

RECALIBRATING CIVILIZATION

The Case For River Time

By Jonathon Keats

Rivers are icons of climate change. They are also highly sensitive indicators of present climate conditions, recorders of historical climate, and predictors of climate in the future. Climate scientists research all of these factors by observing watersheds and the ecosystems they sustain.

Alaska River Time is a multifaceted civic initiative intended to bolster public appreciation of river systems – and people’s understanding of their significance as climate indicators – by enlisting rivers as timekeepers. Instead of being calibrated by the pulsations of cesium atoms in remote laboratories, local time is measured by the flow of local rivers, speeding up or slowing down with the myriad environmental factors that effect watersheds daily, seasonally, annually, and over the course of generations.

An open-ended investigation of our relationship with time and place, Alaska River Time is simultaneously a provocation. The time kept by atomic clocks gives us the false illusion of control: being able to manage the present and predict the future. In fluvial clocks, time is alive with contingencies. We experience the complexity of the global environment. We come to terms with where planning and prediction fail us: the limitations of what we can know about the future – and the threat of hubris.

Eight Motivating Principles

1. A river clock is an environmental observatory. The flow of rivers is an emergent phenomenon, based on myriad systems interacting in irreducibly complex ways. Attention is drawn to these systems in their full complexity by the time indicated on the clock and by its deviation from standard time.

2. A river clock is erratic. Since river time is contingent on the interplay of global and local factors ranging from climate change to weather systems – and since human behavior is unpredictable and weather is chaotic – future plans are rendered uncertain. The illusion of control over the planet – a core assumption of anthropocentric activity – is challenged by the unknown timespan between now and any scheduled event.

3. A river clock is a feedback mechanism. River time is influenced by people's actions, both locally and globally. The rate of flow will change if construction adds sediment to a floodplain, or if carbon emissions increase the rate of glacier or snow melt. Although humans are not in control of the planet, and human behavior is unpredictable, individuals and societies can have a positive or negative influence on planetary homeostasis. Because the time kept by a river clock is impacted by human decisions, river time encourages environmental responsibility.

4. A river clock situates time locally. It recognizes rivers as sources of local sustenance. It acknowledges rivers as places where people have always gathered, forming relationships and civilizations. A river clock encourages human reconnection with rivers by connecting waterways with the human habitat they sustain. A river clock achieves this through the vernacular of public clocks and the ubiquitous practice of timekeeping. Simultaneously it may evoke the interdependencies of waterways through the averaging of multiple rivers as represented by mean river time.

5. A river clock reveals deep time and relates deep time to people's everyday lives. Riverbeds form over eons, yet rivers are constantly changing. Change is multi-scalar, both cyclical and linear. River time reflects these qualities with multiple spans of temporal measurement, and with the combination of analog and digital indications. A river clock relates the decisions humans make in the present with their multi-generational implications. Activities calibrated by river time, such as a river new year, can provide a bridge between the short and long term.

6. A river clock is communal. Timekeeping is a social phenomenon. People must adopt river time together for river time to be meaningful. Collective awareness is the basis of an ecological movement.

7. A river clock is a temporal commons. All organisms share river time. A river clock synchronizes relationships between humans and other organisms.

8. A river clock is a philosophical instrument. It reveals meaning through a dialectical process. The dialectic is physically instantiated and accessible to all. The complexities of natural phenomena are channeled through engineered systems designed to human technical standards. The juxtaposition reveals the crucial distinction between manmade complications and ecological complexity. Although the meaning of river time is open-ended, a new relationship with place may emerge through a new relationship with time.