rapidly spreads throughout the rest of the water turning it into ice.

In the same way I have seen previously dead commercial areas come alive when one trader decides to invest - the rest follow rapidly, changing the state of the neighbourhood from undesirable to desirable in a short period of time. The conditions existed - all that was required was a start from somewhere in the system - nucleation

The model also illustrates the importance of initial positioning. For instance, in a job setting we could be perceived as reliable or unreliable, our initial actions placing us on the relevant curve. So, if you're late on the first day, consider yourself on the unreliable curve. This means you will need to do many incremental things to get to the spinodal point, so that you can jump to a better state. So rather just show up early - it saves a lot of effort in the long run.

Reference: Philip Ball. *Critical Mass, How One Thing Leads to Another*. Arrow Books, 2005.

## ABOUT SID PEIMER

Sid Peimer can jump from zero to hero, depending on his fiancée's mood, and the size of the mess he made. However, you are always a hero on his website [www.stratplanning.com](http://www.stratplanning.com), where over 5 000 strategists from 20 countries subscribe to his free ezine.  
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