



## THE ISEMAPHORE PROJECT

**Salut au Langage.** Philippe Druetz's mixed media art installation questions the evolution of the written culture and the image culture. It exists in the construction of a communication network that spans 220 years of history, using a sémaphore based system producing a proprietary developed code, optical signs, morse and text. The messages can be heard worldwide on short wave radio and be seen on Twitter.

**Language is no longer regarded as peripheral to our grasp of the world we live in, but as central to it.**  
**F. de Saussure.**

The constant stream of images floods and overwhelms us. The average person (and image maker) never learnt the language of images and isn't aware of the power and dangers of it. Evolving communication channels and ultimately the Internet are responsible for the image flood and withering of the written world and it's culture.

## SALUT AU LANGAGE

At the end of the eighteenth century, a time of literary and philosophical abundance, the semaphore will announce a new era (of communication).



*The littleBits module sending feedback to the operator*

The semaphore is the first step in the industrialisation of communication. This semaphore network will be the mother of the Internet, and maybe the final deathblow of the written word as means of communication.

**Umberto Eco proposes that every cultural phenomenon may be studied as communication.**

Linguistics and history stand central in this artwork, where relations and dialogues between language, signs, semiotics, image culture, the written language and communication itself are created and questioned. After losing our ability to remember and recite long texts as the ancient Greeks did, will we lose our ability to read?

## MIXED MEDIA INSTALLATION

After the French revolution, Napoleon needed a way to communicate fast, reliable and secure with his troops around Europe. He ordered to build a 5000km network with optical telegraphs (sémaphores) developed by Claude Chappe. The network could communicate

**Post your personal message  
@The\_iSemaphore Twitter account  
and it will be transmitted worldwide  
on short-wave radio during the day  
of the performance!**

messages at a speed of 500km/hr and lasted for 50 years until the advent of radio communication by Marconi and the Morse code.

**The first optical telegraph that used coded messages dates back to 150BC and was designed by the Greek Polybius**

The initial messages will originate from a mechanical installation based on the Chappe sémaphore, and will be communicated along a network trough history. The optical messages produced during the performance of the artist will be transformed by image recognition software and transformed to Morse code and Tweets. The Morse code will be broadcast by short wave transmitters reaching the outskirts of the world for everyone with a short-wave receiver, as will the Tweets over the Internet.

A for the purpose written codebook, comparable to Baudot code used in telexes, permits to create the optical messages. A message book will contain an index and messages by visitors and participants of the performance. They are easily sent by the public themselves through the use of the index numbers, the way the Chappe sémaphore worked.

## LOTTERY FUNDED ART

The maintenance and salaries to keep the telegraph network running, was too high for Napoleon's budget. Therefore he introduced a lottery. Similarly, and part of the artwork, 100 lottery bills are issued. The bills are designed and personally signed by the artist are sold at €5,00.



Results will be transmitted on 26 april.

## PERFORMANCE: 26 APRIL

**Location:**  
Zwalm, Meilegemstraat, Oude Scheldestraat, Belgium.

**Date:**  
Performance and transmissions will be on April 26th between 12:30pm and 17:30pm CEST.

- GPS coordinates:**
- The iSémaphore: N 50 54 8.8, E 3 41 43.4
  - Relay station: N 50 54 12.7, E 3 41 24.3
  - HF transmission: N 50 59 38.9, E 3 39 35.6

**Transmission Radio Frequencies:**  
ON1PHD / ON6MS in CW/morse on

- 84,22m = 3,565.00 ± 1kHz and
- 21,33m = 14,065.00 ± 1kHz

**Twitter:** @The\_iSemaphore

- Websites:**
- <http://PhilippeDruetz.be/iSemaphore>
  - <http://FaceBook.com/iSemaphore>

**IT Technology and programming:**  
Arduino™, littleBits™, C++, Python

- Thanks to:**
- Academy of Visual Arts, Ghent
  - ON6MS @ JO10TX
  - AVME Pro Facilities, Oostende
  - Everyone who bought a lottery bill!

## THE ISEM CODE BOOK

The iSemaphore Project is Open Source and Creative Commons, so here is the codebook (version ISEM.15A) and protocol for the geeks. The iSemaphore can produce 125 different signs. Most of them are readable ASCII-characters. Some are extended UTF-8 characters (not good for Morse-code). The other signs are communication protocol and special commands. 134 - 144 are reserved for future use.

SYMB	DEC	QUIN	SYMB	DEC	QUIN	SYMB	DEC	QUIN
NOP	0	000	NULL	50	200	0	100	400
a	1	001	A	51	201	1	101	401
b	2	002	B	52	202	2	102	402
c	3	003	C	53	203	3	103	403
d	4	004	D	54	204	4	104	404
e	5	010	E	55	210	5	105	410
f	6	011	F	56	211	6	106	411
g	7	012	G	57	212	7	107	412
h	8	013	H	58	213	8	108	413
i	9	014	I	59	214	9	109	414
j	10	020	J	60	220	TAB	110	420
k	11	021	K	61	221	CR	111	421
l	12	022	L	62	222	LF	112	422
m	13	023	M	63	223	CLX	113	423
n	14	024	N	64	224	BOM	114	424
o	15	030	O	65	230	EOM	115	430
p	16	031	P	66	231	CLA	116	431
q	17	032	Q	67	232	TEST	117	432
r	18	033	R	68	233	CHKS	118	433
s	19	034	S	69	234	BEEP	119	434
t	20	040	T	70	240	RDY	120	440
u	21	041	U	71	241	CAN	121	441
v	22	042	V	72	242	RST	122	442
w	23	043	W	73	243	EXE	123	443
x	24	044	X	74	244	SEND	124	444
y	25	100	Y	75	300			
z	26	101	Z	76	301			
-	27	102	.	77	302			
+	28	103	,	78	303			
*	29	104	;	79	304			
/	30	110	:	80	310			
=	31	111	!	81	311			
	32	112	?	82	312			
@	33	113	SMS	83	313			
&	34	114	URL	84	314			
"	35	120	SKYP	85	320			
'	36	121	TWIT	86	321			
\$	37	122	BOOK	87	322			
%	38	123	PAGE	88	323			
(	39	124	LINE	89	324			
)	40	130	LANG	90	330			
<	41	131	QCDE	91	331			
>	42	132	é	92	332			
_	43	133	ê	93	333			
			è	94	334			
			ç	95	340			
			à	96	341			
			û	97	342			
			ö	98	343			
			ß	99	344			

**ISEM.15A PROTOCOL**

Standard txt msg: (NOP) (BOM) (A) ... (EOM) (SND) (NOP)

Message book reference: (NOP) (BOM) (BOOK) (A) ... (PAGE) (A) ... (LINE) (A) ... (EOM) (SEND) (NOP)

Q-code: (NOP) (BOM) (QCDE) (A) ... (EOM) (SEND) (NOP)

Backspace (only oncel): ... (A) (CLA) (A) ... (EOM) (SEND) (NOP)

Delete an entire msg: ... (A) (CLA) (EOM) (SEND) (NOP)

Execute script: (NOP) (BOM) (EXE) (f;c-name) (l) (param-value) (j) ... (EOM) (SND) (NOP)

Checksum option: ... (CHKS) (#...) (EOM) (SND) (NOP)

Scripts are executed on the relay host station  
A = type A character or sign #... = number