

Recovering an Indigenous Contribution to the *Philosophical Transactions* Using SADFC

J. P. Ascher, January 2022

*An Account of a sort of Sugar made of the Juice of the
Maple, in Canada.*

THE Savages of *Canada*, in the time that the Sap rises, in the *Maple*, make an Incision in the Tree, by which it runs out; and after they have evaporated 8 pounds of the liquor, there remains one pound as Sweet, and as much *Sugar*, as that which is got out of the Canes; Part of the same Sugar, is sent to be refined at Roven.

The Savages have practiced this Art, longer then any now living among them, can remember.

There is made with this *Sugar*, a very good Syrup of Maiden Hair, and other Capillary Plants, which is used in *France*.

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Contents lists available at [ScienceDirect](#)

Digital Investigation

journal homepage: www.elsevier.com/locate/diin



A complete formalized knowledge representation model for advanced digital forensics timeline analysis



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A B S T R A C T

Keywords:
Digital forensics
Timeline analysis

Having a clear view of events that occurred over time is a difficult objective to achieve in digital investigations (DI). Event reconstruction, which allows investigators to understand the timeline of a crime, is one of the most important step of a DI process. This complex task

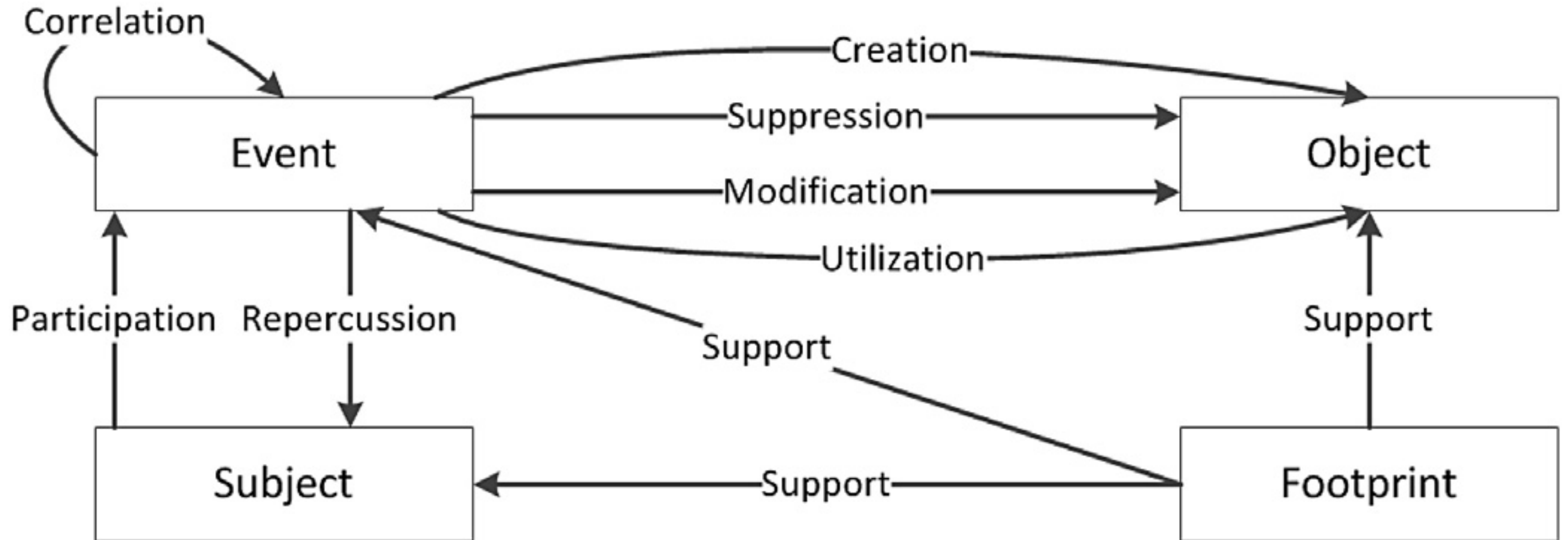
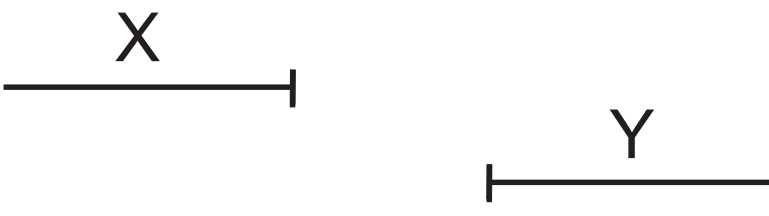
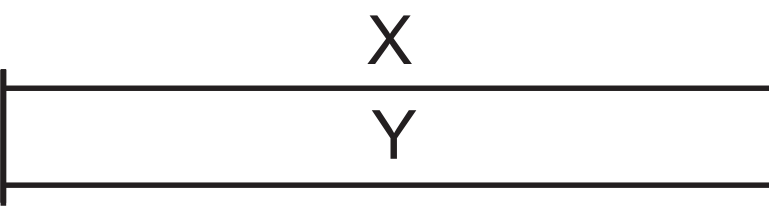
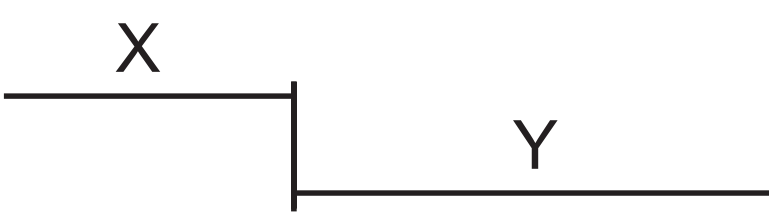
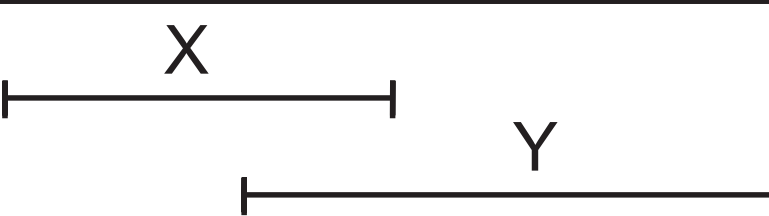
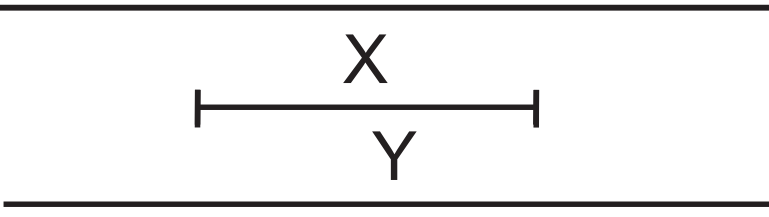
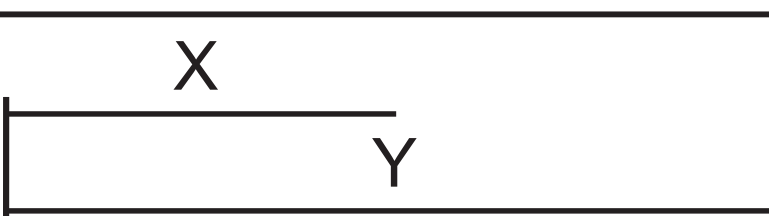



Fig. 1. Knowledge model.

Table 2
Allen algebra.

Functions	Constraints	Example
before(X, Y)	$x_{t_{end}} < y_{t_{start}}$	
equal(X, Y)	$x_{t_{start}} = y_{t_{start}} \ \&\& \ x_{t_{end}} = y_{t_{end}}$	
meets(X, Y)	$x_{t_{end}} = y_{t_{start}}$	
overlaps(X, Y)	$x_{t_{start}} < y_{t_{start}} \ \&\& \ x_{t_{end}} > y_{t_{start}}$	
during(X, Y)	$x_{t_{start}} > y_{t_{start}} \ \&\& \ x_{t_{end}} < y_{t_{end}}$	
starts(X, Y)	$x_{t_{start}} = y_{t_{start}}$	
finishes(X, Y)	$x_{t_{end}} = y_{t_{end}}$	

x is Correlated e means that *x* is linked to *e*
on the basis of multiple criteria:

- ➔ use of common resources,
- ➔ participation of a common person or process,
- ➔ temporal position of events.

Relation of causality: x causes e means that
 x has to happen to allow e to happen.

[987]

Numb. 171.

PHILOSOPHICAL
TRANSACTIONS.

May 20th. 1685.

4^o: 2A² 2B-2E⁴ 2F² [\$1-3
signed]; 20 leaves, pp.
987-1026; plate [1]

Philosoph: Transact: Numb: 171.
Fig: 1.

Fig: 2.



Fig: 4.



Fig: 3.



[987]

Numb. 171.

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[987]

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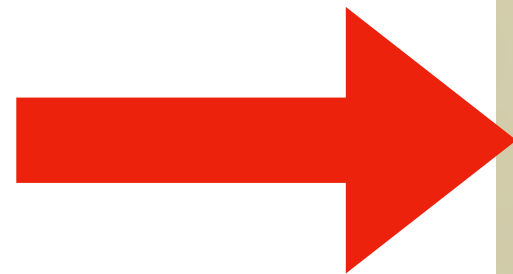
An Extract of the Journal of the Society at Dublin; giving an account of a Periodicall Evacuation of Blood at the end of one of the Fingers.

Decem. 22, 1684.

A Letter was read from Mr. *Ash*, in answer to a Query sent down by the Society to him concerning a man who had a constant and periodical, *Evacuation* of Blood at the end of his fore-Finger; from which Letter the following return is abstracted.

Walter Walsh, an Inn-keeper in *Trym*, born in *Ireland*, of a temperate Diet, Sanguin Complexion, and pleasant Humor, in the 43d year of his Age, anno 1658, about Easter, was seiz'd with a great pain over all his right Arm; a great heat, and redness in his right hand; and a pricking in the point of the fore-Finger; whereon there appear'd a small speck, as if a little Thorn had run in; and supposing it such he open'd it, whereupon the Blood spun out in a Violent but small stream; after it had spent its Violence, it would cease for a while and only drop, and then spring out with Violence again, continuing thus for 24 hours, till at last he fainted away, and then the Blood stancht of it self, and his pains left him: from that time during his whole life, (which continued 12 years,) he was frequently troubled with like *Fits*; seldom having a respite of 2 months, and they never returned oftener then in 3 weeks: he rarely *Bled* less then a Pottle at a time; the oftener the *Fit* came the less he *Bled*; and the more rarely it assaulted him, he *Bled* the more; whenever they endeavor'd to stanch the *Blood*, it rais'd most exquisite tortures in his Arm; no remedys

that were ever used proved in the least effectuall: he had no other distemper that troubled him; neither season, nor weather wrought upon him: he had no outward accident that at first brought the *Bleeding*: Drinking more then ordinary made him more apt to *Bleed*: he had no Child after his first seizure: these frequent *Fits* brought him at last very low, insomuch that towards his latter end he *Bled* but little, and that too but like diluted water. He dyed of this Distemper on the 13th of Feb. 1670.



A Discourse concerning Weather, &c. By the learned Dr Garden of Aberdene. Written by way of Letter, to Mr. Henry Scougall, Professor of Theology in that University; and communicated to the Phil. Soc. of Oxford, by the reverend Dr Middleton, Provost of the Kings College in Aberdeen.

Sir.

I Am sorrie, I can give you no better satisfaction in this account you demand of the Conjecture we had lately occasion to talk about, my other necessarie diversions and the few observations I have made, render it the more imperfect. However since 'tis your pleasure, you shall have it as it is; and if it come afterwards to be cleared & confirmed by the joynt observations and sentiments of others, it may pass for an Aero-Statical Hypothesis of the various changes of the Weather.

We have been hitherto to seek for an intelligible account of the ascent of Vapours, the ballancing of the Clouds and their dropping down again into rain; and the wind bloweth where it listeth, and we know not whence it cometh, nor whither it goeth; and 'tis like our conjectures about the more immediate causes of all these may be still uncertain Guessees, yet the works of God are fought out of all those that take pleasure in them; and the late known properties of the Air, viz. its weight and Spring have made men more inquisitive in this matter then formerly: and you know how by the observations of the Baroscope they perceive that the Atmospheres Gravity is not always the same, and are surpriz'd to see the Mercury subside for the most part in Foggy, rainy, windy, or cloudy, weather; and on the contrary to ascend and be highest in calm and clear seasons. I shall not stay here to tell you the Conjectures of others about this, but shall only take occasion to consider how this may

B b serve



THE
H I S T O R Y
 OF THE
ROYAL SOCIETY of LONDON,
 FOR IMPROVING OF
NATURAL KNOWLEDGE,
 FROM ITS FIRST RISE.

IN WHICH

The most considerable of those Papers communicated to the
 SOCIETY, which have hitherto not been published, are inserted in their
 proper order,

AS A SUPPLEMENT TO

THE PHILOSOPHICAL TRANSACTIONS.

By THOMAS BIRCH, D.D.

SECRETARY to the ROYAL SOCIETY.

V O L. IV.

*Talem intelligo PHILOSOPHIAM NATURALEM, quæ non abeat in fumos speculationum subtilium
 aut sublimium, sed quæ efficaciter operetur ad sublevanda humanæ vitæ incommoda.* BACON de
 Augm. Societat. L. ii. c. 2.

L O N D O N :

Printed for A. MILLAR in the Strand.

MDCCLVII.

" Another raw egg of the same fort	— — — — —	3ij — 3j — 3ij	gr. xiiij.
" The same egg boiled	— — — — —	3ij — 3j — 3j	gr. xvij.
" Lost in boiling	— — — — —	00 — 00 — 00	gr. xv.
" The skin	— — — — —	00 — 00 — 00	gr. xiii.
" The shell	— — — — —	00 — 3j — 3ij	gr. xix.
" The yolk	— — — — —	00 — 3v — 00	gr. vij.
" The white	— — — — —	3j — 3ij — 00	gr. xiiij.
" Lost in weighing	— — — — —	00 — 00 — 00	gr. v.

" These experiments were tried with a pair of scales, which turned with half
 " a grain, and are designed as part of an answer to one of Sir WILLIAM PETTY'S
 " queries."

A discourse was read, sent by Mr. WILLIAM MOLYNEUX, concerning the bogs
 and loughs of Ireland, written by Mr. WILLIAM KING, fellow of the Dublin
 Society. The cause assigned of these bogs was the want of industry, the springs
 raising up gradually a plexus of heath and grass, the bottom under the water be-
 ing a white clay or sandy marl. The inconveniences of them are spoiling com-
 munication, destruction of cattle, sheltering rogues, and corrupting the air and
 waters.

The ways of draining them are cutting trenches, and deepening them by degrees,
 till you come to the bottom.

Dr. LISTER was of opinion, that the discoloured water coming from the bogs
 might be from the flower of the heath falling into the water.

A letter of Monf. JUSTEL to Mr. ASTON^u, concerning some inventions at
 Paris; a curious perspective of a hall; a candlestick snuffing its own candles; an
 invention to estimate the way of a ship; a stove for warming several chambers;
 and an account of several books printing at Paris.

Mr. PAGET presented Dr. BARROW'S posthumous lectures.

Dr. PAPIN shewed several sorts of gellies, which he had filtrated and made fine
 by means of the pneumatic engine, according to the method approved of at the
 last meeting. His account of these experiments was as follows^{*}:

" Having shewn in the last meeting the good effect of the instrument for fil-
 " trations, I hope the Royal Society will be pleased to see a real and great use
 " it may be applied to, for making gellies extraordinary fine, and at a cheap
 " rate: I have therefore brought hither three sorts of gellies: the first seasoned
 " with sugar, and near as fine as ordinary gellies, commonly sold for two shil-
 " lings a pound: and yet this may be afforded for a groat: the second gelly

^u This discourse is printed in the *Philos. Transact.* N^o. 170. p. 948. for April 1685.

^{*} Letter-book, vol. x. p. 7.

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February 18. A lecture
at the University of Ox-
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March 18. Dr. LISTER vic

11 Upon mentioning the ext

compared together.

^a It is printed in the *Philos. Transact.* N^o. 169.
p. 944 for March, 1685.

^r Ibid. p. 927. It is in the letter-book, vol.

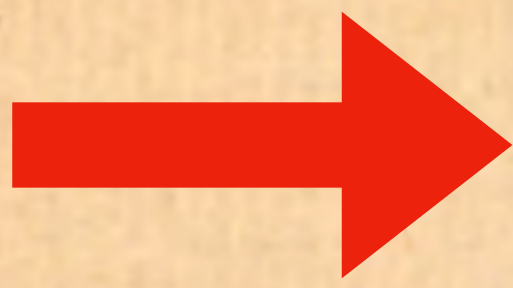
March 2. Dr. LISTER vice

Upon reading the minutes

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THE HISTORY OF THE

168³/₅.



Mr. ASTON produced a large piece of brown sugar, delivered to him by Monf. JUSTEL. It was said to be made by the savages of Canada, who at the time, when the juice rises in the maple (*l'erable*) let it out, and evaporated it to an eighth part; at which time it was said to be as sweet as the sugar from the sugar-canes.

Mr. ASTON was desired to send a piece of the sugar to Mr. RAY, and also to Oxford, intimating, that the Society would be glad to have the experiment made by them, this being about the time that the sap rises; and that if the sap will not granulate without it, there may be used lime-water.

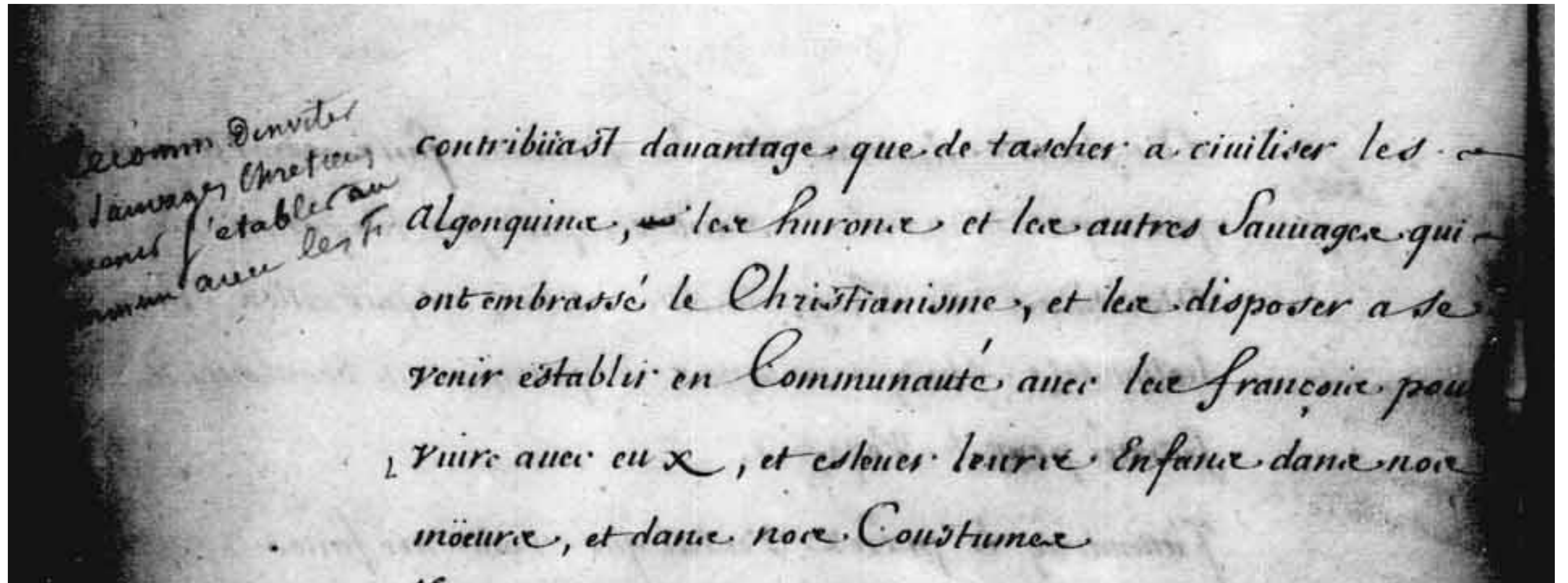
It was said, that at Brocklesby in Lincolnshire there were sycamores planted in

Pour augmenter les Colonies, dans l'Esprit avec lequel
vous travaillez à réduire les habitations, qui sont
esparées en Corps de paroisses, Il me semble, qu'il faut
s'attendre à faire Capital sur les nouveaux Colonies que
l'on peut envoyer de France, Il n'y auroit rien qui

Il conviendrait d'inviter
les Sauvages Chrétiens
à venir s'établir au
milieu avec les

contribuât davantage, que de tâcher à civiliser les
Algonquins, les Hurons et les autres Sauvages, qui
ont embrassé le Christianisme, et les disposer à se
venir établir en Communauté avec les François, pour
vivre avec eux, et estimer leur vie, Enfant dans nos
mœurs, et dans nos Coutumes

April 1666: To build the colony peacefully by ... civilizing the Algonquins, the Hurons, and the other Indians who embraced Christianity, and to dispose them to come and establish themselves in Community with the French, and to educate their children in our customs



... comme Denviter
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Table 1 Completed family size, by wife's age at marriage

Population	Wife's age at marriage (years)					
	15-19		20-24		25-29	
	Family size	Number of marriages	Family size	Number of marriages	Family size	Number of marriages
France						
Northwestern quarter, marriages in 1670-1769	8.3	-	7.1	-	5.5	-
Southwestern quarter, marriages in 1720-1769	7.2	276	6.6	315	5.3	237
Canada						
All Canadian women, marriages before 1730	11.8	3,221	9.7	2,708	7.2	981

Sources: Henry and Houdaille 1973: 895; Henry 1972: 983; Programme de recherche en démographie historique, Population register of early Quebec.

Landry, Yves "Fertility in France and New France: The Distinguishing Characteristics of Canadian Behavior in the Seventeenth and Eighteenth Centuries" *Social Science History* 17.4 (Winter 1993) 577-592.

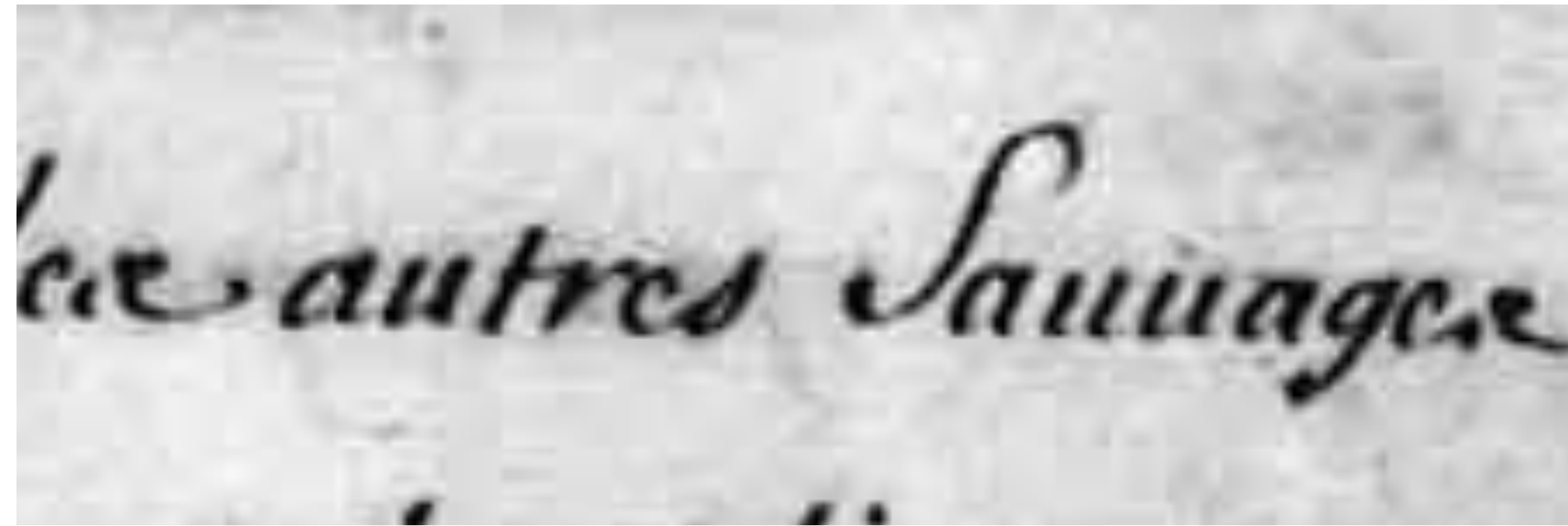
Demographic as well as cultural, political, and economic reasons could be given to understand the kind of intermarriage promoted. First, the lack of nubile French females in the colony, aggravated by demographic weakness, partly explains official attitudes. Between 1608 and 1699, only 1,772 women (nuns excepted) emigrated to Canada as compared with 12,621 men. The sexual imbalance remained a feature of colonial society to the end of the century.⁴⁷

A FIRST SHIFT FROM THE INITIAL POLICY of intermarriage occurred in 1682, when Intendant de Meulles (in charge from 1682 to 1686) criticized the endowment of native girls. He believed it was a useless expenditure for "there is hardly one or two who marry each year." Statistical evidence concerning intermarriage has always been difficult to obtain, and the numbers available are not reliable because mixed unions were commonly celebrated *à la façon du pays*, that is, according to

In 1686, Governor General Jacques-René de Brisay de Denonville (in office from 1685 to 1689) advocated the first definite move away from interethnic cohabitation, arguing that although "For a long time, it was believed that domiciling the Savages near our dwellings was likely to accustom them to live like us . . . I realize Monseigneur, that the very opposite has happened because, instead of becoming familiar with our laws . . . they communicate to us all they have that is the very worst, and they take on likewise all that is bad and vicious in us." According to Denonville, French-native cohabitation presented the seduction of indigenous lifestyle to transplanted Frenchmen instead of bringing savage men to civil society. As Denonville believed that living together had very harmful sociocultural effects, he wanted the two groups to be separated to protect colonial youth from the Amerindians, whose acculturation seemed to him far lower than that of the settlers. This segregation required that colonial authorities gather non-Christian natives living in the vicinity of Montreal inside villages;⁶⁸ Denonville also encouraged the further establishment of Jesuit reservations.

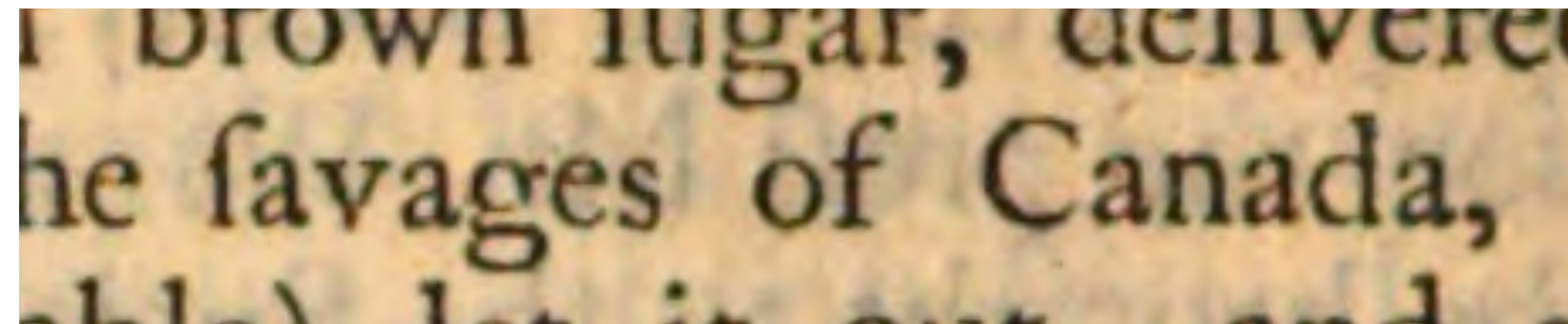
Belmessous, Saliha "Assimilation and Racialism in Seventeenth and Eighteenth-Century French Colonial Policy" *American Historical Review* 110.2 (April 2005) 322-349.

April 1666:



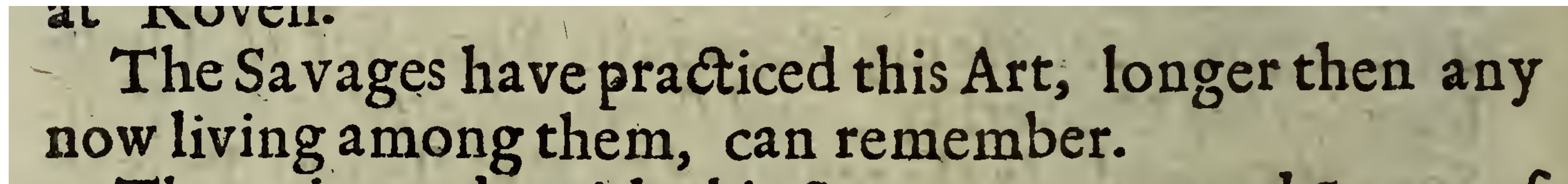
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