

CASE STUDY #2 by F. Durnin-Vernette

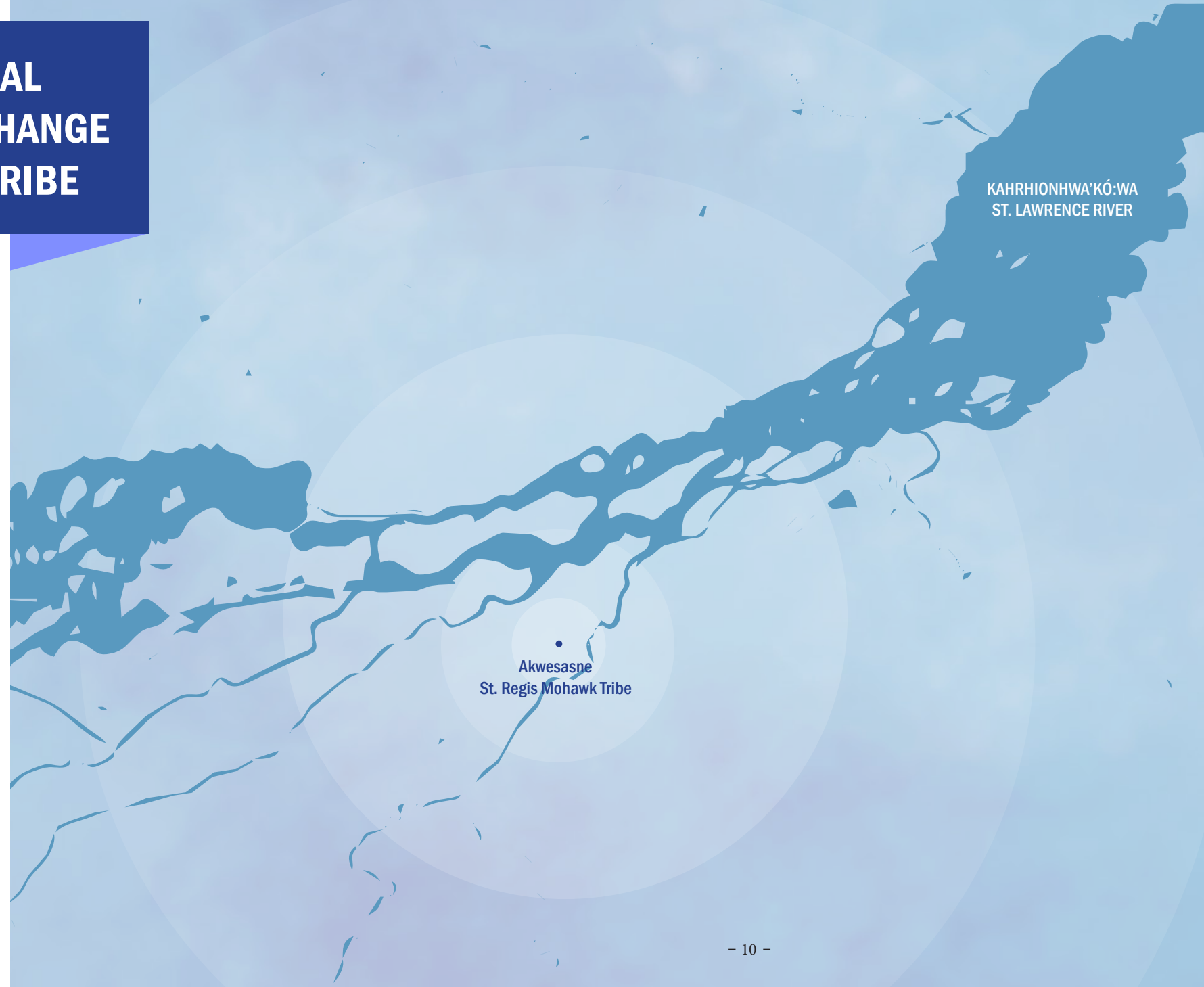
# PRESENT REALITIES AND POTENTIAL CLIMATE FUTURES OF CLIMATE CHANGE AND THE SAINT REGIS MOHAWK TRIBE

## Positionality statement

I identify as a cisgendered heterosexual white man, and a member of the upper middleclass (consciously but not proudly one of the richest people in the world). I was born in Canada during the nascence of the information age in a globalized world. Although I am generally indifferent to politics, I believe my opinions would be construed as radical leftism. I was raised an atheist, but it would be more accurate to label me agnostic. I believe in equal rights and privilege for all, regardless of race, class, gender, or sexuality. I am an advocate for nonempirical ways of knowing, as well as respect for nature and non-humans. I hope to spend my life improving the wellbeing of disadvantaged groups around the world through whatever means necessary and expedient, including the Saint Regis Mohawk Tribe.

A vital deficiency of this essay is that I am in no way affiliated with the Saint Regis Mohawk Tribe, and have never stepped foot on their lands. Being an outside observer of this struggle necessarily colours my interpretation. For instance, my analysis is based purely on publicly-accessible evidence, as I am not able to make use of personal experiences or emotional knowledge. I also do not identify with the Environmental Protection Agency (EPA) or any other associated governmental bodies; their institutional philosophies, ideologies, methodologies and cultures are entirely unknown to me, and they have for this reason been unfairly characterized as a de-personified government actor.

The Saint Regis Mohawk Tribe is an indigenous community occupying territory on the border between Canada and the United States, in the Canadian



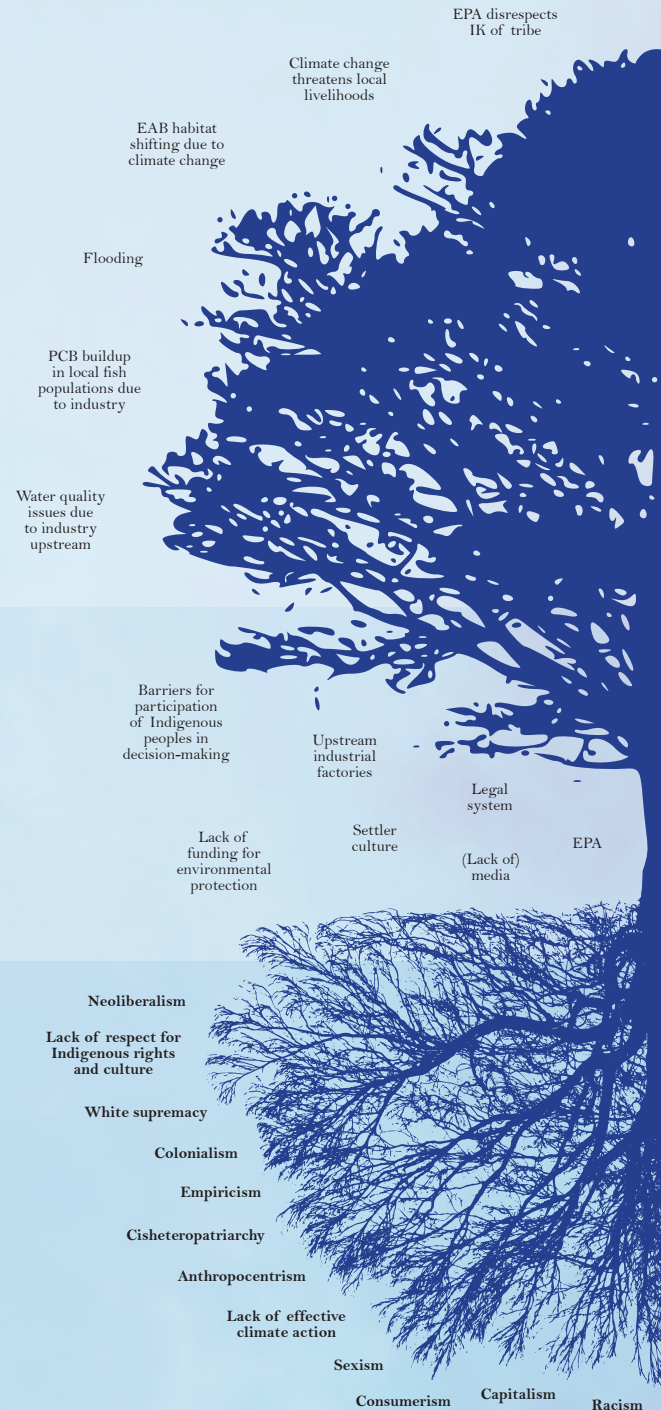
DAILY IMPACTS

STRUCTURES/INSTITUTIONS

ROOT CAUSE IDEOLOGIES

**ROOT CAUSE ANALYSIS of present realities and potential futures of climate change and the Saint Regis Mohawk Tribe**

*From Perera's "Ineqaulitree," used here with appreciation. Leaves represent daily impacts (Perera's "everyday symptoms"), the trunk represents structure and institutions, and roots represent root cause ideologies.*



provinces of Ontario and Quebec and the U.S. state of New York (Figure 1). The territory is known by the Tribe by its traditional name “Akwesasne”, which means “Land Where the Partridge Drums.”

The Saint Regis Mohawk Tribe faces numerous environmental challenges that are caused by (predominantly white settler) human activity, such as the human-induced invasion and population expansion of the emerald ash borer (EAB), a forest pest that decimates ash tree populations, and the bioaccumulation of polychlorinated biphenyls (PCBs) in local fish communities due to upstream industry. The Tribe’s indigenous knowledge is systematically disrespected by state organizations such as the EPA, and in response to this the tribe has drafted a climate change adaptation strategy (Saint Regis Mohawk Tribe, 2013) that takes their traditional knowledge into account. Through this climate change adaptation strategy, the Saint Regis Mohawk Tribe is already on track to achieve a climate future entirely in line with the Equaltree.

**Present realities**

Although the Saint Regis Mohawk Tribe faces a multitude of different climate challenges,

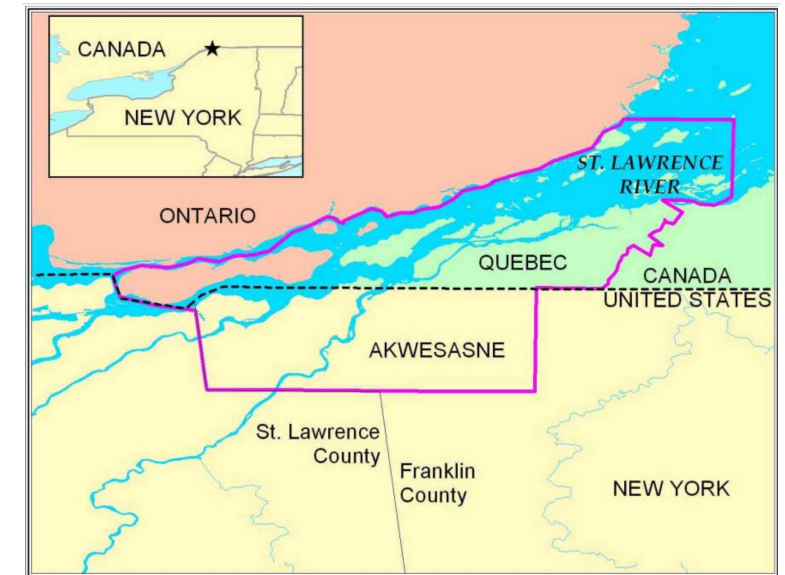


Figure 1: Map of the current boundary of Akwesasne (Saint Regis Mohawk Tribe, 2013)

many of them are outside of the scope of this essay. Therefore, we will focus on two of the most major environmental issues: expansion of the populations of the invasive EAB, and the bioaccumulation of PCBs in local fish populations. A fundamental reason that these environmental issues persist is because there is systematic disrespect for indigenous knowledge and ways of knowing. This is evident through the EPA’s prescription for a state-sponsored environmental analysis of the territory, despite the Tribe already knowing what environmental problems affect them. In light of this disrespect, the Saint Regis Mohawk Tribe

created their own climate change adaptation plan that is in line with their own traditions.

**Emerald ash borer invasion**

One of the most pressing ecological disasters faced by the Saint Regis Mohawk Tribe is the invasive EAB, which was first introduced in North America in 2002, likely via wooden shipping crates (Cappaert, McCullough, Poland & Siegert, 2005), and continues its population expansion to this day (Costanza et al., 2017).

This pest decimates black ash tree populations, which are an incredibly important tree for forestry and traditional basket-

making practices (Costanza et al., 2017; Saint Regis Mohawk Tribe, 2013). Current activities of the tribe to reduce the impacts of the EAB include informational workshops about the EAB, and using “sentinel trees” which are stripped and attract EAB, serving as a sacrificial tree so the surrounding trees are less affected (Saint Regis Mohawk Tribe, 2019).

#### PCB Contamination

Due to the General Motors/Central Foundry Division Superfund hazardous waste site, Reynolds Metals, Inc, and Aluminum Company of America factories that are nearby Akwesasne, and which have released PCBs into the waterways, there is buildup of PCBs in the soils, waterways, and river ecosystems around the St. Lawrence river (Fitzgerald, Hwang, Bush, Cook & Worswick, 1998), which runs through Akwesasne. This has led to widespread bioaccumulation of PCBs in local fish populations. Youth in the Saint Regis Mohawk Reservation have 90 - 95% higher levels of PCBs than the average of all US youth, leading to thyroid problems, autoimmune deficiencies, and cyclical disruptions of young girls (Hayden, 2011). Such phenomena in a white settler

community would be met with widespread outrage and media coverage; the fact that this was allowed in the first place and has remained the status quo reveals the white supremacy, sexism, and capitalist greed that underpins public policy in Indigenous reservations. These ideologies normalize the industrial pollution of sacred rivers, which disproportionately affects women, and which are at the heart of continuing industrialization despite the clear evidence of severe environmental degradation. PCB pollution would not have reached this level if Indigenous people were given equal power in decisionmaking about actions that affect their own territories.

#### Disrespect of Indigenous knowledge

By strongly recommending the Tribe to conduct a suite of costly environmental assessments in order to understand the environmental risks the Tribe faces the EPA is systematically disrespecting the indigenous knowledge (IK) of the Saint Regis Mohawk Tribe. The coordinator of the Saint Regis Mohawk Environment Division laments that “We didn’t need them to tell us what’s important to us, we already know.” (Rosa-Aquino, 2018). This is a blatant materialization of racist, empiricist, colonial

disrespect for IK.

Furthermore, the EPA was unable to guarantee the confidentiality of the IK of the Saint Regis Mohawk Tribe due to the Freedom of Information Act (Rosa-Aquino, 2018). This is enormously disrespectful to the Tribe, given that IK can often be highly sensitive, traditional, spiritual, and culturally-important knowledges that the Tribe would wish to remain private. While this is not the direct fault of the EPA, it evidences the inadequate legal system and judicial structures that operate within the US government, and which perpetuate the white supremacist, colonial culture of settlers who do not wholly respect the importance of Indigenous rights, knowledge, or culture.

#### Climate Change Adaptation Strategy

Aside from the above realities, climate change also threatens the long-term sustainability of fishing, agriculture, medicine, forestry, and many other traditional activities of the Tribe (Saint Regis Mohawk Tribe, 2013). In response to this, and not in keeping with the prescriptions of the EPA, the Saint Regis Mohawk Tribe has created a climate change adaptation strategy that

incorporates the things that are most important for them, including a vast amount of spiritual knowledge that holds great meaning (Saint Regis Mohawk Tribe, 2013).

#### Potential climate futures

The adaptation plan launched by the Saint Regis Mohawk Tribe, which is in keeping with their own culture, and against the recommendations of the EPA, is telling of the Tribe’s strategy going forward: giving higher precedence to their own knowledge systems than settler knowledge systems. In many ways, this strategy is already in almost complete congruence with the Equaltree.

#### Equaltree daily impacts

The Equaltree posits that in an ideal future, there would be daily occurrences of things such as “place-based solutions”, “clean water”, and “thriving non-human communities”. The climate change adaptation plan, which is itself a place-based solution to a massive problem, posits its own version of an ideal future. While the Equaltree demands “clean water” and “thriving non-human communities”, for instance, the adaptation plan illustrates both of these features as part of one system: “The waters were given

instructions by the Creator to supply Mother Earth with water to be used by the people for healing, making medicines, cleansing our bodies, and supporting aquatic life forms, and to quench our thirst and to provide sustenance to all of creation.”

#### Equaltree structures

The structures of the Equaltree include features such as “community resilience” and “localized stewardship networks”. Structures like these are mirrored by the adaptation plan, which calls for community organizations and protocols for things like ambient water quality monitoring stations, as well as in the case of emergencies, such as an “Environmental Response Team”. These emergency structures have already demonstrated their value, as they aided in the effective and safe emergency management during flooding in 2018 (see Timeline).

#### Equaltree ideologies

Finally, the ideologies that underlie the climate change adaptation plan are generally in line with the ideal ideologies from the Equaltree. These include “Indigenous sovereignty” and “self-determination”, which are both fundamental to the idea of an adaptation plan that is

locally-adapted to the territory of an Indigenous community. Another ideology posited by the Equaltree is a “deep connection to descendents and ancestors through history, present, and future”, which is the philosophical underpinning of the adaptation plan that details the past, present, and future of traditionally-significant aspects of the Saint Regis Mohawk Tribe’s worldview such as Mother Earth, Grandmother Moon, and the Creator. By continuing to uphold these traditional beliefs and values, people can better feel connected to their ancestors through the traditions that link them.

#### Trade-off for a more equal future

By relying on their own knowledge systems and skills to inform their environmental planning and decision-making, the Saint Regis Mohawk Tribe is choosing to forgo the assistance of state apparatuses such as the EPA. This is a major trade-off for the Tribe; while they are better able to conduct themselves according to their own beliefs, it also means that they potentially have a more limited ability to use the dominant settler culture’s resources for the benefit of the Tribe.

## TIMELINE of present realities and potential climate futures of climate change and the Saint Regis Mohawk Tribe

*Events related to climate, race, and the Saint Regis Mohawk; inspired by the opening activity of Conversations.*

**1600s**  
Archaeological evidence shows Mohawk occupation of Akwesasne by this time (Saint Regis Mohawk Tribe)

**1755**  
The Saint Regis Mission is founded in Akwesasne by French-Canadian Jesuit priests who migrated upstream from Kahnawake, another Mohawk settlement (Bonaparte, 2005)

**1960s**  
Industrial effluent PCBs contaminate the St. Lawrence River, which runs through Akwesasne (Forum on Religion and Ecology at Yale, n.d.)

**1987**  
Akwesasne Task Force on the Environment founded to address the environmental challenges faced by the Saint Regis Mohawk Tribe, including PCB contamination (Forum on Religion and Ecology at Yale, n.d.)

**2002**  
Invasive black ash pest EAB is first detected in North America (Costanza et al., 2017)

**February 21st**  
Flood Watch upgraded to Flood Warning; TCR (Precautionary Evacuation not mandatory but recommended)

**January 24th**  
Flood Watch downgraded to Area of Concern

**January 19th**  
Volunteers distribute Flood Preparedness Pamphlets to potential Flood Watch Area

**January 22nd**  
Flood Watch begins: St. Regis Rd, North St, Cree Rd, Mose Cook Rd, Cook Rd declared Flood Watch Area

**2018**  
2018 flooding, an example of the successful implementation of the structures outlined in the Climate Change Adaptation Plan in an emergency situation.

**2013**  
First draft of the Climate Change Adaptation Plan for Akwesasne (Saint Regis)

**2011**  
Saint Regis Mohawk Tribe wins grant by the EPA to develop a climate change adaptation strategy (Rosa-Aquino, 2018)

**February 22nd, 11 am**  
State of emergency declared; at 11 am for St Regis Rd, Church St, Helena Rd, North Rd, Gray St, Mill St, Pearl St closed

**February 22nd, 4:45 pm**  
Power outage impacts 225 households; Unified Incident Command established

**February 23rd, 9:30 am**  
Winter Weather Advisory, National Weather Service Flood Warning in effect; water reportedly receding

**February 23rd, 10 am**  
Electricity restored

**February 24th**  
Water recession reportedly stable overnight

**February 26th**  
State of Emergency ends; Unified Incident Command demobilized; firefighters rest but structure remains in place

**February 27th**  
St Regis Mohawk School students relocated to SRCS; Church St reopened

**March 5th**  
Unified Incident Command advises safe to return to St Regis Mohawk School

**November 2019**  
Saint Regis Mohawk Tribe joins lawsuit against Monsanto alleging that Monsanto knew the harmful health and environmental effects of PCBs

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