



tas, and are un-erstan n e u w r t n an Kaur'er t e r ara ter st s o f f e r e n t w r t n  
too s an e a E, un r an t e s o a an or an at ona on t e x t n w r t n  
o u r s F o w e r , E e a n L u n s o r

Our own nvest at on s i ave on e n t r a t e on t h e w a y t h a t w r t e r s u s e e x t e r n a r e p r e s e n t a  
t o n s a s a n e x t e r n a e o r y a s a n i n t e r e a t e n o t a t o n b e t w e e n t h o u r t a n t e x t a n a s a  
e a n s o f s p e e f y n o n s t r a n t a n s t r u t u r e o r t h e w r t t e n t e x t

e r a v e a s o a r r e o u t e x t e n e s t u e s o f o a b o r a t v e w r t n t o e n t r y t h e s s u e s s u r  
a s t h e p a r t t o n n a n o o r n a t o n o f t a s s t h a t a r e e n t r a t o t h e e s n o f s o f t w a r e o r o  
a u t o r n o w a n G o o e t

r e a n p a t o n o f t h e s e s t u e s o r s o f t w a r e e s n s t a t e x s t n w o r p r o e s s o r s  
o f f e r o n y t e s u p p o r t t o w r t e r s t h e r e s a n e e f o r a w r t n e n v r o n e n t w r t a s s t s  
a n e n t r e e p s o e o f w r t n f r o a p t u r n e a s t o e v e r n a n s e o u e n t a n w r t  
a o w s w r t e r s w o r k a o n e o r n r o u p s t o s e t o w n a n s a r e t e r e a s p a n s a n n t e n  
t o n s e a r e e v e o p n t e r t e r s A s s t a n t a s a t o o t o n v e s t a t e t h e p r o e s s e s o f w r t n  
a n a s a p r o t o t y p e w r t n e n v r o n e n t I t o b n e s a n e a s o r a n s e r a s t r u t u r e e t o r a n  
a t e x t e t o r a n t s e s n e t o s u p p o r t a v a r e t y o f w r t n s t r a t e e s e r v e f r o a n  
e x p t o e o f t r a n s t o n s b e t w e e n e x t e r n a r e p r e s e n t a t o n s  
O t h e r a r t e s i a v e s u s s e t h e e v e o p e n t o f t h e r t e r s A s s t a n t

about anything else until we pause, return to most other activities and not  
 to be attentive and aware or reveal ourselves simultaneously or take time to be  
 creative activities such as painting may be one of the reasons but a painter and a so-  
 called novelist are busy strokes with their own conversation or thinking about what to do  
 next, it is not possible to write.

As people experiment with their style to write an easy piece of prose such as an  
 account of what I saw in two cups of corn and at the same time to be attentive  
 to the world around us. You will find yourself alternating between writing and reading, it is  
 not possible to do both at once or simultaneously to write and to think about the  
 structure of the text, you only focus on what a writer can produce in text  
 apart from speaking the text out loud to stop. It follows therefore that a writer needs a  
 few as two options to be arranged by the flow of words perhaps not so unannounced  
 to end or to alternate between thinking and writing, most writers are unable to sustain the strain  
 of producing creative text production at a time as we see after a few professional writers an-  
 d so on and so on the words of Frank, the writer when we write we weave in and out of  
 consciousness.

### The Cycle of Engagement and Reflection

Reflection consists of a range of activities between an engaged and a reflective. An engaged writer  
 is devoted to full attention to the task of creating text which is not a note or a yes or no  
 prose, reflection consists of sitting back and reviewing a whole or part of the written  
 for an alternative means of planning what new material to create or how to  
 see the future. It is usually an engaged and a reflective production of text which is  
 been creative. It is a state of writing that produces a series of ideas but Boen  
 is a state of creativity as a source of creative exploration and transformation of  
 conceptual spaces. Boen is a result of the interaction of the state of the  
 engaged and a reflective writer produces a position for what when an engaged  
 new material for a series of reflection or a reinterpretation of the material and  
 new plans to be enacted.

Forming and transforming  
 ideas, "exploring  
 conceptual spaces"

Re-reading  
 the written  
 material

Planning what  
 material to create and  
 how to organize it

Creating the  
 written material

riters set up st n t v e r y t h s o e n a e e n t a n r e e t o n , r e p e r o o f t h e s e n y t h s  
ay be s i o r t a s w r e n a w r t e r o o s b a , o v e r e a y s e n t e n e a s t s w r t t e n o r o n w r e n a  
w r t e r r e r e a s a n e n t r e p e e o f w r t n a n p a n s a a o r r e v s o n , o r a y t h e r e w b e  
s o e x t u r e o f t h e s e a n t h e n a t u r e a n f r e q u e n y o f t h e n y t h s e p e n o n a o n o t h e r  
f a t o r s t h e s p o s t o n o f t h e w r t e r t h e t y p e o f t e x t t h e r e p r e s e n t a t o n s u s e n w r t n a n  
t h e w r t e r s t o o s

## The Writer's Disposition

A n u m b e r o f r e s e a r c h e r s B r w e B o w e s e t a , G r a n e r r a v e e s r b e t w o  
t y p e s o f w r t e r t h e a n n e r a n t h e D s o v e r e r , a n n e r s t e n t o u s e w r t n a s a m e a n s o f  
r e o r n o r o u n a t n e a s w r i t e y r a v e a r e a y o r e w r e D s o v e r e r s u s e t h e  
a t o f w r t n a s a w a y o f f n n o u t w r a t t h e y w a n t t o s a y G a b r a t u s e s a s a r  
r o t o y n r a r a t e r s n a a e t h e o r e s o f w r t n , r e a s s a p o s t o n s u e s t s t a t  
a w r t e r u n e r s t a n s a n e v e o p s t h e t o p b y a r r y n o u t e n t a p r o b e a n a y s s t o p r o  
u e e a s w r i a r e t h e n e x p r e s s e a s t e x t , r e r o a n t p o s t o n r o s t a t o n y t h r o u r  
t h e a t o f w r t n a n a w r t e r u n e r s t a n r e s e r a n r e r t o p , B y e n a n r e t y a n  
e a t e y w t h t h e t e x t w t h o u t p r e p a n n n a w r t e r a o w s e a s t o r o w p a s t t h e b a r r e r s o f  
r a t o n a t h o u r t , O n e t h e e a s a r e s e t o w n n p r y s a f o r t h e y a n a t e r b e r e w o r e a n  
p o s t e

G r a n e r s u e s t s t a t a n n e r s a n D s o v e r e r s a r e e x t r e e s a n t a t n v u a  
w r t e r s e s o e w r e b e t w e e n t h e p o e s b u t r e o e s n o t n a t e r o w w r t e r s a n e r e t h e  
t w o a p p r o a c e s e n t a p s t h e y o n y p a r t a y e n a e w t h t h e t e x t w r e w r t n o r a r e a b e t o  
o r a n s e t h e r e a s a t t h e s a e t e a s p u t t n t h e o w n o n p a p e r B u t a s w e r a v e s e e n  
w r t n s n o t e t a t r e a t o f w r t n e a n s u a t t e n o n I t s n o t p o s s b e t o r a v e y o u r  
n s o e w r e e s e w r e p e r o r n t h e a t v t y n o r s u t a n e o u s y t o w r t e a n r e e t  
r a t s t u a t e s a w r t e r b e t w e e n t h e t w o p o e s o f D s o v e r e r o r a n n e r s w t h e r t h e w r t e r s  
o r e n t e t o w a r s r e e t n o n o r e n a n w t h t h e t e x t

r t e r s w t h a a n n e r o r e n t a t o n a r e r v e n b y r e e t o n f o r t h e s e p e o p e w r t n  
f o w s r o u n e r s t a n n , r e y s p e n a a r e p r o p o r t o n o f t h e r t e o n e x p o r n e a s a n  
o n e n e r a t n p a n s a n o n s t r a n t s t o u e t h e r o p o s n , r e n t h e y w r t e t s n a n  
a t t e p t t o a r r y o u t a p r e p a r e p a n , r e r n y t h s t y p a y o n e o f r a p a t e r n a t o n  
b e t w e e n w r t n a n r e e t n a , n n o r r a n e s a n a u s t e n t s t o e e p p a n a n t e x t  
n r a n o n y C o n v e r s e y t h o s e w t h a D s o v e r e r o r e n t a t o n a r e r v e n b y e n a e e n t w t h  
t h e t e x t f o r t h e u n e r s t a n n a r s e s r o w r t n , r e y a y p r e e r t o b e n a w r t n  
t a s , b y s r b b n o u t a r a t w r i r e v e a s t h e r t h o u r t s t o t h e a n t h e y t h e n s e e o a t  
t o e a v e t h e r t e x t s a o n e G r a n e r p i t w r i a y n v o v e t h e n r e r e a n t o a n  
e a s w r i a r e t h e n n o r p o r a t e n t o t h e t e x t , r e r n y t h s t y p a y o n e o f o n e r p e r o s  
o f e n a e e n t f o o w e b y r e r e a n a n e x t e n s v e r e v s o n

A t t h e p o a r e x t r e e s a r e t h e p a t h o o a s p o s t o n s o f w r t e r s w i o a r e a u r t n p r o  
o n e e n a e e n t o r r e e t o n , t h e r n y t h r a s o e t o a r a t A t o n e p o e a r e w r t e r s w i o s e  
f u a t t e n o n s f o u s e o n t h e a t o f w r t n f o r o n p e r o s o t t e e a v n n o o p p o r t u n t y  
f o r o n t o r n o r r t a a p p r a s a , r e q u o t a t o n b e o w s r o t h e a u t h o r i o a s o f e

I w r o t e t o o u r a a n I n o t o n y w r o t e w r a t w a s e s s e n t a b u t t e a n t e a a n  
y e n t u s a s f o r a o o s e n e o n e o f t h o s e e n r a n t n v s t a s w r i a n o p e n u p s o  
a a y t o a a n n t h e u f o w o f r e a t o n w o u o v e r p o w e r e a n I w o u w r t e  
t h o u s a n s o f w o r s o n a s e n e w r i o n t r b u t e n o t n o f v t a p o r t a n e t o a b o o ,  
w i o s e r e a t e s t n e e a r e a y w a s r u t h e s s o n e n s a t o n G r s e n

A t t h e o t h e r p o e a r e t h e o v e r y r e e t v e w r t e r s w i o a n n o t t u r n o n t h e r o w o f w o r s  
r y n t o t h n , t o o r a b o u t t h e p a n s a n e t a o f a t e x t a n r e s u t e t h e r n a o p e t e  
b r e a , o w n o f a t v t y o r t o n t e r n a b e t n , e r n w t h e a s a n t e x t

Dorothy Ann, her reports that it's often too, it's often to write a story. It's not out  
an then write the sentence by sentence, nor first rate. I can't write the words but I  
in a seven, Brwe Bowes et al, p

## The Text Type

For most writers a common or a Davis every approach to writing is not a psychological or a  
trait. In general, writers are adaptable and they have a different approach to the writing task,  
or any other. In our era, rapidly changing and a constant reflection, they are generally on  
structure by the need to construct a balance and an intent for the text into a conventional  
or, such as a research report.

arrange the writing nor a year in our era, as on the other side of an event because the  
writer needs to relate an event or to create a scene and a flow and a narrative to a text out.  
For this is a important that the narrative works, except that an in progress. A break, or  
reflection may destroy the intent pay.

## The Type of Representation

text is as shown onto paper is not a matter of empty text, but of a very real  
structure.

text is then into words is not a, and conscious writing as it is to not been  
fully so, or

External analysis suggests that notes top structure out, as a structure top  
and the rest of text are both representations of content and then in the sense  
new structure is so, as for the content of the product and available for interpretation  
of, or an structure of the different types of representation in our era, is not  
itself as they are created and revised.

representations supports a type of writing that is a positive or a text present  
ation. It is enough to be a top or an intent but is not enough to represent a  
unit of, as a writer and as a stop and a balance, over a paragraph, and read as a  
sentence unit. Both Brwe Bowes and as a result, found that the writers  
they study pause regularly at paragraph breaks.

more recent structure out, have been developed to provide an overview of the  
overall structure and a review of the writer's structure plan, they are on the  
infrequent pauses with the writer assesses how the writing fits a general structure.

notes etwors, as a result of Goo et al, berton, r, u, an, an  
aps. But an are often as a result of a representation, a own a writer to v sua  
se associated between content on the before of the text, they allow a writer  
to build up a part of the top to be a unit in a text and to show an easy view for the  
relationships between the top, they offer, is not new ways of working. A writer  
and an a new text, an explore, as an external objects with out the need to express the  
written text, they also provide a view of the relationship to be referred to  
the writing. Instead of taking a complete break, or writing to assess whether the  
process is the intent of a writer and an external theory to relate an idea or an  
a new note to the network, to reorganize a text as a result of writing, notes etwors,  
an other, as a result of a representation, such as a result of trees, as to new  
writer moves between text and a

note in is an a a writer assesses that it's often a ternate between a  
range in or tree in is as on paper and writing, Brwe Bowes et al, p



in the area of computer-aided writing, the next generation of tools and work

### The Writer's Assistant

The effects of new technology on the writing process cannot be assessed in the abstract, there are far too many individual factors and differences of writing practice that need to be taken into account. The extent to which a writer's activities of writing are performed in different contexts and with different tools is also an aspect of writing that needs to be taken into account. The interaction between the writer and the tool is important. It suggests that these new tools should be studied by teachers of writing and designers of new tools for writers. In particular we should now be able to develop a new potentially productive way of enhancing the writer's role in writing and to develop a new strategy for writing.



Figure 1. The Writer's Assistant

We are developing the Writer's Assistant as a test environment for studying the processes of writing. The Writer's Assistant offers three views of the environment see Figure

a notes network, view writer allows the writer to set own eas as notes and to n, the  
 to enter into a network, of association a structure view writer sets the writer create an a  
 nputate a structure out ne of the text and a Lnear view writer enables the writer to type n  
 text with the n u of intererene A writer and ove rap y between the views by for  
 exa pe reatn a rou r out ne n nso e text u pn eas as notes n, n these  
 notes into a network, for n the network, into a str n of text and er n tw t the out ne,  
 re pro ra s es ne to ass st w t ov n between the v ews by for exa pe auto at  
 a y travers n the otes etwor, for or a near text and n n an appropriate pa e n  
 the out ne stru ture to pa e the text e e ents Harpes Cutterbu, an Goo et n press,

One a of the rter s Ass stant s to eve op an nte rate wr t n env ron ent for peo  
 pe wr o reate o p ex o u ents as part of the r professional ves but t an a so be use to  
 nvest ate the e e to new too s an representat ons on the wr t n pro ess, tu es of wr ters  
 us n t s an s ar too s su r as the r t n Env ron ent Lans an t eber  
 an E IA Haa, e an son ou re p to answer quest ons su r as Is t portant for  
 a wr ter to a nta n a re u ar n y t of en a e ent an re e t on? Does the prov s on of  
 u t p e v ews srupt a wr ter s n y t or oes t a tate wr t n by of er n new ways of  
 re e t n on the stru ture an eas be n a text? r at s t e re at ons p between a wr ter s  
 spos t on an the new o puter too s?

re rter s Ass stant s on y ar rst step towar s ore enera support for wr t n er  
 n pen an paper w t o puter, re D ta Des, be n eve ope by Xerox Euro A C  
 ew an e ner sa e at prov n sea ess ove ent between paper an s reen,  
 For the prototype a v eo a era an a pro e tor are suspen e above an or nary es, so  
 t at e e tron o u ents an be pro e te onto the es, an paper ones an auto at a y be  
 t se nto o puter text, otware onne te to the a era w be ab e to re o n se r an  
 estures so t at a person wor, n at the es, an ove the pro e te o u ents arou ust  
 as they wou pus s ects of paper A wr ter w be ab e to o b ne the r for a ty of wr tten  
 s, et r es an notes w t the re u ar ty of o puter base out nes pans an o u ents,  
 r ch r su r syste s w berate the wr ter to s over new patterns of wor, n or wr ch r  
 they w ust ause the wr t n pro ess to be o e or use an s r ar on ous w open  
 on r ow we they are ab e to support an au ent the a ar n y t s of wr t n,

## References

- Bo en i re Creative n y t s an e r ans s Lon on e er e an o son  
 Br we Bow es L Jo nson an Bra e Co pos n an o puters ase stu es  
 of exper en e wr ters, In A ats u as i e r t n n o n pro ton  
 pro ss s i orwoo J Ab ex  
 Bu an s Yo r ev se E t on E t on, Lon on BBC Boo, s  
 Gr an er D re p re no eno o y of wr t n by r an nt nt tor n
- Co ns A an Gentner D i Ar ra ewor, for a o n t ve t eory of wr t n, In L Gre  
 E te nber E s Co nt pro ss s n r t n, n ntr s p n r ppro  
 H s a e J Lawren e Er bau  
 Da ute C sy r o n ust roun at ons of the wr t n pro ess, s r nt n  
 o En s  
 E e L an Luns or A i S n r ts, p r A t ors, p rsp t son Co or t r t  
 n Carbon a e out ern I nos  
 E, un r K robe s n a r ev n a oba perspe tve n o puter base wr t n,  
 nstr t on, S n  
 Fower L an Hayes J i re yna s of o pos n a, n pans an u n  
 onstra nts, In L Gre E te nber e s Co nt pro ss s n r t n, n ntr s p,  
 n r Appro H s a e J Lawren e Er abu



Fower L Co n t o n o n t t n t o r n - O as ona paper Centre or t e tu y  
o r t n n vers ty o Ca r orn a at Ber e ey an Carne e e on n vers ty  
Ga bra t D Con t o n s o r s o v e r y t r o u r w r t n In ar p e s E s Co p t  
r s n r t n . s s n p n t t o n s Dor re v t Ku w e r A a e u b s e r s  
G r s e n B Cr t p r o s s n vers ty o Ca r orn a r e s s  
Gre L an t e n b e r E Co n t p r o s s s n r t n