

Appendix I: Tools Shortlist

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Note: This is a copy of the anonymised document posted 25 July 2018 on interactivenarrativedesign.org/authoringtools/appendix.pdf. It is kept here as a placeholder since its url has been cited in a conference paper. The difference from the original is limited to the addition of the author names above, and the current note.

The current project website is at interactivenarrativedesign.org/authoringtools/

Main overview

Real-time-animation\game engines

All-purpose game engines

1. Corona GUI
2. Construct2
3. CooperCube5
4. Clickteam Fusion 2.5
5. CryEngine V
6. Amazon Lumberyard (based on CryeEngine)
7. GameMaker Studio 2
8. GODOT Game Engine
9. LOVE
10. Ogre3D Game Engine
11. Panda3D
12. Playcanvvas
13. Unity (Plugins: AdventureCreator, Cradle, Danesh, Fungus, Tidy Text Adventures, Vive VR Toolkit, Yarn\Yarn Spinner, PSST – mixed-initiative)
14. Unreal (and Blueprint mode)
15. Source (and GoldSource)
16. Shiva

Genre-specific game makers

17. AdventureGameStudios
18. Adventjure (Clojure)
19. Bitsy
20. Bladecoder Adventure Engine
21. CANVAS + SWB (Story World Builder)
22. Chatmapper
23. Ensemble
24. Game Salad
25. ITY Studio
26. One-Roll Engine
27. RPG in a Box

28. RPG Maker MV (and the Degica 'make'r series)
29. Stencyl
30. TIC 80
31. Tinsel
32. ToonTastic
33. Versu
34. Visionaire
35. Wolf RPG Editor

Dead

Comme-il-Faut

Scribe

Interactive Drama Architecture

Storybricks Engine

Hybrid text + graphic tools

Visual novel authoring tools

36. Omega Visual Nover Maker
37. Kirikiri\Kirikir Z
38. NScripter
39. Ren'Py
40. RenJS
41. RLDev
42. TyranoBuilder

Dead

Novelty

Other hybrid tools

43. ADELENGINE\the Adilebrum engine
44. ASAPS – Advanced Stories Authoring and Presentation System
45. DreamPath
46. Episode
47. Expressionist
48. Adobe Flash(Flex, FleshDevelop, PowerFlasher, Scaleform GFX)
49. The Gamebook Engine
50. IDTesnion
51. K-Sketch

52. NLBB – Non-linear Book Builder
53. Pubcoder 3
54. Scratch 2.0
55. Story Canvas
56. StoryStylus
57. Tracery
58. TWorld\Seltani
59. Wide Ruled 2.0

Dead

Adapt3D + ABAS

Authoring environment for structuring non-linear narratives (Schneider & co 2003)

Bowman-Zocal (Domain elaboration framework)

Emoemma

ENIGMA

FearNot! (FAtiMA)

PriSM

Scenejo

(Visual) SceneMaker (SOAP)

StoryTec

Wayang Authoring Tool

Interactive Fiction tools

Hypertext

60. Adrift
61. Alan
62. AXMA Story Maker
63. ChoiceScript
64. Erasmatazz Encounter Editor
65. Fractive
66. GEM (by CELTX)
67. HUGO
68. INK
69. InkleWriter
70. Literatonic\Liteartronica
71. Ramus
72. Satu Text Game Maker
73. Squiffy
74. Storealis
75. Story EXPLORER
76. StoryLab (Adventure Cow)
77. StorySpace (Eastgate)

- 78. TUVI
- 79. Twine

Dead

Connecton Muse

Recontre

Parser

- 80. Alexa Interactive Adventure Tool
- 81. ChooseYourStory
- 82. CurveShip
- 83. DINE – Data-driven Interactive Narrative Engine
- 84. Hypedyn
- 85. Inform7
- 86. Vorple (Inform7 environment)
- 87. Playfic (Inform7 environment)
- 88. INSTEAD – Interpreter for Simple Text Adventures
- 89. Quest
- 90. Salet
- 91. Storycentric
- 92. StoryNexus
- 93. TADS
- 94. Tale
- 95. TextureWriter
- 96. Varytale
- 97. XVAN Text Adventure Authoring System
- 98. ZILF

Dead

Gadin

MOE

StoryTron\SWAT

SUDS

Undum

Racontuer (Undum extension)

Interactive video\documentary tools

1. Adventr
2. Conductrr
3. Creativsit
4. CtrlEdit\CtrlMovie
5. Explory
6. Exposure

7. FrameTail
8. InterludeTreehouse\EKKO
9. Korsakow
10. Klynt
11. MeoGraph
12. Metta
13. Odyssey
14. Pageflow
15. Popcorn Maker
16. RacontR
17. Rapt Media
18. StoryPlanet
19. ThinkLink
20. WireWax
21. Zeega

Dead video tools

Agent Stories

Djeouti

Jeherazade + HyPE

Hyper Hitchcock

AR\MR tools

1. AR-Core
2. ARis
3. ARKit
4. CHESS (personalized museum stories)
5. EDos
6. HoloKit
7. HP Reveal Studio
8. Mapxbox
9. _Motive.io
10. MR-IS – Mixed Reality Interactive Story-system
11. StoryScope (CURATE)
12. StoryPlaces
13. Voicemap
14. Wikitude Augumented Reality SDK

Sound Tools

15. IZI TRAVEL

16. Roundware

17. Voicemap

Dead

Art-E-Fact\Cyranus

BuildAR\ComposAR

“Immersive tools for tangible AR”

INSCAPE

MR-Based story composition tool

MuViPlan

StoryStream

UCreate

VR Tools

1. Cardboard Camera
2. Microsoft Holostudio
3. Microsoft Visual Studio
4. React VR (Facebook)
5. SceneVR
6. StorySphere
7. VivePort
8. VRDoodler
9. WebVR
10. Wonda

Dead

Acosas

Sub-lists

I. Academic tools

Definition: tools developed by academic\in an academic context.

1. ASAPS
2. CHESS (MR)
3. Curveship
4. Dine
5. EXPRESSIONIST
6. Hypedyn
7. IDTension
8. Korsakow
9. Story Canvas
10. StorySpaces
11. StoryPlaces (AR)
12. Tracery
13. Wide Ruled 2.0

Dead

14. AdventureAuthor
15. ADAPT + ABAS
16. Agent Storeis
17. ART-E-Fact/ Cyranus
18. Bowman/Zocalo
19. CrossTalk
20. DINAH
21. Dramachina
22. FearNot! (FAtiMA)
23. GADIN
24. Inscape
25. The authoring part of the IS engine
26. MOE
27. PRISM
28. Recontre
29. Scenejo
30. SceneMaker\Visual Scenemaker
31. SOAP (environment based on Scenemaker)
32. Scribe
33. Storybricks Engine
34. StoryStream
35. StoryTron\SWAT
36. StoryTec
37. U-Create

Academic procedural generation tools

38. Defacto

39. Thespian
40. The Virtual Storyteller
41. ISRST-IS
42. Mimesis
43. ACTAFFACT
44. DINAH - DYNAMIC, INTERACTIVE, NARRATIVE AUTHORIZING HEURISTIC
45. Fabulist\OpenStories
46. PaSSAGE
47. SayAnything

II. E-Learning Tools

Definition: List of tools usable in classroom\targeting children to facilitate development.
Only narrative-related tools are counted.

1. EDoS
2. Fate2
3. HP Reveal (Aurasama)
4. JabberStamp
5. Kudo
6. Narrative-Centered Tutorial Planning (Crystal Island)
7. Processing
8. Scratch 2.0
9. ShadowStory
10. Storytelling Alice
11. TaleBlazer
12. ToonTastic
13. TUVI
14. Voodoo

Dead

AHA

Heider-Simmel Interactive Theater

Interbook

Wayang Authoring

III. Gestural interface tools

Definition: tools that involve interaction through bodily gestures\input (beyond the typical mouse and keyboard\basic touchscreen interface).

1. Amazon Lumberyard
2. Cryengine
3. Microsoft Holostudio
4. Pubcoder
5. ReactVR
6. SteamVR
7. Unity 3D

Additional tools (don't fully meet IDN authoring tool definition\not in main overview):

Disney BCC system

Crystal Tools

" Generic framework for situated collaborative writing"

GearVR

GoogleVR

FingARtip

HNIM – Interaction Model Editor

Nintendo DEV framework\interface

Oculus

Wekinator

Dead

Assimilate

DEEPSPACE

VR Toolkit\VR Tuner

HIP Storytelling

InterFace Portrait

IV. Interactive Journalism tools

Definition: tools built with interactive journalistic storytelling in mind – facilitating either professional journalistic work, or amateur generation of journalistic content and non-fiction\documentary reportage. Interactive journalism is an area of growing interest and importance, argued by some to be capable not only of expanding the journalistic practice into interactive forms, but also, through this shift, of addressing many of the challenges traditional journalistic storytelling is faced with in cotemporary times (Van der Haak & co, 2012, anonymous). Interactive journalism tools are typically meant to supplement traditional journalistic stories with interactive content (see function-specific, below), ease the production of multimedia journalist stories), or facilitate the publishing, distribution and discussion of journalistic (multi)media in interactive ways (either via web portals or unique intergration with social media platforms). As such, most existing interactive journalism tools do not meet our full criteria for an IDN authoring tool. However, as production of journalistic and documentary stories in fully interactive form becomes increasingly commonplace, an increasing subset of IDN authoring tools is either centers on journalistic content, or (more commonly and in the case of many interactive video tools) treats journalists as an important subset of its intended userbase and takes care to structure itself as to support the creation of such content. This sublist includes tools of both types, though the function-specific tools list is highly partial at this point.

Included in overview:

Creativist (see video tools above)

Exposure (see video tools above)

Klynt (see video tools above)

RacontR (see video tools above)

VoiceMap (see audio tour AR tools above)

IZI Travel (see audio tour AR tools above)

1. EthnoAlly
2. StoryMaker
3. The Break Up (BBC)

Multimedia Journalism

3. Aesop Story Engine
4. Evrybit
5. FOLD
6. StoryForm
7. Sway

Function-Specific

8. Deepstream
9. INN Labs (Knightlab tools)
10. LocalFocus
11. SoundCite
12. Juxtapose
13. StoryMapJS

Interactive timeline tools

14. Similie Widgets: Timeline
15. TimelineJS
16. Tiki Toki
- 17.

V. Mixed-initiative authoring tools

Definition: author-centric story generation tools, where the AI generative system is meant to facilitate human authoring . Mixed initiative tools typically function either by working alongside the human, such as in the line-by-line authoring of Creative Help – or as platforms for generative AI authoring that are constructed to facilitate a high degree of customization, so that the human user pre-authors the process in a meaningful way (such as Tracery’s flexible grammar system). This list includes:

1. Authoring tools listed above with a strong AI generation component.

2. Tools that do not fully qualify as IDN authoring tools, but integrate mixed initiative in a meaningful way. The majority of these are mixed-initiative systems that facilitate the authoring of linear texts – but by intervening in the authoring process, they make the author’s creative experience, rather than the end-product\experience of the end-user, interactive.

In main overview:

See below for expansion (relevant category listed in parenthesis).

Bowman-Zocalo\DEF (Hybrid tools – dead)

Emohawk (Academic prototypes)

Enigma (academic prototypes)

Expressionist (Other hybrid tools)

IDTension (Other Hybrid Tools - Dead)

Korsakow (Interactive video)

MOE (Parser – Dead)

StoryBricks Engine (Game engines – Dead)

Story Canvas (Other hybrid tools)

Storytron\SWAT (Parser - Dead)

Tracery

Wide Ruled 2.0 (Other hybrid tools)

1. Automated Story Director\IN-TALE
2. Creative Help
3. CrossTalk
4. Dramatica
5. GADIN
6. MIL Story Writing Interface\Slogan Writing Interface
7. SayAnything
8. “Supporting human creative story authoring with a synthetic audience”
9. Tanagra
10. WordsAnime
11. WritingBuddy
12. "Authoring Tools Should be Mixed Initiative System"

VI. Web Portals

Definition: Web portals that facilitate either the creation of interactive or hybrid\multimedia narrative works via a browser-based IDE, the publication and personalized consumption of such (interactive consumption of hybrid, remixed linear media), or both.

1. Angular JS
2. ATAVIST\Creativist
3. Cowbird
4. Duckling (Blindspot)
5. Multipop
6. ReadyMag
7. Stampsy
8. Steller
9. Storehouse Storytelling App
10. The Written World
11. TILDA Publishing

The following 6 lists do not contain any tools in the main overview of IDN authoring tools, and are included, for various reasons, due to broader relevance to the field.

VII. Tool Prototypes\Under-development tools

Definition: Prototypes and beta systems that never developed into a fully operational authoring tools.

1. AdventureAuthor
2. DraMachina

Academic prototypes from IRIS project

“An Authoring Environment for Structuring Non-Linear Interactive Narratives”

“A Story Authoring System for Children”

“Authoring environment for ShapeShifting Screen Media Production”

AlPaint: a sketch-based behavior tree authoring tool

Dextor

DIRACT

EMOEMMA

EmoHawk

ENIGMA

Erasmatron

Tool presented in “From Debugging to Authoring: Adapting Productivity Tools to Narrative Content Description”

Generic framework for situated collaborative writing

LinearLogic

Mindstage

ScriptEase

Textable Movies

“(A) Toolkit for Authoring Non-linear Storytelling Environments Using Mixed Reality”

Video Puppetry

WeQuest

WordsAnime

AR\MR prototypes

Ingress Mission Creation Tool

Magic Bench

VR Toolkit/VR Tuner

Interactive video

The Break Up

Riders project tool prototypes

IEQUALSI

OpenEar

“EMERGENT NARRATIVE, DISTRIBUTED DRAMA MANAGEMENT”

C.VIII - Historical tools

Definition: This list includes tools released on or prior to 1998, organized by type (in accordance with the other lists in this project) and chronology. These tools have long become technologically obsolete in the rapidly developing digital ecology, but carry strong historical importance and influenced the design and interface of contemporary tools.

I choose 1998 as the (inevitably somewhat arbitrary) cut-off point, as the year symbolizes both the first high-functioning version of the PC interface, with Windows 98, and the true invasion of the internet into mass-culture.

Precursors

Mouse in the Maze (1959)*

SAGA II (1960)*

Interactive Fiction

Scott Adams\Adventure international

ZIL

Wander

Adventure Writing Kit

Dog Star Adventure

Eamon

The Adventure System

GAGS – Generic Adventure System

Alan

Professional Adventure Writer (PAW)\Adventure Creation Environment (ACE)\The Quill –

AdvSys

StorySpace

TADS

ADL – Adventure Definition Language

Hugo

AGT – Adventure Game Toolkit

Inform 1-6

WALTER (1983)*

StoryTree (1984)*

Visual Novel

AVG32\RealLive

KiriKiri

NScripter

Storybook Weaver

Real-Time Animation

Director

DreamWeaver

HyperCard

ShockWave

VideoWorks

SmartSketch

Future Splash Animator

Game Engines

The Arcade Machine

DIV Games Studio

Gamemaker

Game-Maker Suite

Garry Kitchen's GameMaker

Click & Play + The Games Factory (Europress\Clickteam)

Story Generation

Grimes Fairy Tales

ELIZA

IMPROV

Minstrel

TALE-SPIN

UNIVERSE

Writing Aid

The Collaborator*

Houdini*

Plots Unlimited*

Other

Aspen Movie Map

Placeholder

* = Based on info kindly provided by James Ryan

IX. IDN middleware: interpereters\translators\General APIs

Definition: These are not authoring tools, but rather software meant to allow for usability, importability and exportability of various IDN formats. Such software is crucial in order

facilitate the implementation of common formats for IDN design, and in order to advance the field towards a future where multiple IDN tools can be implemented in tandem in the design process (much like, for example, Adobe Creative Suite – the crucial importance of whose cross-platform function is discussed in Manovich 2009)

ASML

Gargoyle

OPARIS

Scaleform GfX

Scottkit

Text Fiction

Twisty

Z-Machine + Glulx Machine

X. Story Generation Tools\Procedural AI authoring tools

Definition: Unlike the 'mixed-initiative' tools whose generated narratives are in a sense co-authored by human and computer, the following tools are basically programs that author their own narratives.. Since human-customization is a minor function for these tools at most, none of them qualify as IDN authoring tools in our scope. Basically, these are all more authoring systems than authoring tools.

However, many of these systems are of strong narrative interest, entail unique theoretical structures and narrative infrastructure, and are potentially integratable into a broader mixed-initiative authoring process. Additionally, as the promises of model-based design essentially proclaim to turn the IDN authoring into a process that involves AI processing to a far higher degree than in the past, procedural generation systems could be a precursor to such functions.

This list is highly incomplete, and contains mostly academic projects.

ACTAFACT

Automated Story Director

Defacto

DINAH - DYNAMIC, INTERACTIVE, NARRATIVE AUTHORING HEURISTIC

Fabulist\OpenStories

PSST

Thespain

OPIATE

The Virtual Storyteller

ISRST-IS

MASK

Mimesis

PaSSAGE

PERSONAGE

“Plan based story generator” (Thue & co.)

Scheherazade

Prototypes

BARSDS\BOVARY

Context-Aware Architecture\A Simpel Story

DED (Directed Emergent Drama)\Dynamic Plot Generation Engine\Rational Dialogue Engine\The Murder Mystery Drama

DeathKitchen

Façade\Beat-based drama manager

I-Storytelling

NOLIST (non-linear interactive storytelling)\NOLIST Murder Game

Player Preference Module

Search-Based\Declarative-Optimization Drama Manger\SASCE

TDP (Targeted Trajectory Processing) Drama Managers

Teatrix (IRIS)

“Tell a Story About Anything”

U-Director

Virtual Theater\Directed Improvisation

XI. Tangible\Material UI Tools

1. 3D Tabletop
2. Arduino
3. DiME
4. I-CubeX
5. Immerse
6. Inform
7. JabberStamp
8. Handimation
9. Phylactery
10. Sugarcane Island with Alfred
11. The Reading Glove
12. Video Puppetry
13. Wiring

XII. Writing Aid Tools (Interactive tools for linear writing)

Definition: Tools meant to aid and facilitate the process of linear writing (often screenwriting) in some interactive form or another. Includes story visualization\storyboard creation tools, integrated environments for story development, and collaborative writing tools and web-portals. While non of these is particularly meant for IDN work, some of these tools can facilitate IDN authoring, as sub-tools, in their current form (for example by allowing for more comfortable mapping of the narrative world), while others are potentially adaptable for such purposes.

1. Adobe Story CC
2. AmazonStoryWriter
3. AntWriter
4. Articy
5. Celtx tools
6. Google Story Builder
7. Fade In
8. FinalDraft 10
9. iBooks Author
10. Highland
11. Movie Magic Screenwriter 6
12. Plotbot
13. ScriptBuddy

14. Scrivener
15. StoryFactory
16. Storyist
17. Story Touch
18. Trelby
19. WriterDuet

Story Visualization tools

1. ShortHand
2. StoryView 2.0
3. StoryBoardThat