

# AUTOCHTOM, Colonial Legacies in France's Overseas Territories: indigenous populations in the face of justice and school (Guyana, New Caledonia, French Polynesia)

This project examines the relationship to the colonial and postcolonial state of populations claiming to be «indigenous» in France's Overseas Territories: Amerindians and Noirs-Marrons of Guyana, Kanak of New Caledonia and Mā'ohi of Polynesia. In concrete terms, this involves conducting historical and contemporary investigations into the scope and limits of the colonial heritage within two key institutions of the French Republic: schools and justice.



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Nuku Hiva Courthouse, Marquesas Islands, French Polynesia, February 2016

Six local investigations are launched at the crossroads of ethnographic fieldwork and archival research. They form the basis for a two-fold comparative analysis (of two institutions in three territories) focusing on the “points of contact” between institutions and individuals, from two perspectives:

- ▶ Government policies and institutional mechanisms (“from the top down”): changing representations and practices of the government administration of the education and judicial systems with respect to indigenous groups; contemporary policies aiming at taking into account indigenous particularities within schools and the justice system; tensions and issues related to the local “adaptation” of the school and justice systems.
- ▶ Experiences of individuals confronted by these institutional apparatuses (“from the bottom up”): strategies and agency of indigenous people confronted

by school and the justice system through time; various forms of indigenous reception, appropriation, and the contemporary uses of educational and judicial mechanisms; alternative indigenous ways of dealing with conflict resolution (justice) and the transfer of knowledge (education) outside of institutional frameworks.

Justice and education experts generally tackle the issue of colonial legacies only in terms of the contemporary “adaptation” of these institutions to indigenous cultures. However, the recognition of indigenous cultures within the justice systems is extremely variable in these three territories, and it raises serious issues and tensions between culturalism and assimilationism. As for the colonial education systems established in the three territories, they were in fact based on the differentiation of groups, and were consequently fully “adapted” to “native culture” (and subordination). This contradicts the

contemporary assertions of those promoting “alternative” schools and education for indigenous peoples today, and calls the broader notion of the “postcolonial” into question.



## PERSPECTIVES

This project has fuelled public and societal debate on the concrete forms of colonial heritage in French overseas territories, both in the three territories and in metropolitan France. Our research team has often appeared in the media, at public conferences, or at the request of central state institutions (Prison Administration, Consultative Commission on Human Rights, etc.).

## AUTOCHTOM

Colonial Legacies and Indigeneity in France's Overseas Territories: Amerindians of Guyana, Kanaks of New Caledonia and Mā'ohi of French Polynesia in the Face of Two institutions of the French Republic (Justice, School)

**ANR programme:**  
Young researchers JCJC SSH1

**Edition, Project duration:**  
2013, 54 months

**ANR grant:**  
€166,998

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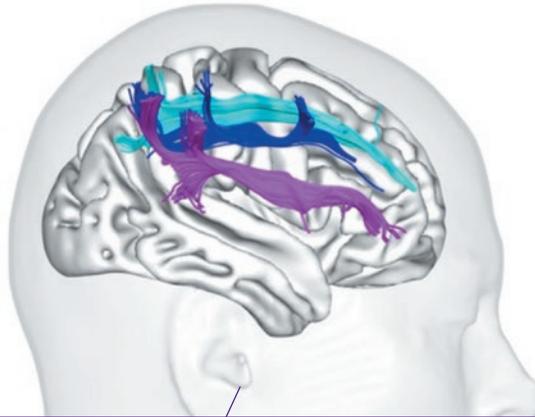
**Main publication or contribution:**  
Special Issue «Justices ultramarines», Ethnologie Française, No 169, 2018

**Partners:**  
Institut de recherche interdisciplinaire sur les enjeux sociaux (IRIS, UMR 8156)

## PHENOTYPES

### The multiple facets of consciousness in healthy and brain damaged humans

Everything we hear, feel, smell or see is an illusion reconstructed by our brain, an interpretation of our surrounding. This virtual reality streamed in our mind is what we understand as consciousness in its simplest definition. In the current study, we hypothesised that consciousness is not located in a brain area but emerge from the exchange between brain areas.



The fronto-parietal circuits of the human brain, hypothetically supporting the stream of consciousness

© Michel Thiebaut de Schotten

In the first part of the project, we used advanced neuroimaging approaches to separate large networks of areas dedicated to the conscious support of the representation of our environment. By re-analysing the work of 20 years of functional magnetic resonance imaging applied to controls to show areas activated during specific tasks, we successfully demonstrated that the anterior and posterior part of the brain associate their function to produce various representation and actions and are separated according to whether they involve spatial material or non-spatial material. Accordingly, dorsal areas will be related to the consciousness of spatial material and the ventral regions to the consciousness of non-spatial material. Additionally, we found that these two networks of brain areas partially overlap on a middle circuit which might well be essential to the stream of consciousness. In the second part of the project, we explored how lesions into this system might alter conscious representations. Results indicated that disconnection between the

early visual processing in the brain and the fronto-parietal circuits lead to an absence of awareness for the left visual field opposite associated with confabulations. In the absence of visual input the fronto-parietal circuits, hypothetically supporting the stream of consciousness, invent or imagine the missing information. This work was further extended to a group of stroke patients not aware of their motor impairment (i.e. hemiplegia). These patients act as if they were not hemiplegic and reported their paralysed limb as moving correctly. Our methods applied to a large population of 95 stroke patients presenting with this disorder revealed, a disconnection between the fronto-parietal, the premotor and the memory circuits. Hypothetically, this complex syndrome would emerge from the integration of the activity between these three systems.



## PERSPECTIVES

This research allowed us to develop and make available to the community a software for the estimation of cerebral disconnection. Its application to brain damaged patients is limitless and will make it possible to test the hypothesis that certain function emerge from the interaction between different regions of the brain and not from their activity alone.

## PHENOTYPES

Fractioning the biology of the visual conscious network

**ANR programme:**  
Young researchers JCJC

**Edition, Project duration:**  
2013, 48 months

**ANR grant:**  
€240,000

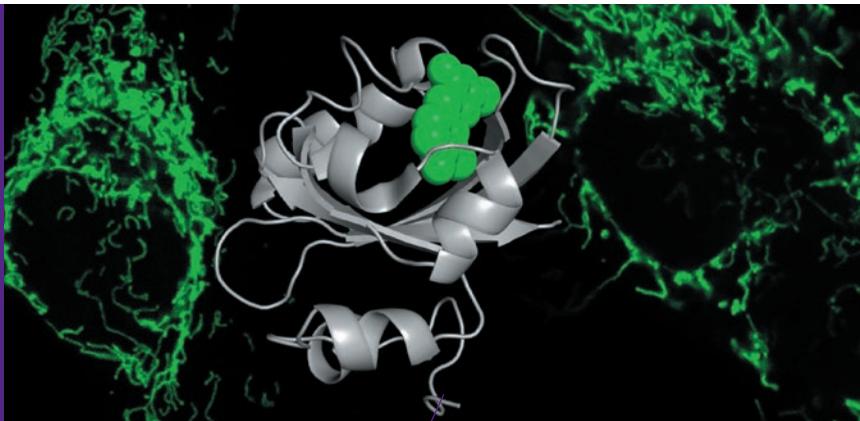
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**Main publication or contribution:**  
Functional segregation and integration within fronto-parietal networks

## Tag-Light

# A new generation of chemical-genetic fluorescent probes for exploring living systems

Cells are complex machines regulated by a set of dynamic processes. Understanding how they work requires observing how their constituents organize themselves and interact. Despite spectacular advances in biological imaging, many molecules and processes remain invisible. The Tag-Light project allowed the creation of new tools to observe the dynamics of biomolecules and biochemical events within cells.



© Arnaud Gautier

Chemo-genetic fluorescent probes reveal the invisible

**A**rnaud Gautier and his collaborators combine organic chemistry, molecular biology and protein engineering techniques to create tools for exploring life in new ways. These tools are composed of two parts: a protein module and a small synthetic molecule. The advantage of using a protein module is that instructions for its manufacture can be easily and specifically introduced into cells in the form of DNA. In addition, its properties can be adjusted using molecular evolution techniques. The interest of using a small synthetic molecule is to be able to use molecular engineering to refine its properties, and thus benefit from the power of modern chemistry to explore the living. This original approach has led to the creation of FAST, a fluorescent marker offering new perspectives for biological imaging. FAST is derived from a photoreceptor found in *Halorhodospira halophila*, an extremophilic bacterium living in hypersaline environments. This protein has been redesigned to selectively and reversibly bind synthetic fluorogenic ligands called fluorogens. These fluorogens fluoresce

only when bound to FAST, allowing the observation of cells expressing FAST or proteins selectively fused to FAST. This technology is distinguished by the reversibility of the labeling, which offers the possibility of controlling fluorescence on demand. This unique property offers unprecedented experimental flexibility and allows the development of many applications, including the design of biosensors in which fluorogen complexation is dependent on the presence of an analyte, interaction or cellular signal for applications in the diagnosis and screening of therapeutic molecules. This innovation led to the creation of a start-up The Twinkle Factory.



### PERSPECTIVES

The FAST technology developed thanks to the Tag-Light project makes it possible to observe processes that were previously invisible. This novel technology can enable biologists to address issues ranging from fundamental mechanisms to the causes of disease and the development of new therapies.

## Tag-Light

Next-generation chemical-genetic fluorescent markers for advanced biological imaging

**ANR programme:**  
Young researchers JCJC

**Edition, Project duration:**  
2015, 36 months

**ANR grant:**  
€ 200,000

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**Main publication or contribution:**  
A small fluorescence-activating and absorption-shifting tag for tunable protein imaging in vivo. PNAS 113 (3), 497-502 (2016).