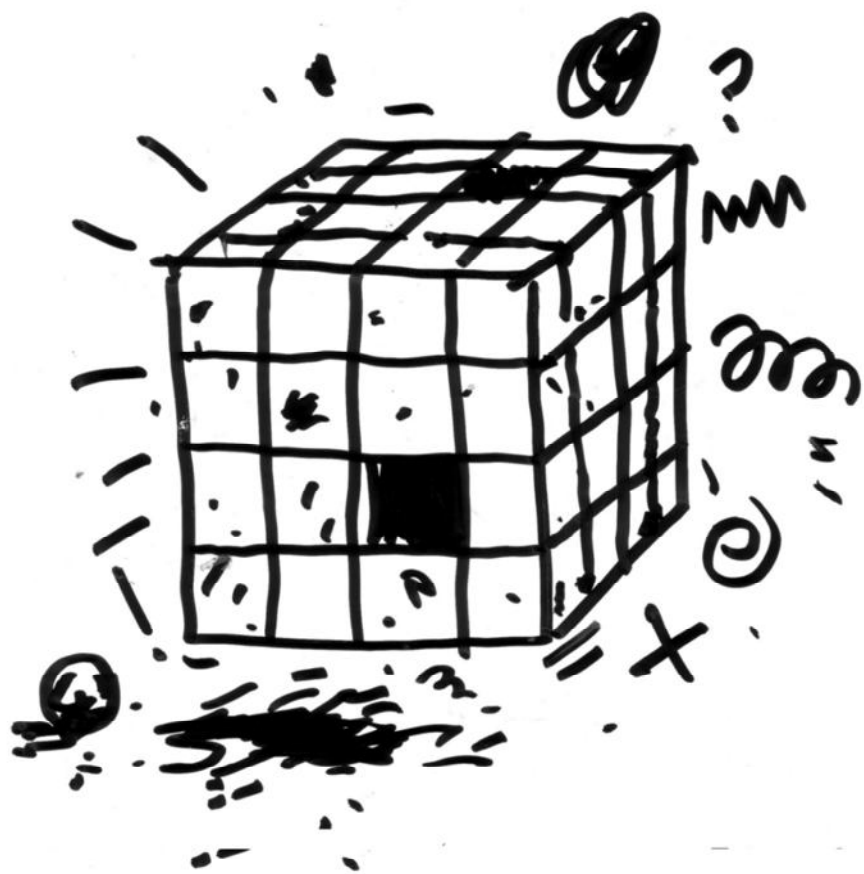


AUTOSOMATIX

PROGRAMMING WITH GRWLIXES



MARC VON ELBURG 013

Introduction

Grawlixes; also known as Emanata, Symbol-swearing, Obscenicons or @&\$#! pop up in cartoons when a character is expressing anger, frustration or agitation. There are many contradictions surrounding Grawlixes. They are used to replace profanities and to escape censorship laws, but they are also used in countries where censorship or taboo are not an issue.

Not only do they appear where a character curses, the same shapes also appear when someone is sick, feels pain, experiences dizziness, confusion and on many other occasions.

This zine will try to clarify some of the confusion and show what Grawlixes are and when and how they come to be.

I don't consider myself to be a cartoonist. I have drawn a few trashy underground comics, but I mostly draw zines filled with some kind of half-controlled, abstract, expressive, action-based line drawings. I got interested in Grawlixes because they seem to be something close to that, namely; abstract expressive line drawings that represent some kind of action.

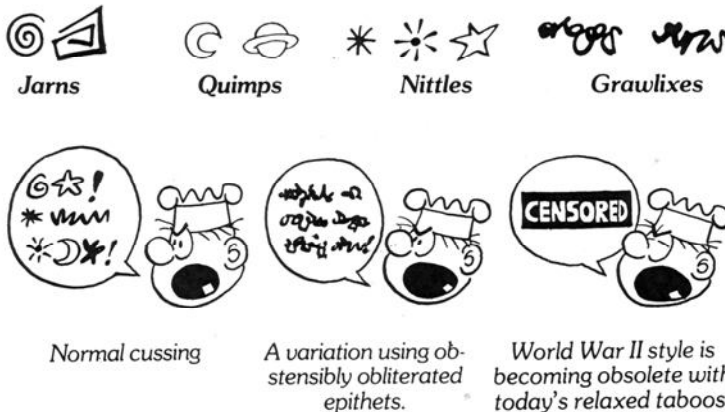
In a follow up to this zine I will demonstrate how the study of Grawlixes can be meaningful for this kind of drawing.

Grawlixes

The term Grawlixes was first used by Mort Walker, the creator of Beetle Bailey, in an article called “*Let’s get down to Grawlixes*” (1964) and in the *Lexicon of Comicana* (1980).¹

The *Lexicon of Comicana* is a cartoon-style taxonomy of universal symbols, signs and visual effects used in cartoons.

In the *Lexicon*, Grawlixes are listed as a subgroup of so-called ‘Maladicta’.



The Lexicon of Comicana, Mort Walker. (1980)

Walker distinguishes several of these Maladicta and describes them as creative and acceptable substitutes for profanities that help to convey a strong emotion and add color and dimension to a personality.

There have been several attempts on the web to rename and redefine this group (Obscenicons, Profanicons, Crudicons), but Grawlixes is the term that seems to be used most frequently.

The Wikipedia page(2014) defines Grawlixes as;

“*typographical symbols standing for profanities, appearing in dialogue balloons in place of actual dialogue.*” Because it has a nice comic-like sound I will use ‘Grawlixes’ when I refer to the general group of symbols used in cartoons that appear in relation to cursing, agitation, sickness, confusion etc.

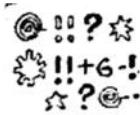
The *Lexicon* points out that there are different ways to use Grawlixes, but it does not explain why specific shapes appear more frequently than others.

In spite of increasing alternatives some of these shapes remain unaltered over almost 100 years and are still used by cartoonists worldwide. The same shapes also appear outside of cartoons for example in emails (@#*!) and on the web, in fonts and emoticons.²

(@★❄!)



Binnacle jim (1904)



Bringing up father (1919)



Gaston (1969)



A Grawlix font (2007)

This zine will show that there are significant similarities between the shapes of Grawlixes and the nature of the experience that make them not just arbitrary and creative substitutes for profanities, but fundamental patterns of behavior, that have a lot to say about the very nature of cartoons and drawing.

The article “Grawlixes Past and Present” by Gwillim Law has been a very useful resource for the study. It includes 151 early French and American examples of Grawlixes dating from 1909 to 1977 containing about a thousand characters.³ Gwillim Law also refers to the website *chronicling America* as an excellent resource for early comics.⁴

These are the most common, with the number of times they appeared in the list;

! 280	* 40	oo 24	
★ 157	? 36	☀ 23	☠ 9
@ 80	-- 36	☀ 21	☪ 5
44	# 33	⊙ 12	

According to Mort Walker’s definitions they are not just Grawlixes, but a mixture of different ‘Indicia’.

Movement

To prove that the relationship between the shape of Grawlixes and the nature of the experience is not arbitrary, this zine will argue that Grawlixes are actually traces of movements that provided a general structure for mental operations. To do this, it starts with the premise that *feelings and emotions are movements*.⁵

This can be observed in the Lexicon of Comicana when you look at what Walker calls Sphercasia and Emanata:

1. Sphericasia



2. Emanata



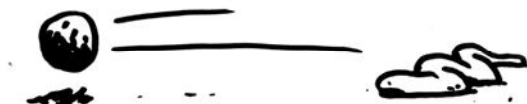
You can see from the Sphericasia that motion in cartoons is made visible by a line *following* an object.

When you look at the Emanata you see similar traces emerge *from* the object and therefore these must somehow be produced from motion inside the object.

What moves an object internally?

Objects can be moved in two ways;

1. Directly; when a cartoon-character sees a snake and runs, that movement is visible in a trace following the character to its new position.



2. Indirectly; when that same character freezes and the urge to run is suppressed. Its position does not change but the trace shows that the character is moved by the presence of the snake.⁶



A trace is a record of a succession of moves in time (---).

Running (or in the case of these rocks, some kind of 'internal rocket booster') is a sequence of bodily movements; you get up, put one foot in front of the other and start running.

Once you know how to run, you no longer think about it, it has become a routine.

When a motor program is performed several times, it becomes automatic and continuous (an 'automatism'), and simply runs on the background.

Motor programs

Walking or riding a bike, once learned, doesn't require attention or deliberate action to control. It is an automatic motor program that runs on its own.

Most motor programs have a similar structure:⁷

- start
- action
- goal

For example when you learn to walk.
First you learn your first step forward:

start –step forward –(goal)

Then you can discover that walking is an ongoing series of similar moves,

- start
- action action action
- goal

start-step forward step forward step forward-(goal)



The goal is the completion of the program.

Once learned, walking itself is no longer a goal. You know how to do it. It has become a routine, an automatic motor program. There is no need thinking deliberately about every cycle. Paying attention is effortful and the energy can be used somewhere else.

(Repeat forever)

- action

...rwardforwardforwardforwardforwardfo...

An automatic motor program produces a single continuous action. Therefore it can be represented as a repetitive loop; the start and the goal are connected so the action simply continues for ever.

Consequently, the continuous action of the program itself, is a movement (Sphercasia) that leaves a closed trace.



(Complete-a-tron)

Mental operations

In this example of Thimble Theatre the character (Olive) uses a structure for reasoning that is similar to a motor program.

GOOD GOSH-HE GETS MY GOAT-
HE'S BEEN WORKING ON THAT
EXPLOSIVE FOR TWO MONTHS

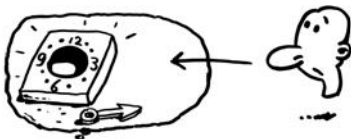


REPROVED, 1988, BY KING FEATURES SYNDICATE, INC.

The Thimble Theatre, E.C. Segar.(1920)



Bodily movements precede mental operations and therefore programs used in motor-control can also be used to reason about events and actions.⁸



Olive's mental image of Ham Gravy is moved towards the image of a broken clockwork. Their unification within a single thought-balloon (Ham Gravy = broken clockwork) is the completion of the program.

You reason *towards* a conclusion, the urge to complete the program comes from the relieve it brings.

It will no longer be effortful and the energy can be used for something else: Enlightenment and illumination.



Hence, most of what we see inside a thought-balloon are those activities that *need* attention.

Background Programs

Like some movements, many concepts are also continuous.

For example; ‘the sky is blue’.

You’ve seen it so often that you automatically *assume* it is like that- always.

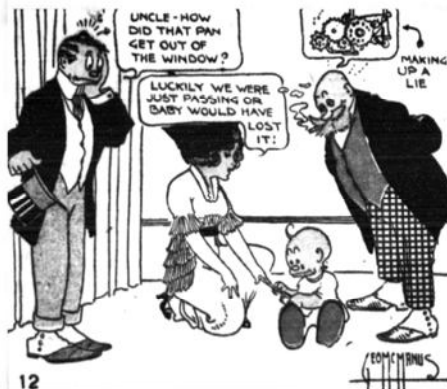
It runs on the background, and you will not see thought-balloons filled with all these ‘facts of life’.

When a concept operates in the background, it is not visible in the cartoon. That doesn’t mean that its gone. It is just an effortless loop that runs on its own and doesn’t need special attention to do so.

This is why normally you would not see a characters’ “thinking mechanism”.

You always think and therefore you no longer think about it.

However; when thinking is effortful, the mechanism of thinking comes to the foreground.



Their Only Child, George McManus (1914)

Cut

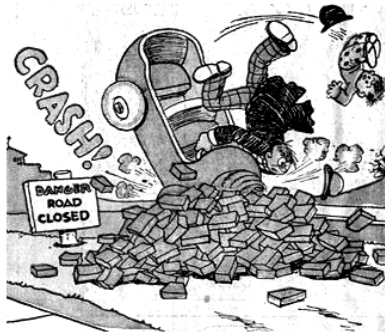
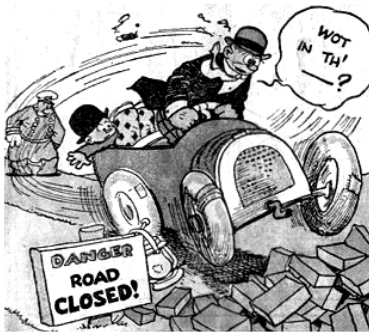
What brings a background program back into attention?

The difference between effortful programs and an automatic background-program, is that an automatic background program -like for example the program governing breathing- does not move towards a goal.

It is a program without a notion of completion (stopping, as in holding ones breath is quite different from completion).⁹

A program that is not completed is a program that is open-ended.

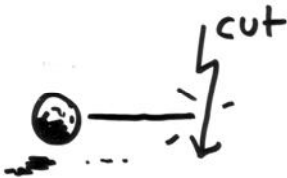
For example, when an unexpected roadblock causes your car to crash; driving stops, but the ride is not completed.



Moon Mullins, Frank Willard (1925)

Crashing follows driving but is not the completion of driving.

The crash is conceptualized as the *cutting-off* of driving.



This sudden cutting-off a continuous program may be a crucial determinant for the shapes of Grawlixes.

Many Grawlixes consist of basic repetitive patterns.

Therefore it is not unlikely that they were run by some kind of automatic program. And if this is true, it should be relatively easy to translate these into simple *executable* instructions.

Here are some examples of common Grawlixes .



(repeat) forward curve, forward curve(-1)



(repeat) forward angle, forward angle(-1)



(repeat) forward curve(-1)



(repeat) forward curve, forward curve, forward curve curve



(repeat)
forward horizontal
forward vertical



(repeat) forward random, curve random

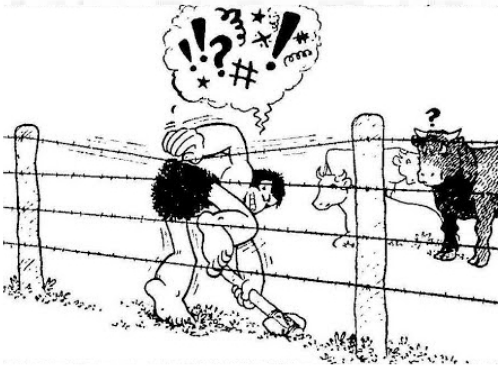
These examples illustrate how Grawlixes can be produced by basic iterations and therefore could be traces of some kind of automatic, repetitive motion. Some examples:

An authority figure suddenly cutting the program of driving.



Spirou et Fantasio, Franquin. (1961)

A cut-off background routine means you were moving smoothly without thinking about it, but this is interrupted by something outside of your attention.



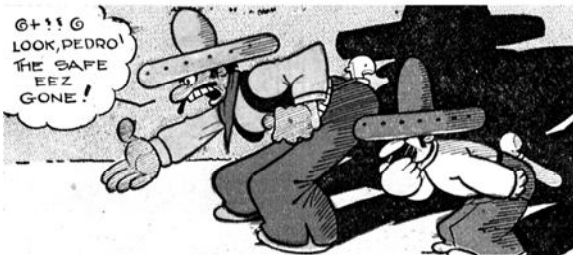
Alley Oop, V. T. Hamlin. (1939)

An unexpected phone call interrupting a nice relaxing bath.



Tintin: The Red Sea Sharks. Hergé. (1958)

A cut-off background concept means something that was there all the time is now suddenly gone.



Felix the cat, Otto Messmer. (1930)

Like, when the assumption you had some cash is suddenly cut-off .



Bring up father, George McManus. (1919)

Appearances can easily become background concepts.

You get used to the way the world looks, but the assumption that the world is a stable place fails when the familiar unexpectedly changes shape.

The line of thought you took for granted is suddenly cut-off.

Grawlixes emerge, confidence turns into suspicion and maybe even a sign of paranoia because after all; can you still trust your own mind?



The Narrative Corpse, Mary Fleener (1995)



(Mort walker)

Life itself is a program that is never completed. But because it is like that- always, it is usually a background concept (makes it easier to live).

Sometimes that incompleteness is deliberately ignored when a character likes to show-off that he has got everything under control. In that case the complete-a-tron itself becomes visible!

DEFINITION

At this point it is possible to define a new category of 'Basic Grawlixes'.



Definition:

Basic Grawlixes are traces of an automatic background program that was suddenly cut-off by an unexpected event.



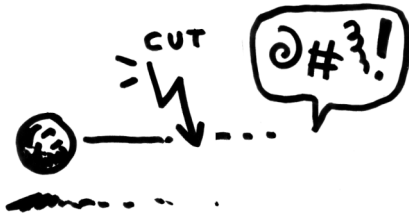
Mickey; lost on a desert island. (Walt Disney, Ub Iwerks, Win Smith 1930)

Why doesn't the trace end when the activity stops?

Basic Grawlixes *follow* action.

The program was conceived as automatic and continuous and therefore it was outside of attention.

The activity stops, but the trace continues *until* the character becomes aware that it is no longer automatic.



Basic Grawlixes are a kind of *phantom motion*.

When a person loses an arm or a leg in an accident, the brain-structure related to the limb is not cut-off, and the *sensation* of the leg or arm often remains as a 'phantom limb'.

In the cartoons a similar effect occurs after the loss of the automatic continuous element of the motion.

This is not unlike the mechanism behind the 'first fundamental law of cartoon-motion' which states that;

Any body in space will remain suspended in space until made aware of its situation.¹⁰

It shows that for background concepts (all swans are white) this law is just as true in real life.



Wile E. Coyote and The Road Runner, Chuck Jones.

Scribbles

Sometimes Grawlixes look like meaningless, unreadable handwriting or primitive scribbles.























The Thimble Theatre, Segar E.C. (1926)

In 1967, Rhoda Kellogg published an archive of c. 8000 drawings of children ages 24–40 months.

Kellogg describes the very first development of children’s drawings as a sequence of basic shapes or forms and their configurations: starting from twenty ‘Basic Scribbles’, which can be observed at the age of two.¹¹

These Basic Scribbles match several of the Basic Grawlixes.

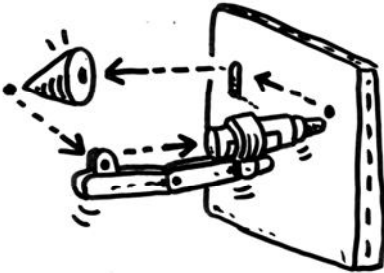
	Dot		Roving enclosing line
	Single vertical line		Zigzag or waving line
	Single horizontal line		Single loop line
	Single diagonal line		Multiple loop line
	Single curved line		Spiral line
	Multiple vertical line		Multiple-line overlaid circle
	Multiple horizontal line		Multiple-line circumference circle
	Multiple diagonal line		Circular line spread out
	Multiple curved line		Single crossed circle
	Roving open line		Imperfect circle

'20 basic scribbles' Kellogg R. Analyzing Children's Art, Mayfield Pub Co (June 1970)

Scribbles are early reflexive efforts of a child to coordinate sensor-motor activity.¹²

They make visible the first steps towards thinking, the use of logic and the coordination between means and ends.

(kids have not yet completely mastered motor control and therefore are not very good at making Complete-a-trons)



Exercising automatic motor programs *IS* coordinating means and ends. Scribbling restructures the sensor-motor program, while *at the same time* scribbles record the effect of the sensor-motor program on drawing (i.e. eye-hand coordination).



Their resemblance to scribbles confirms that Basic Grawlixes precede mental operations.

And much like early scribbles, Basic Grawlixes are not directed towards an external goal.

Basic Grawlixes are like scribbles, however most Basic Grawlixes demonstrate more motor control than scribbles. This will be because they are not produced by 2 year olds, adults rarely lose *all* control after an unexpected event.

○ ← SKILLED PROGRAMMING

Scribble-like Grawlixes operate in a domain between the cartoon-character and the artist.

Many drawing-skills, such as drawing a closed circle, have become background routines. But when the logic of a story unexpectedly cuts a line, it brings the background program back under attention.

And when a trace *continues* after its program was obstructed, the artist may even temporarily feel he lost control over all sensor-motor coordina*()@#?!?!)

(Suddenly cutting-off a program can also be a useful gimmick, one that makes Grawlixes especially frequent in one page comics and comic-strips).

Cursing and censorship.

Censorship laws and religious taboo restricting the use of profanities and cursing led to a variety of creative alternatives.¹³

As a form of protest: Bring the censor itself under attention.



Salesman Sam, George Swanson. (1929)

Instead of cursing, say curses.



Hairbreadth Harry, C.W. Kahles. (1922)

Saying it so no one can see the difference, 'bleeping it' like a straight line.



The Thimble theatre, E.C. Segar. (1920)

Grawlixes appear after the path of an automatic background motor program was cut-off. Grawlixes also appear where a curse is cut from an utterance by a censor. Hence the curse must be an automatic background motor program. And because words are 'mental things' and motor programs provide the structure for mental operations; *Grawlixes do not replace cursing but underlie cursing*. They are what remains after the unlawful element is removed from the curse by the censor!

In which way do Grawlixes manifest in curses?

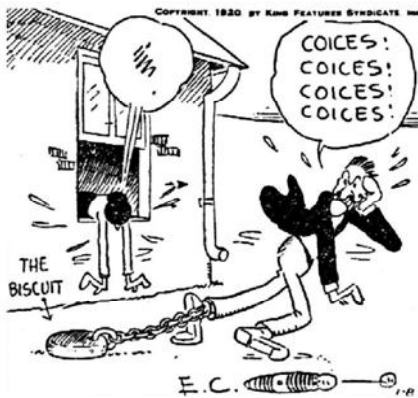
Like Grawlixes, curses consist of a motor component and an emotional component that operate more or less automatically.¹⁴ Basic Grawlixes are continuous, repetitive or self-replicating patterns of behavior. However, unlike a sentence that is a sequence of words that move towards a conclusive point, a Basic Grawlix is a single unit that moves indefinitely.

...K F U C K F U C K F U C K F U ...

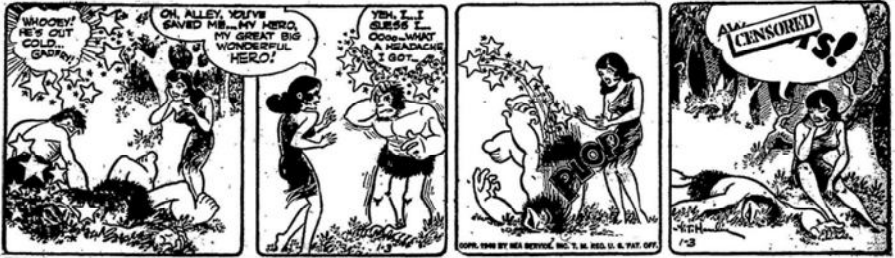
Or as a single, stretched

Fuuu →

Censorship laws and Taboo cut-off the utterance of swearwords, and because uttering swearwords is an automatic background routine, Grawlixes appear.¹⁵



The Thimble theatre, E.C.Segar. (1920)



Alley Oop, V.T.Hamlin (1948)

Expectation activates an automatic background routine (“I assume that we will have sex”) that is cut-off because the partner faints, The program comes to the foreground as an automatic curse that is in turn cut-off by censorship rules.



Punctuation marks.



Punctuation marks like dashes, ellipsis, exclamation marks and question marks can be found in most Grawlixes.

Punctuating *is* motor control;
it controls how you read, like traffic signs control how you drive.¹⁶
Punctuation tells you when to-

- . Stop
- , slow down
- ; switch gear
- : take a detour
- and fade out ...



The Katzenjammer Kids, Rudolph Dirks. (1909) ¹⁷

Suddenly cutting off a continuous activity is like writing a point in the middle of a sentence. The sentence is brought abruptly to a halt. However, the trace (story line) continues automatically and effortlessly on the background, and -unless brought to attention- anticipates a complete sentence and will not be stopped by a simple point.

Physically; you took a big breath for a long sentence that is suddenly cut in the middle. The sentence stops, but the surplus of breath prompted by the anticipation of a continual program needs to ventilate.

Mentally; it is hard to accept the unexpected halt when you're in a 'flow'.

The exclamation mark is by far the most frequent symbol in Grawlixes. It marks the involuntary return of the cut program back into attention :“What th- ---!?” (here followed by a -where-did-that-come-from?- question mark (Interrobang))

Motor-control + Attention

Grawlixes often seem to balance somewhere between involuntary ejaculations and targeted, cunning gestures.

With total control and complete attention Grawlixes can be deliberate, strategic and creative.

But most cartoon characters are not masters of their universe.

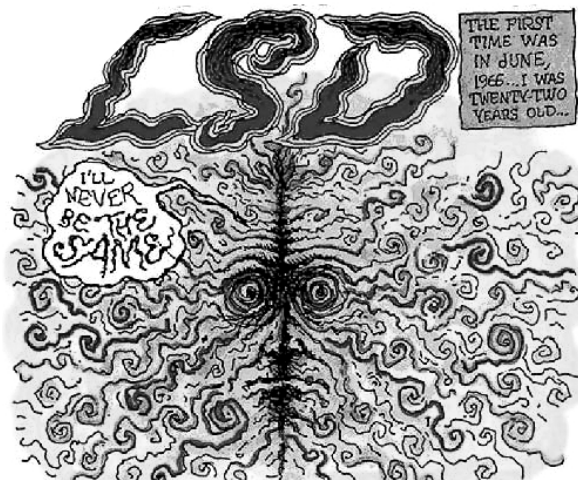


the effects of differences in motor control and attention on Basic Grawlixes.

If attention and motor-control structure Grawlixes; what happens if attention and motor-control *themselves* were suddenly cut-off? Would Grawlixes still pop-up in the picture frame?

1.Intoxication

When some chemical agent cuts-off the automatic motor program, while at the same time immobilizing attention and motor-control, Grawlixes enter the realm of the cartoon unmediated and play the senses like an involuntary cinematic experience.¹⁸



Robert Crumb

Without the mediation of attention and motor-control, Grawlixes occupy the entire space of the cartoon. Clearly these are more than just typographical symbols.



But slowly, Dr. Hofmann's fear-based experience changes into a more enjoyable display of colorful, flowing mental imagery.



* The sense of experiencing one's own death is sometimes reported as a mystical component of an LSD voyage.

Chemical Salvation, Jack C Trick (2006)

2. Subjection.

Using a speech-balloon for communication indicates a certain degree of executive control. When the influence of motor-control and attention decreases, the boundaries of the speech-balloon dissolve.

In this Chinese example where Old Master Q needs an injection, Grawlixes appear outside a balloon but do not effect the environment of the cartoon like LSD does. The fact that Grawlixes don't take over completely implies that -even though motor control is cut-off because the character is doing something against his will, and his attention is distracted by pain or fear over the injection- he is still making an effort to keep in control and trying to keep his head straight.



Old master Q, Alfonso Wong. (2004)

It is another example of how motor programs structure mental operations and the traces of a cut background routine come to the foreground automatically.

3. Prevalence

Sometimes certain shapes show a prevalence for certain situations.

For example; stars for pain or spirals for dizziness.

This ‘input-output’ example of Wash Tubbs illustrates the differences between involuntary experience on the left (stars for pain) and the automatic expression of that experience on the right.



Wash Tubbs & Captain Easy, Roy Crane. (1933)

4. Automatic involuntary Ejaculations;

In this example by Franquin, Grawlixes *do* appear inside a speech-balloon but punctuation is absent (except for exclamation marks).



Spirou et Fantasio, Franquin. (1961)

The driver’s background routine is cut-off , Grawlixes appear under attention but not under control.

The sudden break unexpectedly cuts-off the routine of driving. The cut is followed by a reflex.

A reflex is not something you control, it is an automatic involuntary response to a situation.

As a consequence, traces of the program project directly inside the balloon ----- unorganised.

(notice the 'aaahh!' of the bystander that is also a trace of a cut background program)

5. Cunning.

At its optimum, attention + motor control is not an automatic mechanical routine, but a deliberate, strategic and creative organiser.¹⁹

It allows Grawlixes to be restructured inside a balloon according to the laws of causal logic, and thus enable a variety of intentional and well targeted expressions.



Asterix and Cleopatra, Goscinny & Uderzo. (1965)

things did not go as planned and we're not happy about this, and some cleverly placed Grawlixes will make this point perfectly clear.

Representations.



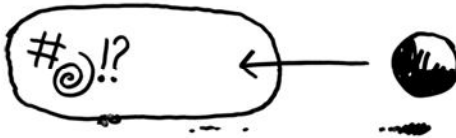
(Asterix)



(Agent 212)

Basic Grawlixes often appear in the company of images like thunderclouds, skulls, explosions, snakes etc.

To find out more about their relation, this chapter compares several examples from the illustrations used in this zine to the shape, movement and goal of some Basic Grawlixes.



- **Shape;** *do they look the same?*
- **Movement;** *do they move the same? (Basic Grawlixes represent general, objectless, automatic, repetitive and selfsimilar movements)*
- **Goal;** *are they goal directed? (Basic Grawlixes are not goal directed)*



A pig

A pig has a distinct shape and a character of its own. The shape of a drawing of a pig varies and depends on the skills and styles of the artist. A pig doesn't move automatically or repetitively like a machine. A pig has goals like surviving and reproducing.

A pig is an animal not a process. At first sight the image of a pig does not share any properties with the shape, movement or goal of Basic Grawlixes.

However, even though the pig itself is not a background concept, a pig is often seen as dirty because it likes to roll around in mud. For most people dirt *is* a background concept that they prefer under the carpet and out of sight.

In English, saying ‘pig!’ is a curse. It is a single unit like ‘fuck!’ but it cannot be permuted into a repetitive motion sequence because it is not a verb.

Pig is an English curse, the Dutch word for pig; ‘var-ken!’ has two syllables and is therefore less suitable for automatic utterances. It is sometimes used as a kind of ‘name-calling’ but not as frequent as pig in English.

Matches for pig.

- **Shape;** *no*
- **Movement;** *no: A pig moves intentionally. His motions are not objectless motions and the word ‘pig!’ is not a verb.*
- **Goal;** *no: A pig has goals, and name-calling is always directed at someone.*

The image of a pig only has secondary matches to Basic Grawlixes by its reference to the English word pig or to the bad quality dirt.



A thunder cloud

A thundercloud is a turbulent and dynamic natural phenomenon that is visible as a dark heavy cloud with sudden outbursts of lightning.

For most people the weather is normally perceived as a background program. Extreme conditions like heavy thunderstorms bring the weather to the foreground of attention.

- **Shape;** *yes: A black cloud resembles a scribble of multiple overlaid circling lines and the shape of lightning resembles the zigzag shape of some Basic Grawlixes.*
- **Movement;** *yes: Turbulent rotating objectless motions and sudden zigzag patterns of lightning.*
- **Goal;** *yes: Thunderstorms are not goal directed, they behave erratically.*

A thundercloud shares several properties with Basic Grawlixes. The weather is a kind of objectless trace of an automatic background program. It is a product of natural forces. It is un-deliberate, continuous, and normally outside of attention. Lightning is an unpredictable event that can be dangerous and cut-off a routine.

In all the resources used for this zine thunderclouds outnumber pigs, suggesting they are better fit for the occasion. This is confirmed by the matches above. Thunder Clouds have multiple matches on all dimensions and pigs only have secondary matches.



Because the image of a thundercloud has structural and semantic similarities with some Basic Grawlixes their relationship is automatic and effortless. The relationship between the image of the pig and the image of Basic Grawlixes is based solely on semantic similarity. Establishing such a relationship is an effortful mental operation based on knowledge and therefore it will probably only be used in strategic and deliberate curses.

Some more examples;

(The arrows indicate the direction of the operation. Basic Grawlixes are motions that were a part of the structure of mental operations. That means that Basic Grawlixes are part of the structure of the arrow.)

Therefore, first: Basic Grawlixes have to follow from bodily action.

Then: External representations can be mapped onto the Basic Grawlixes)



- **Shape;** *yes: The image of a typhoon matches the shape of some Basic Grawlixes*
- **Movement;** *yes: A typhoon is the product of an objectless motion that spirals round and round at very high speed.*
- **Goal;** *yes: A typhoon does not move towards a specific goal.*

The physical experience of drawing a line spiralling round and round at very high speed resembles the ‘manic’ nature of a typhoon (having the spins). Like the thundercloud, it is an unpredictable break from the normal ‘climate’.



- **Shape;** *yes: The image of a moving snake matches the zigzag and waving line shapes of some Basic Grawlixes.*
- **Movement;** *yes: A zigzagging motion.*
- **Goal;** *no: Snakes are goal-directed animals.*

For most people, snakes bring to the attention the background concept of fear. You call someone a snake when you want to point out that they cannot be trusted. A Basic Grawlix is a motion that does not move towards a target, but even though something looks and moves like a Grawlix, its always good to make sure it doesn't find a target in you.



- **Shape;** *yes: The image of an explosion matches the shape of one or more Basic Grawlixes.*
- **Movement;** *yes: An explosion is a fast, objectless outward motion to all sides.*
- **Goal;** *yes: Explosions themselves do not move towards a goal. They move away from a centre. Like Grawlixes their motion runs automatically but maybe used strategically.*

The object of the bomb does not match the shape or action of Grawlixes. The presence of the bomb does provide a possible *explanation* for the explosion and therefore also for Grawlixes. It refers to an object or cause *that is no longer there.*



A skull and crossbones

- **Shape;** *yes. The crossbones match the shape of some of the crosses of Basic Grawlixes.*
- **Movement;** *(..) Crossbones are not movements, but in this case that may just be the point.*
- **Goal;** *(..) Crossing lines mark the end of the automatic continuous line. A crossroad demands a conscious decision. Crossbones sometimes mark a goal, such as the location of a treasure. Death is the end of all goals.*

The background concept of death is brought under attention by the cross and the bones.

A cross is a crossing through, it is censorship, rejection.

The crossbones often appear in combination with a skull. The skull does not share movement or shape with Basic Grawlixes. However, because the skull and bones are both part of the same whole (the character), that is the source of the cross, the metaphorical link is automatic and effortless. The skull provides a possible explanation for the unexpected cut by referring to the grim reaper, the down-fall and the illegal (pirates and warning signs). It is a reminder that says danger! beware! Your background concept will be cut-off. It brings into attention fear and the uncertainties ahead.

Again, it is the structural and semantic similarities, combined with all these layers of meaning, shifting effortless and continuous in both directions that make it such a popular representation for Basic Grawlixes.



Les Tuniques Bleues, Lambil & Raoul Cauvin (1985)

Conclusions

Grawlixes are traces and representations of automatic background programs that have been cut-off by an unexpected event. The unexpected cut breaks the routine. It changes automatic background programs into effortful operations and this brings them into attention.

Basic Grawlixes look like primitive scribbles, but Grawlixes also appear as verbal expressions and mental operations in speech and thought balloons and as involuntary senso-motoric experiences.

Curses are representations of cut automatic background programs. When a curse itself is cut by censorship laws or taboo Grawlixes will automatically appear.

Grawlixes don't replace cursing but are intrinsic to the operational structure of cursing.

When Grawlixes are organized inside a speech balloon and structured by punctuation they can be creative and cunning.

But when they are not, the character is no longer master of his own program.

Images used in Grawlixes provide possible explanations for their sudden appearance. The more structural and semantic similarities they have with Basic Grawlixes, the more frequent they appear in cartoons.



*Ratanplan, Morris, Janvier M.,
Fauche X., Leturgie J. (1992)*

The %&\$#?@ end of #1

Appendix I

Occult and foretelling

In comics, seeing stars often appear after the character receives a blow to the head.²⁰

It is as-if the unexpected hit provides you with a direct line to the universe. And once you're seeing stars why not comets, moons or saturns?

But in Grawlixes astronomical representations also appear in combination with more occult symbols.



It can be frustrating when routines are cut-off *all* the time. It could lead one to think that contact with reality is not optimal.

In ancient astrology planets were thought to be universal background programs that structure all motion in the universe.

The macrocosmic planets were attributed specific traces, and by imagining the traces it was possible to create a parallel microcosmic background concept that could foretell or even prevent future cut-offs.²¹



Astrological magic. Symbols from the Book Of Occult Philosophy²².

Many of those symbols related to the spirits used to conjure the power of the planets appear frequently in Grawlixes.



Thimble Theatre, E. C. Segar. (1928)

The presence of skulls in Grawlixes can be traced back to qualities attributed to Saturn.

Saturn is often represented as a man with a sickle cutting-off time. It was a blueprint for the Grim Reaper and the skull & bones of Baron Saturn(day).



Saturnine influences oscillate between mania and depression. It is the mental state of the melancholic character, cut-off from the positive influences of Jupiter and affected by too much black bile in the body.



Eightball number one, Daniel Clowes. (1989)

Background programs were synchronised with the motions of planets to prevent unexpected cut offs. When a cut-off *does* happen, the occult program is brought back into attention.

Notice the structural similarities with self-programming:

Bodily states resulting from some earthly influence (black bile) are attributed to mental or spiritual representations (Saturn) that can in turn be used to evoke those bodily states (the forces of darkness) when they come in handy.

ORBITS

Representations provide possible explanations for aspects of Basic Grawlixes. The orbit is a distinct feature of Saturn. Also, in cartoons, a blow to the head activates a variety of astronomical objects like stars, planets and sometimes even satellites that move in orbits around or near the head.



Gaston, Gaffes et gadgets., Franquin (1985) With auditory effects.

An orbit is a *gravitationally curved path of an object around a point in space.*²³ Within the analogy of ‘objects in space’, the Basic Grawlix is an orbit without objects, that was set in motion by an abruptly terminated activity.

The hidden gravitational element inspires an often heard excuse for the involuntary aspect of the rudimentary expressions that follow the cut routine:” I can’t help it, it is a force of nature!”.

It also provides a possible definition for the nature of the line that makes up a Basic Grawlix:

A LINE IS A PATH MOVED BY A FORCE THAT IS NO LONGER THERE.



Asterix in Spain, Goscinny & Uderzo (1969)

Appendix II

Almost none of the examples I have found of Grawlixes in literature come from alternative comics, superhero comics, manga or graphic novels.

I think this study explains why:

In superhero comics Grawlixes appear outside speech balloons as exaggerated superpowers and forces of nature. Anyone able to control them is either a superhero or a supervillain.

Like superhero comics, in manga most Grawlixes also appear outside speech balloons, but they also remain outside motor control and transform the environment of the cartoon.

It shows how the Japanese attitude towards the mechanisation of life differs from the west. A difference that is represented in the concept of 'Wakon yosai' (Western techniques Japanese soul) from the early 20th century. An attitude based on the buddhist tradition that advocated the absorption of the new modernist machineries rather than the externalisation. In manga, when the automatic functions of Grawlixes take over, they are not externally controlled in the closed container of a speech balloon but immediately and involuntarily effect the realm of the cartoon. It is the experience of the cyborg rather than the robot.



Memories, Katsuhiro Otomo (1994)

Graphic novels are to Grawlixes what emoticons are to Email; more emoticons means more alternative tools to avoid conflicts and stress.

Compared to one-page cartoons and comic strips, graphic novels have an increase of frames-per-action and therefore there is more time for the character to anticipate and deal with unexpected events.

And the very reason alternative comics are alternative, is that they deliberately put automatic background concepts on the foreground into attention.

Notes

¹ Walker, Mort. *The Lexicon of Comicana*, (iUniverse.com. 1980, 2000)

² Rene Goscinny and Albert Uderzo explain that cultural differences are just a difference in style but that the general shape is the same across borders.



Asterix and the Goths (1963)

³ Gwillim Law. *Grawlixes Past and Present* ;

<http://www.statoids.com/comicana/grawlist.html>

⁴ <http://chroniclingamerica.loc.gov/>

⁵ See Damasio, Antonio. Damasio, Antonio. *Descartes' Error: Emotion, Reason, and the Human Brain*, (Putnam Publishing, 1994) and *a Neural Basis of Emotions* (http://www.scholarpedia.org/article/Neural_basis_of_emotions) following the James Lange theory that states; we don't run because we are afraid but we are afraid because fear is one interpretation of why we run, the action precedes the emotion.

⁶ See also; Damasio, Antonio.(1994)

⁷ For motor program and the "Source-Path-Goal schema", see; Johnson, Mark. *The Body in the Mind: The Bodily Basis of Meaning, Imagination, and Reason*.(University Of Chicago Press (April 15, 1990)(pag.113) and Lakoff, G. Nuñez, R. *Where Mathematics Come From: How The Embodied Mind Brings Mathematics Into Being* (Basic Books, 2001)

⁸ Lakoff, G. Nuñez, R. *Where Mathematics Come From: How The Embodied Mind Brings Mathematics Into Being* (Basic Books, 2001) pag.35

⁹ Lakoff, G. Nuñez, R. *Where Mathematics Come From: How The Embodied Mind Brings Mathematics Into Being* (Basic Books, 2001) pag.36

¹⁰ O'Donnell's laws of Cartoon Motion (Esquire/June 1980)

URL= <http://remarque.org/~doug/cartoon-physics.html>

¹¹ See Kellogg, Rhoda. *Analyzing Children's Art* (1970)

(<http://www.early-pictures.ch/en/>)

¹² For Sensori-motor development see Piaget; Supsakova, Bozena. *Child's creative expression through fine art*; Ljubljana: Debora(2009) , for Piaget and Schemata see Johnson, Mark. *The Body in the Mind: The Bodily Basis of Meaning, Imagination, and Reason*.(University Of Chicago Press (April 15, 1990)

¹³ See; History of Comics Censorship, (<http://cblf.org/history-of-comics-censorship/>) (http://en.wikipedia.org/wiki/Comics_Code_Authority)

¹⁴ On cursing and emotion see also; Jay, Timothy. *Why We Curse, A neuro-psycho-social theory of speech.* (John Benjamins b.v. 2000)

¹⁵ Overheating: Often angry characters will have steam-clouds coming out of their head. The hydraulic metaphor: Solomon (2003) draws attention to the hydraulic metaphor of emotions. The idea that emotions build up inside us like steam in an engine. Crucially it is something that comes from inside and bursts forth, or is held stoically in check.



(Franquin)

The theory of Grawlixes shows that it is not the emotions that build up like steam, but that it is the processing of a motor-program trying to keep Grawlixes running (fuckfuckfuck) as-if they still are a background program (fucking) that heat up the system

¹⁶ See also; Truss, Lynne. *Eats Shoots & Leaves. The Zero Tolerance Approach to Punctuation.* (Profile Books Ltd. 2003)

¹⁷ This Katzenjammer kids example was taken from an article on www.languageblog.net. (Ben Zimmer. *Obscenicons a century ago*)

¹⁸ Basic Grawlixes that appear outside of attention and motor control are also known as 'Phosphenes'. A sudden blow to the head, migraine and epilepsy, intoxication, drugs and pressure on the eyeball can all cause visual distortions.

The geometric patterns people experience share general qualities that are similar to several Basic Grawlixes.

These so-called Form-constants are;

1. lattice, (or grating fretwork, filigree, honeycomb).
2. cobweb figure.
3. tunnel (or funnel, alley, cone, vessel).
4. spiral.



The difference between Form-constants and Grawlixes is that Basic Grawlixes are not just visual or perceptual experiences but can also be communicated. They are traces of movement that can besides influence the senses also structure thought and speech.

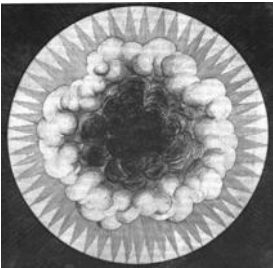
People see Phosphenes and the fact that these look like basic Grawlixes could indicate that people memorize movement in a way similar to how it is represented in cartoons!

URL= <http://www.math.utah.edu/~bresslof/publications/01-3.pdf>

¹⁹ Dr. Timothy Jay refers to automatic cursing as ‘non-propositional cursing’ and deliberate cursing as ‘propositional cursing’. Non-propositional cursing is automatic, reflexive and effortless and draws heavily on the abilities of the right hemisphere. Propositional cursing is not reflexive but strategic and creative. It is effortful because it uses more cognitive resources than automatic cursing and relies on syntax, semantics and logic.

²⁰ *Why We Curse, A neuro-psycho-social theory of speech.* (John Benjamins b.v. 2000)

²⁰ *Seeing stars is seeing phosphenes* See notes 18



²¹

Macrocosm, (Robert Fludd 1617)

See also; Raymond Klibansky , Erwin Panofsky , Fritz Saxl. *Saturn und Melancholie.* Suhrkamp (June 1, 1992)

²² Heinrich Cornelius Agrippa von Nettesheim. *4th Book Of Occult Philosophy* “(The manner of making characters)

²³ Wikipedia URL= <http://en.wikipedia.org/wiki/Orbit>

