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Virginia Woolfとプログラミング

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Virginia Woolf Programmed

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Whoever has thought the combination of Virginia Woolf and the rendition of her works through programmatic language? However farfetched the idea may sound, it perchance may be worth attempting, at least once in anybody's lifetime who makes literary appreciation a part of their living. Because of Woolf's particular penchant for deconstructed syntax and seemingly haphazard imagistic buildup she emerges as one of the optimal candidates for programmatic manipulation, particularly in her later career when her writing becomes increasingly fragmented and almost impressionistic without necessarily having its holistic consistency. What is likely to be accomplished through the mediation of the seemingly heterogeneous medium is still wrapped in a thick impenetrable cloud of enigma. The approach may fail because of its too much unorthodox take on the whole issue of bringing out the essence of Woolf's artistic penetrations. Yes, the purpose of combining the two discrepant elements is to foreground the aesthetic congealment that is manifested in the author's works.¹ If the approach here proposed fail in that mission then the *raison etre* of this paper will vanish instantaneously. The question then hinges upon the insight and the meaningfulness (in both pragmatic and aesthetic sense) of the outcome this approach produces. If yanking together of Woolf and the program I intend to utilize here succeed in bringing out the hidden aspects of Woolf's authorly engagement with her own work then something indeed valuable is to emerge both in aesthetic and technical sense as the reader confronts the author under the circumstances that are legitimately considered more traditional.² My approach indeed is intended to be auxiliary in that

¹ We should not at the same time forget the free flow of readerly interpretations the author herself encouraged in her various writings. As Patricia Maika suggests in her *Virginia Woolf's Between the Acts and Jane Harrison's Con/spiracy*, Woolf pointedly left literary interpretation and judgment to the reader's imagination and insight and his participatory discretion. Reading to Woolf, Maika notes, was a shared creative experience that "is never static and ... is constantly renewed as readers from different environments and periods of history, with varied perspectives, take up the text" (p. 14).

² This may be just a wishful thinking but if the author's social, and iconoclastic antipatriarchal, stance and nuances can be woven into the new rendition of the story then expectations and readings of a critic like Elen Bayuk Rosenman can definitely be reflected in the final interface here projected. On the relevant issue see *The Invisible Presence* by the same author, pp. 75-92.

the combination of the two realms I have been adumbrating, or I should say specifying, in this preamble is to help the potential readers to delve into the often knurled and aesthetically disassociated works of the author and to come up with the handles which they can later employ as references as they work in the, if I may rephrase the term I already used, conventional setup. If the joy of experiencing ice cream lies in eating it then let us start concatenating and splicing the two discrepant elements together and experience how the concretized product of that unorthodox approach pans out.

What strikes the reader most when he encounters Woolf's writing is the apparent disorderly cacophonous manner in which a collage of images jumps into his ken. Since abstract generalization does not make a convincing argument in this case, let us look at her representative work *Mrs. Dalloway*. As soon as the reader is engaged with the work he is snagged by the very obtrusive first statement that goes, "Mrs. Dalloway said she would buy the flowers herself" (p. 5). What is transpiring? perhaps the reaction such a line is likely to elicit. What is indeed happening? We need to tackle the question before we can successfully bring it into the programmatic realm and render the scene or line, whatever is more appropriate, more amenable and meaningful to the reader.³ Granted that the syntactical interpretation is simple enough. It is a nested sentence with an inner clause indicating the conscious ratiocination of the protagonist. But what is so upsetting and recondite about the sentence? Why does the presentation employed by the author convey such a jagged tone to the reader as a grammatically seamless sentence is pushed to the foreground right at the beginning of the story? It turns out that the significative structure the first sentence constitutes as a part manifests in a manner that the part that is metonomized presents itself completely lopsided without adumbrating the whole in a proportional manner. When the reader is confronted with the non-decipherable entity, or rather almost decipherable conundrum may be an appropriate term here, he is left helpless. But from the author's perspective that is indeed the very state Woolf desires to fix the reader in. Once the reading subject is suspended in an interpretational limbo, then the rest does not appear as strange as it otherwise might be, or so the authorial logic goes. The authorial strategy seems to work, or rather timely pan out, as the jumble of disconnected images proceed one after another. Notice the next line, "For Lucy had her work cut out for her" (p. 5). Once again the reader's mind is hard at work here as it tries to figure out the

³ In order to avoid incurring undue complications as we ready ourselves to embark on the fusion between the two discrepant elements we half-deliberately skip the feminist implications such a setup automatically evokes. For more feminist analysis see *Virginia Woolf and the Languages of Patriarchy* by Jane Marcus.

context in which the series of descriptions make the most sense. Of course investing the sentences with an appropriate signficatory content that is consistent and contextually seamless is not easy. As I already implied, the author dwells in the readerly space and constantly inhibits the smooth proliferation of meanings which the reading subject is free to partake of. Unlike the traditional stories, the author is indeed there to repel straightforward decryption of whatever linear significations that are embedded in the writing.⁴ Or rather she is there to oppose the traditional constructive approach that has been the norm for centuries since the inception of the form now known as the novel. The best strategy the reader then can bring into the conscious interpretative theater is to recognize that and build the deconstructive platform, however paradoxical it may sound, on which to base the exegetic forays into what appears to be the signficatory chaos.

With that reminder let us turn our attention to the fusion between the original work with the digital realm, or if applicable, to manipulation of the former through the programmatic language. How does one go about breaking into the discontinuous world that is ushered in by the very beginning of the sentence in *Mrs. Dalloway*? Could the most effective method be auditory or visually oriented? Or even the combination of the both and more? Let us attempt the first approach that is mainly dependent on the auditory effect of the music and sound effects brought into the picture that opens out before the reader's eyes. The most likely structure the syntax will take looks something like the following.

```
Sound(1).queue([#member: member("sndCcphns")])
```

```
Sound(1).play()
```

Needless to say this is a rather oversimplified structure that needs to be much elaborated upon if the desired effect mentioned above is to be accomplished. Let us flesh it out a little to approximate the real-life situation. To start with let us insert more parametric values in the function represented by the first line. One value that can be added is one that deals with the pitch of the sound that is to be played. The manner to insert it can be described as follows.

```
queue([#member: member("sndCcphns"), #rateShift: 8])
```

⁴ The issue of linearity and non-linearity of writing is indeed one of Woolf's literary agendas the author admits to having expended a considerable time upon. The comment that is particularly pertinent in this context is the one she made in her correspondence with Jacques Raverat, a painter. To the latter's remark that radiality is exactly the thing writers should aspire to in order to capture reality Woolf was said to have replied, "it was precisely to this that she aspired, 'to catch and consolidate an consummate... those splashes of yours'" (Makiko Minow-Pinkney, *Virginia Woolf & the Problem of the Subject*, p. 54).

It is here understood that the function is to be the property of the function `sound(chnnlNm)` and not to stand independently of it or any other functional declarations. Now what does the newly added parameter is going to accomplish? It is again a very primitive structure we have introduced here and the introduction of the `rateShift` argument is not going to change that fact very much. Suffice us to say that the value chosen for this particular demonstration alters the pitch slightly higher than the original, with the value 0 indicating the unaltered pitch and - values lower and + values higher pitches respectively. What seems like a convenient device could turn out to be an undesirable artifact producer if the programmer is not careful. One unexpected side effect, or rather what is traditionally considered an inevitable byproduct, of such an operation is that the sound thus manipulated changes duration as well as pitch. Therefore an extreme values such as + - 40 produce a sound that may not be quite pleasant in the ordinary sense of the word unless the programmer intends to circumvent all the conventionally bound smug responses from the interactively engaged subjects. The caveat here is therefore use the `rateShift` property with caution and conservatively. The fewer parameters a structure has the better usually the result obtained is. Now another parameter that could bring an interesting insight into the digitally mediated literary experience is `#loopCount`. This parameter sets the number of repeats to the value indicated after the colon. For example if the value is set to 2 the sound is played so many times continuously until the end of the clip on the last repeat is reached. That means if one desires to allow the interactive subject the freedom to turn off the sound before that condition is satisfied then he has to create a mechanism to accomplish that task.⁵ The same caveat applies here too, however. When the `loopCount` property is recklessly used the overall effect that is likely educed from the interactive subject is boredom and ennui. Nothing is less exciting than the same tune that is repeated more than once unless the repeat is executed for some specific pragmatic as well as aesthetic purpose. If the editor is uncertain about either then he is advised to stay away from the arcane realm of sound loop. There is too much danger in taking advantage of the programmatic power without adequately comprehending the consequences of looping the identical sound clip.

But without going too much into possibly extraneous mechanism to liven up

⁵ A simple line needed here can be expressed as follows.

```
Sound(sndChnnlNm).stop()
```

Although more complicated structure can be contrived with the use of such properties as `volume`, `fadeOut`, `fadeTo`, and `duration`, none of the elaborate property manipulations is going to achieve the level of refinement one dreams of after expending hours on fine-tuning the relevant script set.

the presentation let us consider the structure that is more likely to enrich the interfacing experience the active subject is to be engaged in. Since we began this digital blueprinting with the two simple lines of sound cue coding it may be best to continue in the same strain. The sound play mechanism can be triggered by a number of handlers and on a number of possible occasions. As for the former one possible handler would be on prepareMove that turns on the prepared sound clip as soon as the presentation starts. Other candidates would be anything that are capable of playing the sound element at any timely juncture such as on exitFrame, on mouseUp, on cuePassed, and so on. Suppose the former tactic is decided upon then the whole relevant coding will look as follows:

On prepareMovie

```
Sound(1).queue([#member: member("sndCphns")])
```

```
Sound(1).play()
```

Needless to say the handler used need to be closed off with an appropriate ending message, which is End PrepareMovie or simply end. But for the moment we leave it open ended as the lines stated are to be augmented and further elaborated upon. Now what are some of the features that are likely to accomplish such aesthetic enhancement? Of course possibilities are unlimited. But how about some graphic elements that will go in tandem with the sound that has been introduced? Without dithering much on the selection process then let us seize upon the cue words that are weaved into the first line we have been considering. Just to nudge the reader's memory a little I quote the line in question.

Mrs. Dalloway said she would buy the flowers herself.

This is, as already pointed out above, a very simple line that contains not a plethora of obvious cues that promise to direct reader's active consciousness one way or another. But if we concentrate on the mystifying images that come out of the penumbra of the syntactic structure we notice some splotches of signifying *semes* linger in our minds. It is those images I intend to reify and turn into physical representations, or rather representatives, of the phenomenological picture that is to develop before the reader's mind as he delves into the world of Mrs. Dalloway cum (although it may not be entire so) Virginia Woolf. Let us seize on the flowers since that is the most evident substantive clue that is presented to the reader. Suppose they go crisscrossing before the readers' eyes to create the shifting and floating holistic image that is to be constituted by the deconstructive tack of our author. In order to concretize that very effect I composed the following coding.

```
on beginSprite me
```

```

    pAniCh=pInitAniCh
end

on mouseEnter me
    if pAniCh<pLstAniCh+1 then
        puppetSprite pAniCh, 1
        sprite(pAniCh).member=member(pMemNm)
        sprite(pAniCh).loc=sprite(me.spriteNum).loc+point(0, random(170)-random(170))
        sprite(pAniCh).ink=36
        aniObj=new(script "flwrPrnt", pAniCh, pMemNm, pDrctnMltpI, pInitLocH, pAniSndNm)
        goAppend(aniObj)
        pAniCh=pAniCh+1
    end if
end

```

Let me analyze the seemingly sophisticated lines in order to provide the uninitiated with an opportunity to keep abreast of my argument. The first equation sets the property variable to the value expressed by pInitAniCh, which as the name indicates signifies the initial channel in which the flower animation is to occur. The reason that the two-step initialization is taking place is because the pAniCh is to be incremented as the number of flowers increases over a period time designated beforehand. The first line in the mouseEnter handler is premised exactly on that precondition. The if clause checks the value contained in the variable pAniCh and if it exceeds the value represented by pLstAniCh the coding embedded within that conditional clause will not run. If on the other hand the channel number conditioned is satisfied then the channel represented by pAniCh is made available for graphic member animation. The preceding three lines determine the member that will populate the channel, its horizontal and vertical location, and its transparency relative to the background, respectively. The next line generates an object that will handle the way the graphic element behaves across the stage. The line that starts with the new() function is the crucial instantiator of that very object by transmitting the needed parameters lined up in the parentheses and paving the way for the actual animation trigger, which is handled in the following line. The ultimate line within the if clause deals with incrementation of the channel number stored in the variable so that next time the signal is sent to the program the channel represented by the variable is cranked up one integer value higher and duplicate population of the graphic members will not take place. Now let us go to the corresponding script that answers to the calling initiator we

mentioned above.

```

on new me, spNum, memNm, drctnMltpl, initLocH, aniSndMm
  pSpriteNum=spNum
  pMemNm=memNm
  pSffxNum=1
  sprite(pSpriteNum).member=member(pMemNm&&pSffxNum)
  pSpV=sprite(pSpriteNum).locV
  pVariQ=0
  pSpdH=drctnMltpl*(random(3)+2)
  pInitLocH=initLocH
  pAniSndNm=aniSndMm
  pAmpltd=random(10)+20
  pFrqncy=random(30)+150.0
  pWaitT=the ticks
  return me
end

```

If the number of the parameters are of any indication this is rather complicated scripting. But rather than discouraging us from delving into the minutiae of the acting scripting let us face it with courage and lay it out to the living daylight so that the editor, whoever he is, can take advantage of the innards and inner workings of the recondite coding. Avowedly this is an object creating scripting that corresponding to the calling script we covered above. The initial `on new me` answers to the convocation and gives rise to the encapsulated object that is equipped with the arguments that are lining up after the self-identifying `me`. The first line sets the property variable specific to this object creating script to the value sent over from the calling script that is represented by `spNum`. The second line sets the member string value to the similarly sent string value `memNm`. The next line sets the target property value to the integer given on the right side of the equation. It is used to cycle of the members that are identified in the member cast by the same substantive root plus the integer turned literal (or string, which ever is easier to understand). The following line sets the member of the channel indicated by the channel property variable to the value specified on the right of the equation. The proceeding line stores the vertical position of the member in the given channel to the variable specified on the left of the equation. The `pVariQ` given in the following line is the variable used to give the graphic element its

specific sinuous movement across the screen. The initial value sent to the variable on the left is zero in this case. The following equation stores the randomized value determined by the random() function on the right. It could be either minus or plus, or left or right across the stage, depending on the value that is held within the argument sent from the calling script. The proceeding lines determine the horizontal value the graphic member assumes on the stage, animation sound clip that accompanies it, amplitude of the curvilinear line the graphic element describes, frequency such curves occur, and the timing at which the animation develops. Finally, all the values stored in each respective property variables are returned to the program itself so that they become available at appropriate junctures whenever such contingencies occur during the course of the interactive display.

The object-creating maneuver, however, is not sufficient in itself to animate and control the graphic elements that will be dancing across the stage. There needs to be more switches and structured coding to accomplish the holistic symphony. Let us proceed to the inner workings of the operative phase of digital literary fusion promised above. Now the actual switch, if such a term can be accepted on a par with the switch often referred to in real environment, consists of incorporating the newly created object (newly because the object becomes available as such as soon as, in a blink of an eye or even faster, it is initialized through the process described above) into a special list called scriptInstanceList that is contemporaneous with the program itself. The handler used here is on goAppend, which is in truth a customized one defined by the invoking script.⁶ Let us review it so that we get a better comprehension of the workings of the switching mechanism.

```

on goAppend me
  if getOne(sprite(pSpriteNum).scriptInstanceList, me)=0 then
    append(sprite(pSpriteNum).scriptInstanceList, me)
  end if
  if getOne(the actorList, me)=0 then
    append(the actorList, me)
  end if
end

```

⁶ It is customized in more than one sense because although the calling handler invokes the name of the handler that happens to be incorporated in the current object creating script it does not have to be. In other words the handler invoked from the calling handler is also constructed in a way that corresponds to, or rather that is identical to, the name called in the originating script.

Compared to the actual object creator this is a very simple straightforward handler. Nevertheless, let me enter into an explication, albeit brief, of as to how the said switch works and what the ramifying implications are. As you can see from the way this particular portion of the script is constituted, turning on and off of the switch is in fact translated into incorporation of the object me to the list property named actorList. That is specifically stated in the conditional line preceded by `if getOne()`. What the function just mentioned does is to check if the object is already included in the said list. If it is not, here expressed as comparison to 0 or false, then the following lines are to be run. In its simplest form the switch is obtained by the `append()` function for what it accomplishes is to generate a certain message every fifteenth of a second⁷ (by the very action of incorporating the object me into the actorList as just mentioned) and make the message available for any handler mechanized to snag it from any place in the program. The lines enclosed within the first conditional clause is meant to achieve various interactive actions between the animating object and the engaged subject. Once again this segment is not absolutely necessary to obtain the kind of animation we are aiming at but without a modest amount of interactivities built into the overall design the initial premise on which we have been working on for the construction of the multimedia integration of digital functionality and fun into the original text is sure to crumble, annulling all the efforts we are putting into the individual designing of the interface.

Once the object is incorporated into the said list, the actual process of animation is controlled by the coding sandwiched between the handler `stepFrame`. There is of course not mystery about the handler because the `stepFrame` happens to be able to intercept the message that is generated from the incorporation of the script object that has just been accomplished in the above switch. Now let us take a close look at the animation controller. The first line initiates the horizontal position the object (in fact the channel the object resides) is to assume during the animation sequence. The conditional clause then checks if the horizontal position of the object is indeed to the right of the zero value, which coincides with the leftmost edge of the stage. If that turns out to be the case then the script forces the object to the pre-designed horizontal position indicated here as `pInitLocH`. But not before another conditional clause intervenes. This line is intended to gauge the distance of the object from the leftmost

⁷ That is, if the frame rate is set to that particular rate. Theoretically the rate can be set to any speed; however, real working experience dictates it not to exceed more than 30 on the fastest computers and 15 on average-speed computers. The number given here is just meant to indicate the close link that exists between the frame rate and whatever animation that is designed to occur on the stage.

edge of the stage. The value given here as -50 is a result of calculation done before the animation is architected and happens to be the distance where the current graphic object completely disappears from the engaged subject's view. The second conditional set checks a similar condition of the object except that it deals with the contingencies on the opposite horizontal end in relation to the stage. The next equation controls the curvilinear trajectory of the graphic element across the stage. The final conditional coding sets the timing for the animation, allowing only those actions that fall within a fixed timeframe specified in the coding. The following is the actual scriptural structure spelled out to facilitate easy grasp of the argument being developed here.

```

on stepFrame me
  sprite(pSpriteNum).locH=sprite(pSpriteNum).locH+pSpdH
  if pSpdH<0 then
    if sprite(pSpriteNum).locH<-50 then
      sprite(pSpriteNum).locH=pInitLocH
    end if
  end if
  if pSpdH>0 then
    if sprite(pSpriteNum).locH>850 then
      sprite(pSpriteNum).locH=pInitLocH
    end if
  end if
  sprite(pSpriteNum).locV=pAmpltd*sin(pVariQ/pFrqncy*PI)+pSpV
  pVariQ=(pVariQ+1) mod pFrqncy
  if the ticks<pWaitT+5 then
    exit
  else
    sprite(pSpriteNum).member=member(pMemNm&&pSffxNum)
    pSffxNum=pSffxNum+1
    if pSffxNum>2 then
      pSffxNum=1
    end if
    pWaitT=the ticks
  end if
end
    
```

That is just about all the needed ingredients to control the graphic element in synch with the original text for the purpose of enhancing the synthetic structure of the two traditionally considered discrepant elements. Needless to say there are other structural embellishments very plausibly thrown in to increase the interactivity between the program and the involved subject. But let us skip that in order to hurry on to further consideration of the original text. After all the space is limited and without due regard for the textual element, upon which the proposed synthetic structure will be built, the final result will be an abysmal flop or elaborate intellectual quagmire at most.

The next question that needs to be addressed, although it has already been alluded to in the very beginning, is the abrupt and seemingly disconnected remarks that is nevertheless is apparently taking place in Mrs. Dalloway's consciences. Who is Lucy that is concatenated and as if seamlessly yet abruptly spliced with the first still obtuse remark by the protagonist? Is she somebody related to her or is the person conceptually working on a different imaginative or conscious level than such personal relationship? The third sentence supplies no help as to the status of the second sentence, at least on an obvious level. What is this business of removing the doors? What does it have to do with Lucy being currently occupied, as indicated in the second sentence in retrospect? (Now I am assuming that the reader's readerly consciousness, which tires to decipher and make sense of the given circumstances, is on the third sentence when this retrospection happens.) And the third sentence is not completed with a rather perplexing cropping up of the protagonist's consciousness. It is in fact augmented in its disconnected collageness as the engaged subject is further bemused by the introduction of a new name and befuddlingly mundane statement. What does coming of Rumpelmayer's men have to do with the rest of the protagonist's conscious manifestation? Is it possibly in any way related to the taking the doors off of the hinges and Lucy being occupied? Regardless of the sketchy circumstances, holistic structuation of the human imagination works, however, in synthesizing and forming a larger picture out of the seemingly disconnected details. That is as it should be and all to the advantage of the author, who whether or not affected by her schizophrenic condition does not make any particular effort to guide the reader through the labyrinths of her idiosyncratic conscious images. At least most reader would be hopelessly discouraged from going any further after a couple of lines of *Mrs. Dalloway* if the holistic knee-jerk reaction does not come into play.⁸ But of course the author does not

⁸ This is one of the very reasons why the fusion of this kind is worth attempting. That is, how to smooth the readers' way into the world of Virginia Woolf and enhance

simply leave the reader under the phantasmagoric creative power of his imagination. Note the following line: "And then, thought Clarissa Dalloway, what a morning—fresh as if issued to children on a beach." This is the first time that the perspectival mental description is thrown in the story after its inception three lines preceding to it. The foregone lines are all abrupt non-mediated flow of the protagonist' consciousness that intrudes, as it were, upon the readerly consciousness whether the latter wills it or not. But the use of the mediational term indicates a possible direction the readerly interpretation should take. It is then that retrospective conscious work starts in the minds of the readers and reconstitution of signifiatory structure going aback to the beginning of the story. However, let us go back to the present segment to code the appropriate fusion between the text and multimedia and compact the maximum impact into the interface the readerly consciousness will face.

Now we have to come up with the most impacting image to convey the disconnected atmosphere the whole story evokes. Out of a number of possible (in fact a limitless, if one is endowed with a fertile imagination) setups what about seizing on the unhinged doors⁹ out of which the names, as if casually scattered in the story, well out without any reason at all? Would that create the kind of impact the text itself tends to have as it engages the first reader with its seemingly haphazard unfurling? Perhaps or perhaps not. That is rather a discouraging answer but we have to start somewhere. Without becoming unduly skeptical let us hope for the rosy future where fusion of discrepant kinds would give birth to wonderful possibilities. Believing in that, let us start constructing the blocks out of which such a wonderful world might evolve. The simplest animation controlling script might look like as follows.

```

if the ticks<pWaitT+pIntrvl then
    exit
else
    sprite(pSpriteNum).member=member(pUnhngdDr&&pDrSffx)
    pDrSffx = pDrSffx +1
    if pDrSffx >4 then

```

aesthetic appreciation of the original text. For those who are still uninitiated into this kind of seemingly disconnected stream of consciousness novel the attempt to integrate digital elements for the service of literature seems indeed noble and valiant for the prize that is obtained for the mediated reader is so precious and lasting.

⁹ Double entendre is not intended here. It just happens that the author opportunely prepares the term and the image for the kind of programmatic rendition we have endeavoring to accomplish. In fact the more deeply one involves in the story the more keenly one feels the inevitability of yanking the story together with digital media. The combination may be more of literary inevitability than of serendipity.

```

    pDrSffx =1
  end if
  pWaitT=the ticks
end if

```

This coding supposes that the door animation consists of three images that are circulated as it opens and closes on the strategically placed position *n* the stage. Of course the animation could be finer tuned and made to move more elaborately if we throw in more images for each frame as the playback head implicitly calculates the passing of time. The specific number of images here used is three as is evident from the comparison between the actual value 4 and the variable *pDrSffx*. The line that follows reinitializes the value of the suffix variable to one, thus recycling the images from the start. Now suppose the door, which is one of the few concrete elements the reader is introduced to in the beginning of *Mrs. Dalloway*, is adequately represented by the setup we just worked out above. What about the seemingly randomly scattered words that almost baffle the readerly consciousness and nearly mires the reader's effort to take in a consistently meaningful overall picture? Good representation of that mental image would be to approximate the randomness and the collage-like effect the author's technique achieves in the original text. How can that be emulated, if I may ask the redundant question on the heel of the same just preceding this one? Look at the following structure before any explanation is attempted.

```

on new me, spNum, origLoc, memName, aniSndNm
  pSpriteNum=spNum
  pOrigLoc=origLoc
  pMemName=memName
  pMemSffx=1
  sprite(pSpriteNum).member=member(pMemName&&pMemSffx)
  pStep=1
  pOrigStep=pStep
  pAmount=random(160)+60
  pFrequency=8
  pSpeed=random(8)+2
  pAniSndNm=aniSndNm
  pWaitT=the ticks
  return me
end

```

This is part of the object creating structure that is needed to control the animation we

are envisioning. Unfortunately, this is just a portion of the whole controlling coding that enables the jumping and thrashing of the key phrases that pop out before the readerly consciousness referred to above. It may be unwise to become too verbose. Let us plunge into the arcane world of programmatics. As I mentioned, on new me handler generates a self-encapsulated object upon request from the calling function. The parameters appended to the handler, their order, stores the values sent over for the calling script. They will be immediately used to initialize the local property variables that will be used throughout the current script. The channel number is represented by pSpriteNum and it assumes the value sent over through spNum (or it may be more accurate to say in the form of or even vessel of spNum). The proceeding two lines execute the same function except that they invest each discrete value in the named variables. The following line set the suffix umber to integer 1 to initialize the variable so named.¹⁰ The variable pMemSffx now defined, the member pMemName&&pMemSffx points to a specific cast member that will be first utilized to cycle appropriate members through. The pStep variable is established to generate the jerky movement of the words, which at this point is hypothesized to approximate the random appearance of the staccato images in the original text. Similarly, all the following initializations are appended to materialize the quirky conceptual patterning that is brought out to bear on the readerly consciousness by the author.

As I already mentioned the actual control is left to the coding that is built into the scripture the former object creation segment is a part of. Let us analyze the engine of the animation and see if there is anything to be potentially embedded into other functions later on. But first the script.

on goAppend me

if getOne(the actorList, me)=0 then

append(the actorList, me)

end if

if getOne(sprite(pSpriteNum).scriptInstanceList, me)=0 then

append(sprite(pSpriteNum).scriptInstanceList, me)

end if

end

¹⁰ Although I mentioned time and again throughout my papers, it may be wise to remind the would be editors to always remember to fill empty variables with a definite value before any action is attempted. The failure to do so entails a penalty that is sometimes so calamitous that the entire presentation fulcrumed by the set of scripts collapse without giving any clue as to why.

The switch is managed by incorporating the created object into the universal list called actorList. In that light, the first line checks if the object referred to is already in the list and only if not (=0) it (me) is appended to the actorList. This seemingly innocent and redundant maneuver is crucial because the objects that exist in the program at any given time is not actually checked by their specific identifier but by the order in which they are incorporated in the list. Therefore, if the same object is inadvertently put in the actorList, which might as well happen if the object identification does not take place both immediately after and before it is put in the list on the heel of its generation, then the result could be a total chaos where no object would be able to find its assigned function. The second if conditional clause checks if the object is also incorporated in the scriptInstanceList, which deals with the kind of behaviors it is associated with. The same logic works here. If it is already included then the following operation is shunned; otherwise, it is put in the list and the object is linked to the type of behaviors later defined in the script. When the switch is turned on in the goAppend handler, then the actual animation is left to the following coding preceded by on stepFrame.

```

on stepFrame me
  if pStep>=360 then
    pStep=pStep-360
  else if pStep<0 then
    pStep=pStep+360
  end if
  angle=2.0*PI()*pStep/360.0
  x=cos(angle)*pAmount
  y=sin(angle)*pAmount
  sprite(pSpriteNum).loc=point(x,y)+pOrigLoc
  allowAnimation(me)

```

It essentially allows a circular movement to the target element. It goes in either direction as specified by the conditional segment, which checks whether the defined step variable is less than 0 or equal to or greater than 360 degrees. The ensuing two pairs of coding turns the object in a circular manner with the original location dictated by the value represented by pOrigLoc. Interestingly enough, the actual core animation control is left to a very short coding that is turned on every stepFrame by allowAnimation().

```

on allowAnimation me
  if pStep=pOrigStep then

```



```

if random(pFrequency)=1 then
  pStep=pStep+pSpeed
end if
else
  pStep=pStep+pSpeed
end if
end

```

The rest of the stepFrame, which is the heart of the animation mechanism for this segment of the animation, is dedicated to the member manipulation that has already been touched upon. The overall scheme here introduced just a barebones structure that can easily be improved upon. For instance, behaviors attached to the object, or more intuitively the graphics with which the object is associated with, can be turned into very elaborate kind that faithfully emulate the supposed reactions interfacing of the original text and the readerly consciences give rise to. However, due to the limited space in which to weave our literary and digital media amalgamation it may be better left to the imaginative minds of the would be programmers to take their cue from the sketchy scheme and develop on it. We are, unfortunately, compelled to hurry on.

The next passage continues the same discontinuous collage-like tone. Note how expansive the imagery the author develops in the following excerpt.

What a lark? What a plunge! For so it had always seemed to her when, with a little squeak of the hinges, which she could hear now, she had burst open the French windows and plunged at Bourton into the open air. How fresh, how calm, stiller than this of course, the air was in the early morning; like the flap of a wave; the kiss of a wave; chill and sharp and yet (for a girl of eighteen as she then was) solemn, feeling as she did, standing there at the open window, that something awful was about to happen; looking at the flowers, at the trees with the smoke winding off them and the rooks rising, falling; standing and looking until Peter Walsh said, "Musing among the vegetables?" (p. 5)

Indeed it is a long passage to quote but considering the layers of images that weave and reweave upon themselves and develop into a wave like motion and metaphor, the abrupt and extended lifting of the passage from the source seems justified. Now it is incumbent upon us to analyze and make sense of the scene where the protagonist indulges in imaginative effusion. As with the previous passage the initial remark immediately gives way to ambiguous and at the same time diffusive interpretations. As the sense meets the readerly consciousness through the interface of the textual

inscription on the page the expression "What a lark?" expands into something semio-semantically more than what it is. Obviously what lark represents may be imbued with the senses and nuances that have been cultivated through centuries of cultural and literary accumulations such as well represented by Hayden's famed quartette, if I cite a very general exemplification. But could it, meaning the textual manifestation of the word in question, be a literal representation of the lark that actually flew in the sky at the time Clarissa's mind wanders back to and seizes upon? But as the readerly consciousness is dragged into the world the protagonist's mind dwells upon the literal and figurative distinctions fade into the penumbular regions where any conscious excursion is possible. Note, in fact, how the protagonist's mind wanders through the conscious landscape that actually stretches over a period of boundless years with the only controlling element being the core of her psychological hangover, Peter Walsh. Except for the fact that her ideas and associations whirl around the central core of her memories they do not particular manifest any specific vectorial characteristics to the cursory eyes of a person who tackles the collage-like coagulation of random imageries. But the conscious trajectory Clarissa's mind reveals eventually does force the readerly consciousness to focus on the causational, or rather semi-causational, relationship between the doors taken off their hinges and the French window leading to the blissful encounter with her beloved and all those associated memories circulating around him.¹¹ The constant narrative oscillation along the chronological line has to be considered with this psychological nub in the depth of the protagonist's mind. Once that is accepted then all the associative detritus that accumulates around the narrative axis can be easily reconciled. The abrupt exclamations in the second paragraph—in the present quotation the first part of the passage—are cues in fact that reminds the reader that the protagonist's mind dwells astraddle two, or more than two, chronological terrains that are in turn anchored by the most vivid and fond memories generated by her romantic encounter with Peter. No wonder all the sensory images become extraneous to Clarissa and to the readerly consciousness by extension. Because they are mere associations and not the core of her experience and they are merely to be appended to the true and the only significant

¹¹ In this context an observation like C. Ruth Miller's becomes rather contradictory. Despite the seeming non-presence of the author, or to be fair I should say unobtrusiveness of the author, the hidden threads are always there for an intelligent reader to discern to move the dramatis personae in the designated direction. There should not be any contraction, however, between the need for readerly fleshing out of the story and authorly scheme of the narrative. For more on the invisibility of the author in Woolf's work, see *Virginia Woolf: The Frames of Art and Life* by C. Ruth Miller, pp. 17-44.

event that took place in her romantic youth. With that understanding it makes sense that the choppy expressions and syncopated floating images bombard the readerly consciousness without any apparent writerly afterthoughts. Because they establish their *raison d'être* by their spontaneity and their narrative value by their truncatedness from editorial intentionality. All the floating and detached—seemingly, that is—images in other words find their essential being and functionality by merely being those images—dissociated from anything that tries to control the narrative line and preserving their seeming narrative autonomy from anything that can be termed as authorial oversight. However, an interesting part of the Woolf's presentation is that despite the putative autonomy those images tend to foreground before the readerly consciousness they are inevitably subsumed by the etiological line that etches itself under the cacophonous narrative surface. For example, in the passages we have gone through, the causational line that can be traced, as I have already mentioned, is the present or the present activity she is currently engaged in that is continuous with the past with all its rosy associations with Peter at the center of it. This dominant thematic whirlpool becomes ever so pronounced as the reader advances in his comprehension of the situation that all the narrative imageries the truncated phrases evoke tend to get sucked into the general ethos Clarissa's involvement with the young romancer generates. Again, if I dare run the risk of being repetitive, the etiological narrative axis once again takes over independent lateral derivatives and subsume them under its control. Or at least that is what is presumed to occur in the reader's mind as he tries to construct and deconstruct the narrative significance while each raw image relentlessly falls on his interpretive psyche.

Indeed the whole setup seems like a formidable nugget to translate into the digital realm. Especially when we consider the multi-layered significations and functionalities each phrase is assigned in the overall narrative configuration. But we must try and come up with a template on which to build the optimal structure to realize the phenomenological world that is developed at the juncture between the readerly consciousness and the original text. First let us conceive a general plan in which the thrusting axis is somehow always in the background of the interface. It does not have to be obtrusive but it needs to be omnipresent somewhere as a physical entity as it were the psychological hangover the protagonist of our work is hiding in the corner of her mind all the time, although once again she does not say it in so many words. The optimal strategy to realize the conception is to use the modulated blend property in the program in consideration.

Sprite(pTrgtSpNum).blend=pOmnPrsntBlndV

Of course, the value indicated can be modulated according to the momentary needs as the interfacial manifestation gives rise to. But for the moment let us leave the blend value initialization as it is. Next we can tackle the scattering and almost random popping up of images that occur as the reader proceeds with his encounter with the author's original text. How can that be translated on the digital plane? Could there be a matrix on which to build all the lateral contingencies as they arise with the passage of time, which in turn can be analogized to the temporal axis on which the mental grasp works as the reader tries to comprehend the gestalt signification of the original work? The spluttered images, however, can be rendered by the incremental method, in which an integer value is added to whatever value the property representing the channel, for instance, is added in the following manner.

```
PImgChnnl= PimgChnnl+1
```

```
PImgMmbr=PImgMmbr+pImgSffx
```

```
PImgSffx=pImgSffx+1
```

Etc.

All you have to do is to check the maximum number of images or the channel they will reside in. (Unless those values are checked the preceding coding keeps adding the integer value indicated to itself ore ever, resulting in mismatch that is irreconcilable to the nature of the presentation program. The checking process is also simple. All you have to do is to define the maximum value allowable for each variable and compare the current value to the value thus defined in the following manner.

```
If pImgChnnl<pImgLstChnnl+1 then
```

```
--Go ahead and run the script--
```

```
Else
```

```
Exit
```

```
End if
```

Although the coding is put rather facetiously, the general intent should be obvious. Besides the imagistic random rise to the stage, sound cacophonization seems also appropriate in this context. Let us conceive a plan in which a series of text related sound clips play one after another with the passage of time. In order to realize such a scheme, in which all those target clips play independent of whatever is happening on the stage, objectification of the engine seems very apt. Therefore, the following is an adumbration of such an encapsulated aggregate of scriptural dynamo. First, however, it has to be triggered at some point in the development of the presentation. It can be accomplished in the following manner.

```
SoundObj=new(script "soundEnginePrnt")
```

Of course the line just quoted is a bare minimum of the script invoker. You need to append appropriate arguments so that the object, when once generated, can avail of those values sent from the calling script. Some of the arguments that need to be sent over to the target script would be the channel number in which the sound actually plays, the sound clip member names that will be played, and the manner in which the target clips will be played, if applicable. There are other numerous arguments that can be sent over to the object generating script in order to facilitate the smooth operation of the sound playing mechanism, of course. But for the current conceptual adumbration, let us ignore them and stick to the main two that will be passed on to the invoked parent script. Now once the object is safely stored in the calling script it can be utilized to turn on the switch, as it were, to bring on the cacophonous wave of auditory effectual simulacrum of the original text. That switch is turned on by a very simple coding in the following manner.

SoundOn(soundObj)

It may be rather bathetic but in the setup we have been preparing it is no more complicated than the line we just quoted. But the truth is that we have been hurrying on a little too fast. The actual engine has not yet been adumbrated. Now we turn our attention to the invoked object generator. First and foremost, it has to be able to return the object that is requested of it. The mechanism for that is expressed as follows.

On new me, sndCh, sndMm

Once the object is created then the real work is to be done by a kind of a switch that is realized by incorporating the object in a list so that a message that is issued every step through the presentation has a chance to be snagged by an appropriate handler. That process, however arcane it may sound, has already been mentioned time again throughout this paper. The bare architecture for that scheme can be described in the following manner.

On goAppend me

If (the actorList).getOne(me)=0 then

(the actorList).append(me)

end if

Does it look familiar? It should be but if it is not, my point should be grasped firmly without sounding too redundant. Now the actual sound files that are to be played will be triggered by, first, checking the sound channel if it is already used and second if the sound that has been played immediately before the current one is to be played has indeed been selected again as the candidate for the next (or I should say the current)

sound. If that is the case then the selection process starts again by randomizing the content of the sound list before the current sound is picked. If the same thing happens then the randomization process takes place again until at least a different string value results from the said process than the value representing for the one that preceded immediately before the present occurrence. But the explication for the sound selection mechanism is becoming more complicated than actually is. I will present the target relevant coding to avoid further confusion.

```

on stepFrame me
  if soundBusy(pSndChnnl) then
    exit
  end if
  repeat while member(pPrvSndNm, pPrvSndCstLbNm)=member(pCrrntSndNm,
pCrrntSndCstLbNm)
    pCrrntSndNm=getOne(pSndList, random(pSndList.count))
    if pCrrntSndCstLbNm<>pSndCstLbNm then
      pCrrntSndCstLbNm=pSndCstLbNm
    end if
  end repeat
  puppetSound pSndChnnl, member(pCrrntSndNm, pCrrntSndCstLbNm)
  pPrvSndNm=pCrrntSndNm
  if pPrvSndCstLbNm<>pCrrntSndCstLbNm then
    pPrvSndCstLbNm=pCrrntSndCstLbNm
  end if
end

```

Now does this look as simple as I promised? I am not surprised that you are unfazed a little by all the property variables that pop up throughout this coding. But you should not be discouraged. This is in fact as straightforward as any simple script I have tried to use to adumbrate my presentational structure. First, the soundBusy() function checks, as I already laid out before you, whether the sound channel, here represented by pSndChnnl, is busy or used.¹² If it is busy, then no more code running is necessary. The following part is only utilized when the sound channel is not used, that is when no

¹² Strictly speaking the expression should be written as if soundBusy(pSndChnnl)=1 where 1 stands for true and 0 false. But to encourage brevity and clarity in programming and also, which is perhaps more important, to expedite the editing process by minimizing cluttering of coding structures, the right term, that is true or false, part of the expression is assumed implicitly in functional expressions like this. This is indeed a very common practice.

sound is playing. The next repeat section checks if the string value that is equated with the preceding sound file is the same as the string value selected for next playing. If they match then the repeat process continues ad infinitum. It is only a setup that tries to ensure no repeat of the same tune twice, which will be boring and extremely detrimental to the effective permeation of the target sound throughout the playing environment. The rest of the coding is an auxiliary to the non-repeat sound scheme of the script. One important thing is that the sound files that are put in the target list are to be played forever unless there is any specific interruption in the form of reader request or other programmatic trigger embedded within the presentation.

Let us jump a number of scenes and go to the section where the protagonist arrives at the florist. There is no particular reason why we fall on the exact juncture in the protagonist's excursion except that it again exemplifies the quintessential expressionistic collage like congeries of images as Clarissa faces the overabundance of colors in the shop. First let me quote.

Nonsense, nonsense! She cried to herself, pushing through the swing doors of Mulberry's the florists.

She advanced, light, tall, very upright, to be greeted at once by button-faced Miss Pym, whose hands were always bright red, as if they had been stood in cold water with the flowers.

There were flowers: delphiniums, sweet peas, bunches of lilac; and carnations, masses of carnations. There were roses; there were irises. Ah yes—so she breathed in the earthy-garden sweet smell as she stood talking to Miss Pym who owed her help, and thought her ind, for kind she had been years ago; very kind, but she looked older, this year, turning her head from side to side among the irises and roses and nodding tufts of lilac with her eyes half closed, snuffing in, after street uproar, the delicious scent, the exquisite coolness. (p. 15)

Note how the images and the psychological effluvia that go with them change from one mood to another without any explicit authorial interpolation.¹³ (This is not to say that the collection of impressionistic concatenations goes without being seized by the reading subject's active consciousness.) The initial interjection that leads off the present quotation is obviously meant to allow psychological transition both for the reader as

¹³ Indeed changeability is another narrative undercurrent that runs through the story. Even the protagonist is said to be one of the most unstable and fluid characters in Woolf's stories. She is in fact, as Ralph Freedman puts it, a symptom of the world in which "nothing remains stable long." He goes characterizing her as a "creature of motion and change," thus not capable of solidification. The quotes are from Freedman's *Virginia Woolf: Revaluation and Continuity*, p. 160.

well as the protagonist herself. In fact it is, which is rather rare in this very stream-of-conscious novel, appended with the authorial objectifier “she cried to herself,” as the scene transitions into the next one, the florist’s shop. The act of “pushing through” the door indeed accentuates the notion of plunging the reader into another schematic dimension that lies on a different psychological terrain than the one the preceding actions were based on. Here the descriptive insertion intrudes for the first time (well, perhaps not for the first time to be exact but it is rendered in such an obtrusive manner that it deserves to be placed in a category of its own) that almost throws the reader in a traditional novel format as he readies to take in the full significance of the schematic implications. Indeed this impression is extended by the descriptive follow-through the author employs in this abrupt yet rare paragraph. The seeming change in format even tries to distance the reader to an appropriate perspectival vantage point while giving him an ample opportunity to judge on the protagonist who can dare say the “button-faced Miss Pym” with bright red hands. At a glance this is an innocuous remark enough but at closer scrutiny, to which any careful reader is condemned to be reduced or rather promoted to, the full humanness of the protagonist becomes foregrounded with all its sordid appurtenances. While all the tenuous congeries of images, which have barely been pulled together by readers’ benign imagination, tended to endow the whole fictional space with the pellucid penumbral tones this sudden manifestation of all too tangible observations by Clarissa pulls her down to the level where the reader can communicate at a level where all the mundanities threaten to intrude. The magnified images represented by Pym’s reddened hands are even extended, as it were, by the very descriptive conveyance of the flowers that are located in the shop. In fact itemization of the floral names even threatens to tax the readers’ patience before the protagonist’s attention finally shifts to the florist. This time the attendant signficatory implications impinge upon the temporal associations that trace back their origins way back years.¹⁴ The momentary manifestations of the relationship between the two women tries to expand into a gamut of emotional complications that might or might not have their roots in something more complicated than the mere choppy images suggest. What does the protagonist exactly

¹⁴ The idea of temporal circularity, in which Wool indulges in *Mrs. Dalloway*, is again a mere derivative of her “discovery” of “tunneling into ‘caves’ behind characters.” The issue of non-linearity was indeed so closely tied to her quest to capture the so-called reality that the hiatus between “the inner and the outer world, the past and the present, speech and silence” could be also said to be collapsed in the present novel in order to aspire for a “form” that was “patterned like waves in a pond rather than a railway line.” The quotes are from *The Novels of Virginia Woolf* by Hermione Lee, p. 93.

mean by the remark, "Miss Pym... owed her help," or "[Miss Pym]¹⁵ thought her kind, for kind she had been years ago," etc.? Could it mean that the passage in question is a cue for the readers to pick up the signifiatory threads to trace back the very personal relationships and excavate layers of apparent impenetrability to find the nubs that might reveal keys to understanding and interpreting the protagonist? Or is it entirely something else? But either way sudden gratuitous confessionals just nonchalantly dropped in the cursory remarks of the protagonist cannot just let the readers go on to the next signifiatory segments without disturbing the latter as to the nature of the relationship hinted upon and the personality of the protagonist. But all the allusive references to the relationship between the two figures redound to the protagonist herself when the reader is dragged back to the situation that is actually unfolding in this passage. Regardless of what the distance between the two figures is being treated he is forced to recognize the unidirectional nature of the conscious flow. It is the protagonist and what is occurring in the protagonist's psyche that is, whether unbeknownst to the readerly consciousness at first, foregrounded. Note the furtive observations, or rather the passive perspective, that is exemplified by the point of origin of the cursory remarks that are generated from. It is by no means absolute; rather, it is completely dependent on the mood and whims of Clarissa when she stored those impressions in her malleable memories. It could very likely that the bits of seeming revelations might not signify as they were at first glance supposed to. Could all the observations be merely relations of the state of our protagonist's mind and the reader is implicitly led on to the path to the logical ratiocination that the space occupied by the peripatetic narrative, both in the mental and psychical sense, is permeated with the multi-faceted reflections upon our heroine and her mind alone? That all sweeping generalization aside, the manner in which the narrative advances seems to corroborate the extensive permeation of Clarissa's mind process. Note the extreme introversion, which is the hallmark of the present story, that increasingly takes control of the passage I quoted above. The reader suddenly feels lonely because he is forced to come to grips with the reality that in this narrative space there is after all no one or nothing except the protagonist's mind and the residues that drop out of her expansive thought process. Look at the thought process that is exemplified by the extroverted, concrete tidbits to

¹⁵ It could be argued that the subject of the sentence here quoted might as well be Clarissa. It would put the reader in a diametrically opposed perspective. But in the world of Virginia Woolf where truncated impressionistic images predominate, reversibility of the perspectival entities is a norm rather than the exception. In a way, the fluid subjects and reversible perspectives make her writing more rife with interpretational opportunities.

the introverted abstract state of the protagonist's mind (or rather the manifestations of or reflections upon the protagonist's mind) that ultimately impinges upon the isolated psychological landscapes that only the self in question could possibly be absolutely sure about as to its mental topography.¹⁶ Indeed, all the amorphous mental effluvia arising from the protagonist's mind is effectively punctuated by the announcement of "opening her eyes" in the next passage. This concrete reference to the psychical action on the part of our protagonist definitely announces, in retrospect, the way the story flows in and out of Clarissa's mind. The momentary illusion that the reader feels that the scenes developing before his mind's eyes are completely identifiable with his own personal experience constantly dissipates before the fickle flow of the story. But the constant reminder as to who is in charge of the story is for the better for the programmer who is intent on creating the interface to represent the dual actors who participate in giving rise to the synergy that is perhaps greater, or more interesting to be more exact, than the single experience the textual version tends to provide. In a way the digital-textual fusion opens up a narrative horizon where more signifiatory elements are to be generated rather than merely constraining the reading subject to the subservient role of following the phantasmagoric conscious meanderings of the main player in the narrative. If the reader can assume an active role in the new digital setup it is of course for the better both for the seeming direct experience he can obtain and the degree of malleable overall meaning he can possibly endow the original text with. Although I am by no means willing to go along with the entropic search for the meaning of art as the old deconstructive school was wont to do, if the fusion of the kind envisaged here has a modicum of a chance to broaden the signifiatory horizon of the work we are dealing with I do not hesitate to break away from whatever tradition that work has been constrained within. By running the risk of sounding trite, that exact exploration of the narrative horizon may well have been one of the important objectives of Virginia Woolf. If I am not egregiously off the mark then I can be said to be extending the course of narrative exploration the original writer herself had initiated. And the passages, which follow the scenes we have particularly seized upon to bring out the conscious trajectory of our protagonist as being exemplary of her fluid mental

¹⁶ Although I have a strong doubt that even Mrs. Dalloway herself may not be fully aware of the implications of the thought process she is engaged in. Except for the privileged few whom the author thinks may have a chance of glimpsing into the inner psyche of the protagonist's conscious nebulae because of their astute mental incision into the deepest corners of the mindscape, no one may be absolutely sure of the direction and the true significance of the collage of images that are dotted throughout the passage.

interactions with the external stimuli, seem in their turn just to reiterate the romantic sensibilities and thus firmly embed the conscious landscape of our protagonist in the literary tradition that had been in ascendance for generations. Well, the sentence has been rather clumsily related to the previous argument, I am sure. But the point being made here and the point I would like to get across to the reader is that Virginia Wolf herself has been also in the middle of that maelstrom that is we as multimedia pathfinders are indeed involved in, to extend and expound on the tradition that has been there lying and in the midst of the literary activities our author herself had been ineluctably embedded in. Now without going too much afar in the direction of splitting traditional fine points let us now concentrate on finding the synergistic interfaces between the traditional text and digital media.

Once we set upon constructing the ideal interface the task seems to overwhelm us with its sheer complexity. How to render the vivid images, the tangible colors—the collage of them popping up in the conscious landscape of our protagonist as the mind continuously plasticizes and plasticized in its turn by the very images that are given birth to by the mind process of Mrs. Dalloway—and the ever changing physical milieu in which our heroine is located herself? Can this be really realized through the media and in the environment we are proposing to construct? The lofty ideal seems to come crashing down on us by its sheer unattainability. But once again the key word is courage. We need to be emboldened and go a step at a time no matter how far the projected goal seems to be. Enough of preambles and adumbrative ratiocinations. Let us begin in gritty, concrete terms to build a castle of literary pleasures where the fusion (the word I have been using too abundantly throughout this paper, I admit) between the two media is so natural that one helps the other to come to its full fruition that has been impossible in the unilateral traditional approach. Then back to the initial proposal to incorporate the spontaneous generation of images, colors in tandem with the continuously shifting environmental parameters—I mean how to synthesize them effectively with the digital media to maximally give rise to the significatory shades that are potentially in the original text? How about the following scheme? A hand of Pym’s gradually appears across the stage and when it is completely visible it still moves across the stage as if to focus on its “peculiarity” which it is to our protagonist. When it has enough foregrounded its ruddiness a sound plays again to bring the interactive subject’s attention to the hand. Look at the following setup.

on new me, spriteNum, yToXratio, fdInTmV,xLftMvLmt, pymRsDhndSnd

pSpriteNum=spriteNum

pYtoXratio=yToXratio

```
pFdInTmV=fdInTmV
pXlftMvLmt=xLftMvLmt
fdToXdstncRatio=((800-pXlftMvLmt)*60*pFdInTmV)/float(100)
pXlftMvDstnc=(800-pXlftMvLmt)/fdToXdstncRatio
pPymsRdHndSnd=pymsRdHndSnd
return me
end
```

This scheme in reality does not meticulously correspond to the plan delineated above. However, it may suffice as a rough sketch to visualize the kind of interactive platform to bring in the engaged subject further into the world of digital-textual realm for the establishment of which we have been striving for the duration of this essay. But cursory explanation is due, nevertheless, to let the would-be programmers to build their own customized versions on the basis on the current framework. The first line is incorporated in the scheme to store the value necessary to realize the target action in the designated channel. In other words, pSpriteNum is to be accessed throughout the script to envisage the Pym's hand fading in as it slides across the stage. The next equation is included in order to coordinate the y increment in relation to the x increment. (In this particular instance y value is relativized to the absolute value of x, although the reverse operation could easily have been put into service without any undue complications.) The next line sets the fadein time of the hand to the variable pFdInTmV to accomplish the timely fadein across the stage. The following lines are needed to coordinate the fade timing with the distance the target hand moves across the stage. The initial part of the current parent script is concluded with the designation of the sound clip that is used to coincide with the full fade value and cessation of the movement of Pym's hand diagonally across the stage. The ultimate command, of course, is the set phrase needed to return the object and its assumed values to the macro program so that all those stored values can be accessed throughout the presentation as long as the object exists in the virtual sphere.

Once the object is created then it has to be included in a global list called the actorList in order for it to generate a signal needed to give rise to the target animation. The operation has numerous times been touched upon that the lack of space compels us to hurry forward. The next coding assumes that the object has already been incorporated into the said list.

```
on stepFrame me
  if sprite(pSpriteNum).blend>100 then
    Sound(1).queue({#member: member(pPymsRdHndSnd)})
```

```

Sound(1).play0
xOut(me)
go next
end if
sprite(pSpriteNum).loc=sprite(pSpriteNum).loc + point(-pXlftMvDstnc,pYtoXratio*pXlftMvDstnc)
put sprite(pSpriteNum).loc
sprite(pSpriteNum).blend=sprite(pSpriteNum).blend+float(100)/60*pFdInTmV
end

```

By now you must be adept at figuring out what this series of expressions signify. This is indeed the part that actually controls both the fadein and movement of the all-important hand. As the handler `stepFrame` indicates the relevant values are checked every time the signal `stepFrame` is issued from the program, which would be every fifteenth or thirtieth of a second (actually any value between 15 and 30, if you are aiming at an acceptable animated presentation) depending on the playback head speed initially set before the whole architecture has begun. The parade of colors that ensues is also structured in continuation of this chromatropic programming. As I emphasized before the sheer coloric onslaught released by the collage like representation of flowers and other almost metamorphized habiliments make themselves especially amenable to the rendering I have been leaning toward throughout this essay. But the space is limited and I am forced to conclude my attempt in a nutshell.

I have adumbrated in my paper how to inject the essence of the original text into the digital realm and somehow make the two come together in a synergistic whole. However, the attempt of the kind may be yet an arcane and murky one, which may or may not result in the kind of fruit ambitious pathfinders like myself dream of culling in the not so distant future. But the combination of the two traditionally considered disparate realms is sure to give rise to a sphere in which original literary text is weaved into new media and is transmuted into a new level of experience for those who have been inured to the traditional textual appreciation. Although there is no guarantee that the new experience is richer and more satisfying to the subjects who are engaged with the interactive interface, there is at least a modicum of possibility that the friction that the moment of fusion between the two entities occasions might nudge the tradition blunted consciousness into new aesthetic ebullience and enlightenment. However modest the objective may be, possibility of injecting new life into literary text more than compensates for the roundabout and often chaotic impression coding structuralization tends to impart to the reader. If as yet unexplored nuances suddenly rise unleashed from the seemingly exhausted original text it in itself seems to encourage and justify

the attempt I have been making throughout this paper. Nothing should deter literary exploration. That is and should be the motto for those who dare go beyond the trodden path. Mine exemplified here may not be such a bold one after all. Who knows what will be the literary landscape in a decade or even a few years? But whatever is in store for aesthetic front literary experimentation has to go in tandem with whatever is happening on other fronts and it cannot be but so. Literature is merely one manifestation of social-cultural engagements people find themselves involved in. If so then rather than avoiding and turning a blind eye to technical innovations that are taking place every single day why not take advantage of them to bring new insight into the corpus that has been mostly consigned to the textual realm? The time is more than ripe to deconstruct and reconstruct literary text by dint of the best early twenty-first century technology has to offer. Programming Virginia Woolf is merely a step toward that lofty goal.

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Virginia Woolf とプログラミング

この論文では Virginia Woolf の作品のプログラム化したプレゼンテーションの可能性を具体的にマルチメディアを前提としたコードも交えながら論述してみた。特に Woolf の著名な Mrs. Dalloway を取り上げその impressionistic な側面をいかにプログラムの見地からより enliven することができるか検討してみた。究極の目的は original text と digital media との synergistic な融合であるが、この論文ではプログラム言語の持つ versatility を活用して、いかに original text を伝統的な literary tradition の範疇を超えた signficatory paradigm のもとで interactive な consciousness に impact をもって訴えることができるか、という現実的なレベルで議論してみた。