

## The Swinging Pendulum Theory v. The Action-Reaction Theory

### Abstract

#### A Critical Analysis of the Swinging Pendulum Theory Illustrating Tribal Government Relation

Federal Indian policy in the nineteenth thru the twentieth centuries is theorized to resemble a "Swinging Pendulum", moving back and forth through time from International Sovereign at first contact (1492) to Tribal Restoration in (1970). However, when challenged, the swinging pendulum, regardless of where it starts, never really gains the momentum necessary to swing to its full potential; instead it is caught in a state of intermitted inertia. This theory illustrates the tribal government relation from contact to the present, using the famous historical event, the sinking of the



Titanic, (which has been visualised in people's minds by the 1997 film by James Cameron) to give an instant recognition of the impact the federal government has had on tribal sovereignty.

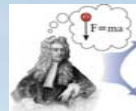
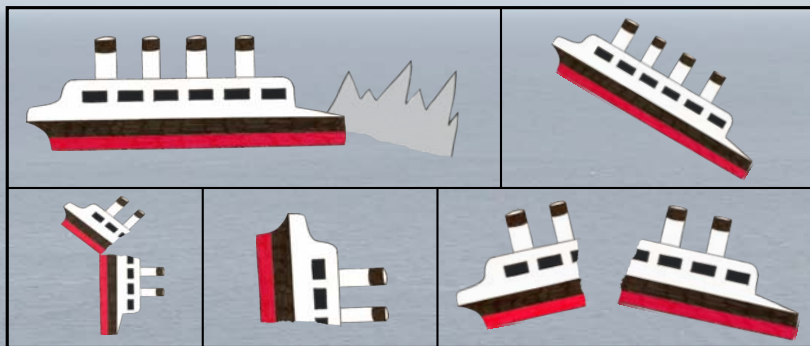
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### Oscillating Pendulum



### The Sinking Of The Titanic



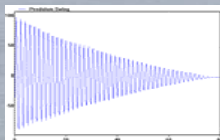
### The Action-Reaction Theory

This theory comes from Newton's Third Law that states for every action there is an equal reaction. This is representative of contact between Tribal and Federal government, which has

undergone an equal change, in its own motion, towards the contrary part. Our theory is that the Titanic, which stands for Tribal sovereignty, hits the iceberg (contact), which is the newly formed American government. As the Titanic sinks, each of the bulkheads (an Era) within the ship floods (Federal policies), tipping the Titanic until it breaks into two pieces. There is force and pressure as the ship is tipping and bobbing trying to find its equilibrium. Indian self-government is the reprise which keeps the Titanic bobbing up and down for a while, until it too sinks into the water. While at the bottom of the sea, the Titanic remains preserved and in pieces. The question is, has the Titanic (Tribal Government) reached equilibrium? Or should it be raised, risking the dangers of erosion from the environment outside of the frozen waters (Federal Government). This question represents many issues as to what the future holds for tribal sovereignty.

### The Swinging Pendulum Theory

The pendulum theory is the most widely accepted description of the effect which American government had on Indian Tribal sovereignty. However, the pendulum theory does not work. It is a very simple way of explaining a very complex set of experiences. The pendulum shows neither the diversity of the tribe's reactions nor the immeasurable experiences of each tribe.



**Pendulum Formula**  
 $T = 2\pi \sqrt{l/g}$   
 Where  $g = 9.78 \text{ M/S/S}$  and  
 $l = 0.76 \text{ M}$

### Conclusion

The pendulum would only be a true representation if it followed the mathematical equation and swung equally the other way. Newton's third Law takes each government policy as a separate era, and therefore allows for the reaction of the Tribal Nations to take place.

### References

- Champagne, Duane. *Social Change and Cultural Continuity Among Native Nations*, 66-106. USA: AltaMira Press, 2007.
- "Titanic" James Cameron, 1997.
- The Swinging Pendulum  
<http://www.picotech.com/experiments/pendulum/pendulum.html>