

Time in Michael Frayn's Copenhagen

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Copenhagen is a play written by Michael Frayn, first published in 1998. The play centers on the afterlife ruminations of Neils Bohr, Margrethe Bohr, and Werner Heisenberg. Through the course of the play the characters try to discover why Heisenberg came to visit the Bohrs at their home in Copenhagen in 1941 during World War II. Because there was no official accounting of what took place at the meeting and the real Heisenberg and Bohr disagreed about what happened, a great deal of controversy was generated. Copenhagen operates within that controversy, testing out the possibilities.

The meeting and many of the events the characters discuss during the course of the play are centered in the turmoil of World War II. Espionage, surveillance, and military science are everyday reality. Bohr and Heisenberg are both responsible for developing atomic technology but for opposing sides of the war. Numerous theories about why Heisenberg went to visit the Bohrs have circulated over the years; Heisenberg may have been making an attempt to ascertain the progress of the Allied atomic bomb project, may have come to discuss the ethics of his participation in the Nazi atomic project, or may have intended to sabotage the Nazi project in some way with Bohr's help. The theories are endless, and this play makes use of the uncertainty by allowing the characters to try to discover what actually happened.

One of the most profound responses to the play came from Bohr's family. The family members were planning on releasing documents pertaining to Bohr's life for several more years at the time the play came out in 2002 (Niels Bohr Archive). The questions raised by the play led to the documents being released early. Ironically even with the new information the mystery surrounding the meeting was just as elusive and the uncertainty Frayn includes throughout the play was left intact.

Copenhagen is compelling to audiences today in part because of the tension of the events the characters lived through around the time of World War II. The outcome of the meeting, which is the focus of the play, could have greatly influenced the war. In both history and the play, this meeting was a life and death issue for the Bohrs and Heisenberg. The characters and audiences alike still want to know what happened on that day in 1941 that was worth such risk. It is a pervasive mystery that has crossed time with ease.

With the premise and context of Copenhagen in mind, we can begin a close analysis of the play to shed light on the subtle layers of content. Like Heisenberg moving up the path to the Bohr's home in Copenhagen, we begin with the meeting between Niels Bohr, his wife Margrethe, and Werner Heisenberg in 1941 that makes up the center of the play. Rather than writing a singular fictional version of the event, Frayn wrote a play where the characters reflect after their death about what happened at the meeting. Their position outside of time allows them to relive three different versions of the meeting as well as move back and forth through time while reflecting on their lives. This atypical use of time in the play gives Copenhagen unique but not unprecedented tools to explore the possibilities of the meeting. We will explore how time is used in the structure, content, and historicity of the play.

In most literature and drama the standard conventions of time are built into the structure. George Bluestone in his article "Time in Film and Fiction" discusses both conventional and unconventional use of time. He comes to the conclusion that "The treatment of time in fiction and film shows us once again that at a high conceptual level there appear certain common patterns..." (311). Some of these conventions include a linear chronological sequence of events, a stable passage of time, an ability for the events to fit into the larger structure of time as a whole, and recall of or flashbacks to earlier events. These conventions come to be expected, but

the choice to follow them or not can influence the play in intriguing ways. Brian Richardson in his article “‘Time is out of Joint’: Narrative Models and the Temporality of Drama” analyzes plays like Frayn’s, writing “I suspect that one of the reasons it is so difficult to frame literary theories is that literature thrives by altering the very orders it constructs: the essence of literature is to change its essence, its logic is to defy logic” (Richardson, 307). Copenhagen is justified in its unique approach to drama and time because it is reshaping the approach to the material.

Copenhagen clearly uses an unusual temporal structure. The characters begin their story essentially at the end of time, when they are all dead. They then slip back through time in their minds and relive a version of the meeting in question. When the results of the reliving process are unsatisfactory, they try another version, and then finally one more before the characters are satisfied. The same tense change that transports the characters through time into the versions of the meeting also moves the characters into powerful memories. The use of unusual temporal structures isn’t out of place on the stage because “[T]he majority of the most interesting narrative experiments were conducted on the stage” (Richardson, 299). Theatre drama allows the audience to engage the text in ways television or films cannot.

The willing suspension of disbelief for staged plays is much stronger than it is in other media. Bluestone’s general assertion in his article is that film is always in the present due to its forced rate of observation while text is always in the past because of the limitations of language. Richardson takes a step closer to Copenhagen by dealing with drama, going back to the work of Shakespeare. Richardson explores how temporality has been experimented with on stage by examining Shakespeare’s Midsummer Night’s Dream. Richardson finds numerous occasions in the play where time is compressed and concludes that overall “The story – the order of the occurrence of the represented events – is itself internally contradictory, inherently unknowable, or even non-existent” (300). The paradox of the play is resolved when Richardson concludes that

the one night the title suggests is true for the characters in the forest while four days pass for the other characters. Midsummer Night's Dream, like Shakespeare's other work, has been extremely popular for hundreds of years. Audiences accepted the unusual use of time long before many dramatic experiments with time had been made and the popularity of the play has continued to grow with time. The experiment was a success.

Both Midsummer Night's Dream and Copenhagen use relative time. The characters slip past each other through time due to the unusual way time works in both plays. One could disagree with Bluestone and Richardson and argue that a willing suspension of disbelief could allow text and film to use time in new and believable ways, such as in science fiction. Even with the freedoms text and film have inherently, a staged play is able to experiment with time more freely because theatre makes use of a suspension of disbelief where film and literature attempt to be taken as reality. A playwright crafts a world in the imagination of the audience free of the restrictions of realism that comes with film. The only aspect necessary to allow the audience to follow the play without getting lost is the playwright's ability to manage the use of the time in the play well.

Frederick Hunter writes in "The Value of Time in Modern Drama" that "in dramatic art, some management of time enhances, and some detracts from, the vivid and rich experience of a play in the theater." (194). Frayn is managing time in his play as a vehicle for the characters to reflect on their lives to good purpose. Hunter would likely consider that Frayn's management of time would enhance the rich experience of Copenhagen. He writes:

There are also indications that the use of double time and the resulting fluidity of duration, interval, and historical moment may make it possible to theatrically exploit the intense crises to be found in certain lengthy stories while at the same time unraveling an extensive history in the same plot structure. (Hunter, 201)

Frayn is not the first to manage time in a way that enhances the text. Shakespeare also utilized unconventional methods in his use of time.

While exploring temporality, Richardson explores some of Shakespeare's Midsummer Night's Dream. In the discussion of the play Richardson writes that "the paradigmatic literary text often ignores or subverts the temporality essential to natural narratives" (Richardson, 306). He goes on to write:

The title itself suggests that one night will be the period of time depicted and enacted and the neo-Aristotelian unity of time will therefore be observed, but the first lines spoken contradict this: the "nuptial hour" of Theseus and Hippolyta will take four full days to arrive.  
(Richardson, 302)

The neo-Aristotelian unity of time is based on Aristotle defining "the action as being a complete whole, having a beginning, middle, and end" (Richardson, 195). It is presumed to be a construct of chronological and linear time, a convention Midsummer Night's Dream breaks. Richardson later explains "In Shakespeare's text, two incompatible story times are present: one for the orderly city, the other for the enchanted forest" and "even as he speaks, time begins to contract" (Richardson, 303). Multiple concurrent timelines and contraction of time are both elements present in Frayn's Copenhagen. While his use of time is unusual, it has a precedent in the work of one of the most critically acclaimed playwrights of all time.

While time is firmly established in the structure of the play, it is the content of the play that gives the use of time meaning. The characters and the events of their lives through out history give the play shape, in turn reinforcing the structure. With Frayn's characters musing about the meeting in death, they have the opportunity to explore what happened multiple times and relive powerful experiences. This is impossible in a linear view of time because the characters would be unable to go back to their past. When their theories prove unfruitful they can try a new set. The mechanism that gives them this freedom must be elaborated upon. Bluestone

described Bergson's view of chronological time as time that was "measured in more or less discrete units, as in clocks and metronomes" (311). Chronological time is fixed, linear, and stable. It fits the conventions illustrated earlier. While the entire piece may not be necessarily chronological, having some chronological aspects is often considered a fundamental requirement of plot.

It is possible for a story to be told out of order without straining credibility as long as the events being discussed originally occurred in a logical and chronological order: "What is seldom realized, perhaps, is that in all drama – comedy, fantasy, tragedy, or melodrama – the anticipation of the audience can only be evoked for those events which fall within a probable sequence of antecedents and consequences" (Hunter, 197). Richardson points out in his article that no matter the presentation order, the original events have to fit into a logical chronological structure.

In many modern dramas, the distinction between story and text simply will not work because the story – the order of the occurrence of the represented events – is itself internally contradictory, inherently unknowable, or even nonexistent. That is, an opposition between story and its order of presentation only makes sense if there is a consistent, implied story to be arranged.  
(Richardson, 300)

Richardson's quote has interesting applications to Copenhagen. The play is about an inherently unknowable sequence of events and the scenarios contradict one another. However, the events in the lives of the characters followed a chronological sequence so Frayn could arrange references to them in any way he wished without losing the audience. Since the characters are operating out of a stable past, the audience can enjoy trying to understand what could have happened at the unknowable event, and they do so outside of chronological time.

Copenhagen operates outside of chronological time since the characters are already dead. The structure and content of the play both lead to differences from the chronological time of the original events. In plays "Plot time differs from time in real life in those cases when the action of

a play is said to have happened in some previous moment of history or in some other space-time context” (Hunter, 194). That space-time context is developed from the minds of the characters in Copenhagen, and allows the characters to utilize psychological time.

Psychological time is fluid and flexible. Euphemisms like “a watched pot never boils” demonstrate how psychological time operates differently to chronological time. Bluestone wrote that psychological time “distends or compresses in consciousness and appears in continuous flux” (311). Author Jared Moore wrote on Bergson’s idea of time, commenting that “the reality which we can most surely and readily know in this ‘absolute’ metaphysical way is our own personality” Moore, 305). For the purposes of Copenhagen psychological time can be defined in two different ways.

The first suggests that the human mind is capable of accelerating and collapsing the “feel” of time to the point where each individual may be said to possess his own time-system. The second suggests, beyond this variability in rate, the kind of flux which, being fluid and interpenetrable, and lacking in sharp boundaries, can scarcely be measured at all. (Bluestone, 312)

The characters of Copenhagen seem to operate within both definitions of psychological time. Because the three characters are dead, their existence can only be defined by their own minds. They have control to ‘accelerate and collapse’ time in relation to their own lives.

“When a playwright wants the passage of hours and months to take practically no time at all in the theater, it is justifiable to say that somehow the time has dissolved, disappeared like a vapor in the air. The audience has been transported to another context of space and time”  
(Hunter, 196)

Richardson discusses how never before is “theme more effectively dramatized than in the reforming of the shape of time” (Richardson, 303). The freedom afforded to the characters by being dead allows them to live entirely in a psychological sense of time so they can move back and forth just as if they were stepping into their memories.



The qualities of psychological time don't escape the characters either. The fluid quality of this time is located in the text itself. During their reflection on the past, the characters discuss the qualities of memory.

**Bohr** A curious sort of diary memory is.

**Heisenberg** You open the pages, and all the neat headings and tidy jottings dissolve around you.

**Bohr** You step through the pages into the months and days themselves.

**Margrethe** The past becomes the present inside your head.

**Heisenberg** September, 1941, Copenhagen... And at once – here I am, getting off the night train from Berlin...

(Frayn, 6)

They describe memory in a very conventional way, stepping into the past and into the events that have defined them.

[M]an is somehow a product of his environment *necessarily* of all his past experience. The dramatist, in order to reveal man as his psychoanalyst sees him, has had to search out his past and tell his whole story by representing it in many scenes.

(Hunter, 197-198)

The characters are capable of reliving parts of their chronological lives in this afterlife of their psychological consciousness, showing the audience what is necessary to understand the motivations of the characters. Even if the meeting itself is uncertain, by knowing the events and experience leading the characters to who they are, one can better predict what might have happened. The past really does become the present for them. In Copenhagen Frayn “creates a new reality, the most important characteristic of which is that laws of space and time which are ordinarily invariable or inescapable become ‘tractable and obedient’” (Bluestone, 313).

There is one additional reason why psychological time is critical to Copenhagen. Bluestone points out that “the novel has three tenses; the film only one” (Bluestone, 311). Drama is somewhere between literature and film. The audience is seeing a linear presentation given in the present despite the fact that the characters are talking about being in other eras. If the concept

that time could flow outside of the discrete units of chronology did not exist in our culture, the willing suspension of disbelief for the play would not be possible. With psychological time as a foundation, however, the characters existing in a timeless afterlife are given a freedom the audience can embrace and understand. It seems almost natural for the characters to be given this freedom in death, no longer restricted to the forward flow of time. This freedom, however, has interesting ramifications on the plot.

Hunter continues his earlier quote about Aristotle's view, saying that the incidents are 'so closely connected that the transposal or withdrawal of any one of them will disjoin and dislocate the whole'" (Hunter, 195). Despite the fact that the characters move back and forth through time in Copenhagen, the work has a unified, linear action. The characters start and end in the afterlife and in the middle of the play they experience numerous integral incidents that make up the three versions of the meeting. The beginning and end follow Aristotle's model well and the center of the play is full of events occurring out of order but they are all connected and vital, so much so that they draw the characters into the past.

The tool Frayn uses to visit the various points of the characters' chronological lives is that of the flashback. In his article Hunter discusses the flashback in great detail. He writes about the play Our Town, writing that "Not only is the flashback used throughout, but time also shifts forward and then back again impelled by the sentimental remembrance of things past" (Hunter, 198). He goes on to critique Sentimentality:

Sentimentality is a strong motive which may guide some playwrights to use the flash-back technique, and this is one instance in which time as a plot factor seems to be manipulated for the sake of a character's feelings or the author's feelings, rather than for the causal sequence of events.  
(Hunter, 198)

The use of flashback is integral in Copenhagen to develop the characters, mystery, and plot. It may be a characteristic of sentimentality while at the same time being a way for Frayn to manage the events. Sentimentality has a profound effect on the play.

Hunter describes sentimentality in a negative way, describing it in his quote as manipulating time for no other reason than emotion. Sentimentality is defined as “the tendency or practice of indulging in emotion or nostalgia” (Encarta). In Copenhagen time is manipulated for nostalgia, for the sake of the characters, and for the purpose of finding out why Heisenberg came to Copenhagen. The meeting is the driving force for the characters in the play, but it is their emotional nostalgia and curiosity that motivates them. In this way the play both fits and counters Hunter’s quote. Further, Copenhagen is about the characters as much as it is about the meeting. The audience shares the lives of the three people on the stage and hears about their wants, fears, questions, and concerns. It is natural for their emotions to be the force that drives their perceptions through time.

Frayn’s method of managing time has been established in literary theory, drama, and the text itself. The time management in Copenhagen functions well and enhances the play by allowing the characters to move back and forth through their lives. Also, by collapsing the events of their lives into small economical pieces of dialogue Frayn is able to make the play even more vivid. Hunter writes “There seem to be two distinct kinds of treatment that may be given to time in the dramatic structure. The first is employed to achieve vividness or intensity by compressing the action, i.e. by confining the action to events of short duration, or by accelerating the time within a speech or episode” (194). Copenhagen is a two act play with three versions of the meeting in 1941. Anything that is consistent between versions is used more economically each time, giving more time to explore what sets the current version of the meeting apart. Each new scenario is able to use the background established in the previous scenarios to move into

unexplored territory much faster each time, increasing the speed and vividness of the play. The three scenarios of the meeting are established very well in the structure of the play, but the shape of the play would be nothing without the support of the content.

Frayn clearly establishes the structural elements of his unusual use of time well, but it is still necessary to examine how the structure works in relation to the text. The play begins with the characters being placed by Frayn. Like the historical figures they represent, Bohr, Heisenberg, and Margrethe have been dead some time. The play makes no attempt to mention how long they have been dead, so the play isn't dated. The only indicator to how much time has passed is when Bohr responds to Margrethe's question about what happened by saying "You're still thinking about it?" (Frayn, 3). Enough time has passed for Bohr to move on and be surprised that Margrethe hasn't. The ambiguity of how much time has passed is just one feature of the afterlife in *Copenhagen* that is atypical.

In most works of literature characters in the afterlife are portrayed as being omniscient of what transpired in their lives, leaving them open to reflect and having no need to interpret. This is not the case in *Copenhagen*. Margrethe is still unsure of what happened at the meeting in 1941, despite being past the limitations of mortal life. Paul Gooch explores Aristotle's views of the dead in his article "Aristotle and the Happy Dead." Gooch begins with showing how Aristotle has reacted against the "Greek aphorism that forbids the attribution of happiness to anyone alive" (112). The conventional interpretation of Aristotle's view is that he believes "Good and evil befall not the dead themselves but their reputations" although alternative interpretations exist as well (Gooch, 112).

An insight Gooch offers to *Copenhagen* comes from his own interpretation. Gooch's interpretation of Aristotle's passage indicates that "The dead, though not immediately aware of goods and evils, do come to learn of them (perhaps indirectly and weakly) and are affected by

what happens after their death to their survivors” (113). The good and evil Gooch mentions is essentially what has happened to their reputation after death. The characters of Copenhagen are not aware of what happened at the historical meeting and they could be just as unaware of how historians have framed them. Their exploration is a quest for knowledge about what happened at the meeting and what happened to themselves.

The characters begin well after they have died, with Margrethe trying to get a better grasp on what happened during a specific point in her life.

**Margrethe** But Why?

**Bohr** You're still thinking about it?

**Margrethe** Why did he come to Copenhagen?

**Bohr** Does it matter, my love, now we're all three of us dead and gone?

**Margrethe** Some questions remain long after their owners have died. Lingered like ghosts. Looking for the answers they never found in life.  
(Frayn, 3)

Margrethe and Bohr continue to discuss the uncertainty of what happened, the disagreements and confusion that existed both for the characters and the world at large long after the characters had died. This tone of reflection makes up the introduction and conclusion of the play, but the main body is a living memory of the past.

Because the psychological time that allows the characters to move back into their past is regulated by memories, particularly strong memories override the focus on the 1941 meeting and pull the characters away from it and into the stronger memories. Their past lives are their present, and the meeting is pushed to the side when stronger memories surface. While Bluestone is explaining Proust, he points out a similar phenomenon: “To be sure, there seem to be intuitive moments of illumination in Proust during which a forgotten incident floats up from oblivion in its pristine form and seems, for the moment, to become free of time” (314). There are numerous such memories during the play, one of the strongest being the boating accident.

**Bohr** And once again I see those same few moments that I see every day.

**Heisenberg** Those short moments on the boat, when the tiller slams over in the heavy sea, and Christian is falling.  
(Frayn, 29)

And later Heisenberg suddenly reflects on his outcome after the end of the war:

**Heisenberg** Well, I must cut a gratifyingly chastened figure when I return in 1947. Crawling on my hands and knees again. My nation back in ruins.  
(Frayn, 78)

Despite the unusual use of time, Frayn is consistent and seems to even toy with the ability. The characters use many stories and experimental models to explain themselves and these stories also take on the present tense voice. “Ski-ing” is referenced many times in the play and often times the characters will speak as if they are skiing at the present moment. The mystery of Heisenberg’s purpose is central to the play and Bohr conveys that search for understanding while discussing the scientific theory stating that light is both a particle and wave:

**Bohr** But, Heisenberg, Heisenberg! You also have been deflected! If people can see what’s happened to you, to their piece of light, then they can work out what must have happened to me! The trouble is knowing what’s happened to you! Because to understand how people see you we have to treat you not just as a particle, but as a wave.  
(Frayn, 69)

The difference between being pulled into powerful memories and telling stories and anecdotes about their past is very slight. At times the anecdotes can give way to the powerful memories and the two methods of character and plot development come together.

Heisenberg’s tale of his exploits with the reactor in the cave at Haigerloch is an example of the synthesis between telling a story and reliving a memory. The meeting at Copenhagen takes place in 1941 and it is established that one possible reason Heisenberg came to Copenhagen was to get Bohr to try to help him cripple the atomic projects by lying about the ability to produce a chain reaction. While Heisenberg is discussing this with Bohr he talks about what happened in

the cave at Haigerloch, but that event took place in 1945. Heisenberg is talking about an event that took place after the moment he was in.

Hunter might raise an objection to this because “Whenever the dramatist has neglected probability in the sequence of his episodes, it may be that he has failed to cement the relationship of character to event by neglecting the continuity, duration, or historicity of time” (Hunter, 197). Despite this, the scene doesn’t strain the willing suspension of disbelief. Once again psychological time allows Heisenberg to operate in this apparent paradox of temporal settings. Frayn’s words are powerful, giving Heisenberg this freedom and connecting the events in the story to the structure at large as well as the history that has inspired the play.

The dialogue in Copenhagen is key to allowing the audience to transition through the structural changes of the three versions of the meeting as well. While each version is distinct, there are conventions to indicate that the event is resetting. Dialogue and actions conveyed through dialogue both point out the reset. In each version when Heisenberg shows up at Bohr’s home there is a warm exchange between Bohr and Heisenberg.

**Bohr** My dear Heisenberg!

**Heisenberg** My dear Bohr!

**Bohr** Come in, come in...

(Frayn, 13, 54, 86)

The greeting between the two acts as an anchor, one of the clearest signs that a new version is taking place. It is exactly the same in each version. Other signs of the new version taking place are not as stable. Even before the greeting each version of the meeting in 1941 begins with Heisenberg’s arrival. In act one Heisenberg’s character has been on stage thinking about his life as well, but as the characters are pulled into reliving their memories he approaches the house for the meeting.

**Heisenberg** I crunch over the familiar gravel to the Bohr’s front door, and tug at the familiar bell-pull. Fear, yes. And another sensation, that’s become painfully

familiar over the past year. A mixture of self-importance and sheer helpless absurdity.  
(Frayn, 12)

Heisenberg is firmly centered in his past, reliving the approach to the house and thinking about the fears he has. He is narrating himself in the moment with no regard to the afterlife. He is not omniscient to what will happen, worrying about what happens if he fails in his purpose. When the first version of the meeting is insufficient and the characters must try another version, Heisenberg again approaches the house.

**Heisenberg** Why did I come? And once again I go through that evening in 1941. I crunch over the familiar gravel and tug at the familiar bell-pull.  
(Frayn, 53)

Heisenberg is slightly less locked in the past, focusing more on the question of why he came and knowing that he was ‘again’ approaching the house. Once again this version of the meeting proves to be unsatisfactory to the characters and they must try once more, the last version beginning again with Heisenberg’s approach.

**Heisenberg** And once again I crunch over the familiar gravel to the Bohr’s front door, and tug at the familiar bell-pull. Why have I come? I know perfectly well. Know so well that I’ve no need to ask myself.  
(Frayn, 86)

Over the course of the three versions of the meeting, Heisenberg seemingly obtains a greater and greater clarity. Structurally, Heisenberg is moving further away from psychological time and closer and closer to the chronological time he started with.

The three iterations of the meeting allow for the characters to evolve. They have moved from the afterlife where they know nothing into the past to relive the experiences. They go through the experiences over and over until they are satisfied. Through the process, they start to reach the understanding commonly associated with the afterlife. Heisenberg exemplifies the process by beginning in fear, moving to confusion, before finally understanding his motive for



meeting with the Bohrs in 1941. His evolution is demonstrated in the opening of each version of the meeting, but is carried out through metaphors and anecdotes.

The scientific experiments and stories the characters tell express elements both in the play and about the play. Heisenberg for example may discuss an experiment like Schrödinger's cat to get his point across, but the same story can express qualities about the characters themselves. Heisenberg could be talking about their own growing understanding just as easily when he says "Until the experiment is over, this is the point, until the sealed chamber is opened, the abyss detoured; and it turns out that the particle has met itself again, the cat's dead" (Frayn, 26). Once they reach the end of their exploration of the meeting, once their uncertainty has collapsed, they will know what really happened and return to their position in the afterlife.

Another experiment discussed in the play that has a unique bearing on the interpretation is the two slit experiment. The experiment deals with particles of light that can only pass through one of many possible slits, but because of uncertainty it is never known which one they do pass through. In addition, because light also acts as a wave, the outcome of several particles passing through the slits appears to be a wave outcome with peaks and dips that are almost like the physical manifestation of probability. This entire play is like a two, or rather three slit experiment. The truth about the meeting can be processed through the three scenarios given in the play, but in the end we will never know which scenario is closest to the truth. The only conclusion that can be reached is that the characters and the audience receive the particles of truth in such a way that one scenario will seem more likely to them, but all will be based on probability. The next step is acting on the outcome of this experiment of the text.

At the end of the first two versions of the meeting the characters arrive at a conclusion that is unsatisfactory to one or all of them, and they try to come up with a new answer to their

questions. It is interesting to note that the characters seem to exist in the past but their desire to explore the meeting hints at their position in the afterlife and their desire to reflect.

**Bohr** So, Heisenberg, why did you come?

**Heisenberg** Why did I come?

**Bohr** Tell us once again. Another draft of the paper. And this time we shall get it right. This time we shall understand.

**Margrethe** Maybe you'll even understand yourself.

**Bohr** After all, the workings of the atom were difficult to explain. We made many attempts. Each time we tried they became more obscure. We got there in the end, however. So – another draft, another draft.

(Frayn, 53)

And then in the second version of the meeting the desire to restart comes even faster.

**Heisenberg** Why did I come to Copenhagen? Yes, why did I come...?

**Bohr** One more draft, yes? One final draft!

(Frayn, 86)

Just as the two might rewrite a paper on their research to make it clearer, Bohr repeatedly encourages Heisenberg to try once more to try again and to make his purpose more clear.

At the end of the play the characters return to where they started from, emerging from the past into the afterlife once more. They complete the cycle and then go even further, their observations reaching the audience more directly than the conversations shared by the three friends.

**Margrethe** And sooner or later there will come a time when all our children are laid to dust, and all our children's children.

**Bohr** When no more decisions, great or small, are ever made again. When there's no more uncertainty, because there's no more knowledge.

**Margrethe** And when all our eyes are closed, when even the ghosts have gone, what will be left of our beloved world? Our ruined and dishonored and beloved world?

**Heisenberg** But in the meanwhile, in this most precious meanwhile, there it is. The trees in Faelled Park. Gammertingen and Biberach and Mindelheim. Our children and our children's children. Preserved, just possibly, by that one short moment in Copenhagen. By some event that will never quite be located or defined. By that final core of uncertainty at the heart of things.

(Frayn, 94)

While Margrethe and Bohr are talking about a time when humanity is long dead, as they are, Heisenberg tries to give the hope of their survival through the mysterious outcome achieved at Copenhagen. Even without knowing what happened, because things turned out the way they did, the human race survived the advent of nuclear weapons. The characters also are able to look toward the future and connect it to their personal past. Humanity, like the characters, is connected to the past.

As we have seen, the play with time built into the structure of Copenhagen is driven by the desire of the characters to explore the possibilities of their past, but there is another level that time comes into play. Copenhagen makes use of the time the characters lived in, connecting the audience in the present to the events in the past. Through the play the audience can experience events from an age past, and their knowledge of the past informs their understanding of the play being acted out in the present. The conclusion of the play extends the idea that humanity has a future because of the past. It is not unreasonable to believe then that the play is connected to humanity's past since it is based on historical figures. The meeting in 1941 likewise is a mysterious historical event that is almost as compelling to the audience as it is to the characters. Exploring how the play engages the historical context of the Copenhagen meeting can bring even more insights to Frayn's use of time.

The Copenhagen meeting has been an enigma to historians for quite some time. Even with the release of never before seen documents about the meeting, it is still just as much of a riddle as before (Niels Bohr Archive). The author and characters both want to figure out what happened. Margrethe expresses her desire to find out what happened at the start of the play and Frayn expressed it by writing the play. This sentimentality for discovering the past is a cause behind the entire play, expanding on Hunter's definition about the cause of flashbacks.

Hunter writes about another play in his article, explaining that “the excursions out of the normal story sequence here are fully motivated by the leading character’s continuous search for self justification” (Hunter, 200). Hunter could have just as well been writing about Heisenberg. People want to know why the real Heisenberg went to the meeting, and the character embodies the question asking things like “Why did I come to Copenhagen? Yes, why did I come...?” (Frayn, 86).

This brings up a very interesting possibility. Within the frame of the play, the characters are trying to discover what happened at the meeting in their life just as the audience is. Hunter writes that “It is evident that dramatists in all periods have had to consider the relationship between the times indicated in a story and the plot time or performance time of the play” (201). The plot time of Copenhagen takes place after the characters and historical figures have died, while the story time surrounds their lives and the meeting in particular. Story time and plot time are connected together by the characters in the play going back to what they, or more accurately what the real Bohr, Heisenberg, and Margrethe, may have said and done at the meeting in Copenhagen. The characters seem to be acting as vehicles for the audience to ‘flash back’ to the meeting. The characters are not their historical selves.

When looking at the play from the outside the characters are tools to assist us in our experiments. It is almost as if they are sentient models that Frayn has placed into an experiment to determine what happened. When the outcome doesn’t reach a satisfactory conclusion the variables of the experiment are changed and it is run again. Throughout Copenhagen ”there have been long lapses between several scenes; there have been intensely condensed scenes representing many hours; there have been reversals or flash-backs; and there have been combinations of these” (Hunter, 201).

Just as the play allows the audience to look backward through time and muse about what happened, it is also a vehicle for the past to move forward. Specifically, Copenhagen is dependant on the life and death context surrounding the meeting and World War II at large. The fact that Heisenberg is revisiting the Bohrs is incredibly important. If the characters in the play were not the Bohrs and Heisenberg, if they were original characters created entirely by Frayn, the play would not have stirred up as much controversy and may not have been as integral to the audience. Because it is Heisenberg visiting, however, the entire fate of the world was at stake in the past, and is at stake through the telling of the play.

In the final scenario the play touches on a question people have asked about Heisenberg for decades; did he intentionally or unintentionally neglect to do the calculations that would have led to a German nuclear weapon:

**Bohr** No. It's because you haven't calculated it. You haven't considered calculating it. You hadn't consciously realised there was a calculation to be made.

**Heisenberg** And of course now I *have* realised. In fact it wouldn't be all that difficult. Let's see.... The scattering of cross-section's about  $6 \times 10^{-24}$ , so the mean free path would be... Hold on...

**Bohr** And suddenly a very different and very terrible new world begins to take shape.

(Frayn, 89)

In that moment the very different world that is taking shape isn't just a world in the play, it is the same world the audience lives in. It is the world where "there's no more uncertainty, because there's no more knowledge" and the world where "even the ghosts have gone" that Bohr and Margrethe worry about in the closing lines of the play (Frayn, 94). But, that aspect of the scenario didn't come true. The audience comes from a time "preserved, just possibly, by that one short moment in Copenhagen. By some event that will never quite be located or defined" (Frayn, 94). The conclusion of the play touches on the fact that the human race may still be alive because

of the outcome of the meeting, even though they may never know what that outcome is. It is the ultimate connection between the past of the characters and the present of the audience.

The characters draw on their past for the audience's benefit, but the psychological time that takes them into their past also takes them back into the dangers of their past. Once they have made the transition back into their own lives they are forced to deal with the troubles of the time even though they agreed that no one can be hurt now that they're all dead. The tension surrounding Heisenberg's visit is apparent to the audience, and it is almost as if we are spies working during World War II, eavesdropping on this secret meeting that the rest of the world doesn't know about. The World War II world the characters find themselves in is integral to the play.

Even Heisenberg's visit was a touchy situation. At the beginning of the play when Margrethe and Bohr are first trying to discover why Heisenberg came to visit Margrethe points out that it was very dangerous for him to come:

**Bohr** It was probably very simple, when you come right down to it: he wanted to have a talk.

**Margrethe** A talk? To the enemy? In the middle of a war?  
(Frayn, 3)

The audacity of the idea pointed out so clearly at the start of the play helps give credit to the significance of Heisenberg's efforts to come see them. At various points throughout the play the difficulty of the characters' situation is pointed out.

**Bohr** He knows he's being watched, of course. One must remember that. He has to be careful about what he says.

**Margrethe** Or he won't be allowed to travel abroad again.  
(Frayn, 8)

And then later their situation is elaborated on even further:

**Heisenberg** I carry my surveillance around like an infectious disease. But then I happen to know that Bohr is also under surveillance.

**Margrethe** And you know you're being watched yourself.

**Bohr** By the Gestapo?

**Heisenberg** Does he realize?

**Bohr** I have nothing to hide.

**Margrethe** By our fellow-Danes. It would be a terrible betrayal of all of their trust in you if they thought you were collaborating.  
(Frayn, 9)

This last scene is particularly important to bring the past forward.

World War II was an incredibly intense event that resonates strongly even today. However, while people still discuss World War II in detail, the majority of people are unaware of the day to day realities of living in that time. It wasn't just the Gestapo one had to worry about, as Margrethe points out in the play. One's activities and appearance were under scrutiny from all sides, including your own. By reminding the audience of how things were in the past, the play receives even more tension. No matter what Heisenberg came to Copenhagen for in 1941, the Bohrs were in danger. The connotations of the meeting could be very well why the real Bohr and Heisenberg disagreed about what happened. It is a mystery confined by the necessities of living safely in life.

It is only because the war is over by the time the play is taking place that the characters consider it safe for them to explore the question again as Margrethe says "So why did he do it? Now no one can be hurt, now no one can be betrayed" (Frayn, 4). The safety of their position in chronological time allows the characters and audience to carefully tread into the past and attempt their quest for the truth, although that truth will influence the reputation of the historical figures.

Because Bohr and Heisenberg are who they are, large portions of the play are spent discussing physics, telling their stories to explain their points, discussing their scientific positions and past, but even that is interrupted by the war at times. One such instance occurs on page 18 when their discussion of cyclotrons breaks down:

**Bohr** No secret, either, about why there aren't any. You can't say it but I can. It's because the Nazis have systematically undermined theoretical physics. Why? Because so many people working in the field were Jews.  
(Frayn, 18)

The dialogue of the play is used powerfully to express their concepts and ideas but also their way of life. The war interrupts their discussions as much as it did their lives and it is the state of the war that shapes the characters. In the first possible version of the meeting Heisenberg discusses his patriotism as the motivation for why he has asked Bohr to tell him what he knows:

**Heisenberg** Bohr, I have to know! I'm the one who has to decide! If the Allies are building a bomb, what am I choosing for my country? You said it would be easy to imagine that one might have less love for one's country if it's small and defenseless. Yes, and it would be another easy mistake to make, to think that one loved one's country less because it happened to be in the wrong.  
(Frayn, 42)

This is not the motivation that the characters settle on in the end, but it is one example of the play using the power of the past to reach forward while at the same time the quote allows the audience to reach into the past, to decide if this is why Heisenberg came to Copenhagen for them.

It should be the goal of any playwright to involve the audience in the lives of the characters. Shakespeare overcame the limitations of the Elizabethan era's lack of sound effects by using the language to describe the locale, the weather, the events... it was all conveyed in language. Frayn's writing in many ways follows Shakespeare's tradition. There are no direct stage directions; Frayn gives them in the text of the play just as Shakespeare did. One of the most powerful and classical images comes from a description Heisenberg gives.

**Heisenberg** You never had the slightest conception of what happens when bombs are dropped on cities. Even conventional bombs. None of you ever experienced it. Not a single one of you. I walked back from the centre of Berlin to the suburbs one night, after one of the big raids. No transport moving, of course. The whole city was on fire. Even the puddles in the streets are burning. They're puddles of molten phosphorus. It gets on your shoes like some kind of incandescent dog-muck – I have to keep scraping



it off – as if the streets have been fouled by the hounds of hell. It would have made you laugh – my shoes keep bursting into flame.  
(Frayn, 43)

Heisenberg's description is powerful and vivid. It pulls Heisenberg out of the meeting for a moment, his tense changing from the past tense of his memory to the present tense as he relives walking through the city on fire. It is moments like this that the audience can begin to feel what the characters have suffered through, the world they live in, and what has brought them to where they are.

In a protracted excerpt from the play Bohr and Heisenberg talk about when Heisenberg retreated to Haigerloch with his reactor near the end of the war. While the characters don't slip into the memory as they have with others, the discussion begins to betray Heisenberg's state of mind at the time.

**Bohr** Thank God. Hambro and Perrin examined it after the Allied troops took over. They said it had no cadmium control rods. There was nothing to absorb any excess of neutrons, to slow the reaction down when it overheated.

**Heisenberg** No Rods, no.

**Bohr** You believed the reaction would be self-limiting.

**Heisenberg** That's what I originally believed.

**Bohr** Heisenberg, the reaction would not have been self-limiting.

**Heisenberg** By 1945 I understood that.

**Bohr** So if you had ever had got it to go critical, it would have melted down, and vanished into the centre of the earth!

**Heisenberg** Not at all. We had a lump of cadmium to hand.

**Bohr** A *lump* of cadmium? What were you proposing to do with a *lump* of cadmium?

**Heisenberg** Throw it in the water.

**Bohr** What Water?

**Heisenberg** The heavy water. The moderator that the uranium was immersed in.

**Bohr** My dear good Heisenberg, not to criticise, but you'd all gone mad!

**Heisenberg** We were almost there! We had this fantastic neutron growth! We had 670 per cent growth!

**Bohr** You'd lost all contact with reality down in that hole!

(Frayn, 50)

The scene continues from there with Heisenberg talking frantically about how close he was to success. He has lost himself, forgetting about the meeting. Frayn has combined the historical evidence of Heisenberg in Haigerloch with his own Heisenberg character to show the audience a character who could be overpowered with scientific discovery. The Haigerloch scene shows how carried away Heisenberg could be; culminating in the scene where he realizes the calculations would be simple. History helps the play show just how far Heisenberg could go, what he might be capable of with the right stimulus, and how easily things could have been different. These are all aspects the audience has wondered about Heisenberg.

Once again Frayn's unusual afterlife has importance. As Gooch explained "Good and evil befall not the dead themselves but their reputations" (112). In the afterlife the dead can learn of what has happened to their reputations. The audience is invested in discovering what happened and their judgment has ramifications on the reputations of the characters. Each scenario gives evidence that could sway that judgment one way or the other. In this way the decision in the present about the meeting in the past could be seen as affecting the real Heisenberg, Bohr, and Margrethe. The judgment itself isn't the only factor affecting their spirits, however.

Aristotle's view on the dead is complex. Assuming there are spirits in the afterlife, what happens to their reputation can affect them, but so can what happens to their survivors. As Gooch points out, "The dead may be conscious and affected by the fortunes of survivors" (115). If this is so, the ending of Copenhagen has extreme significance. When Heisenberg says "Our children and our children's children. Preserved, just possibly, by that one short moment in Copenhagen" (Frayn, 94) he is talking about their actual descendents and the audience, and by extension themselves. Whatever their afterlife is, their existence or their freedom could be guaranteed by the fact that humanity has continued, knowledge still exists, and the question about them still remains. It is all made possible by aspects of the past being brought forward.

Without bringing the history of the characters and the era forward through time to the audience, Copenhagen would not be nearly as compelling. The action and obstacles of the era inform the danger the characters are facing in this play by meeting. While the characters have agreed no one can be hurt, the risks are real enough for them that they still have to go on a walk to talk in case they are overheard. The fate of the characters is still at stake. Psychological time is merely a vehicle they use, but history is the world they go to. History is the material of the play that the characters move back and forth through. The content of the play, their choices and decisions, controls where they move to in time. The content of the play operates within the larger structure of the play, including the three iterations of the meeting. On each of the levels time is being used to convey a special significance of the meeting in Copenhagen.

Copenhagen is a complex play, using time in numerous ways. Structurally the characters exist outside of time and are able to move back and forth through time by using their memories. Those memories of times long past make up the content of the play, and the past the characters are reaching to informs the audience by fleshing out the reality the characters exist in while drawing intrigue from the mystery from history itself. All of these diverse uses of time exist simultaneously and give the play depth, breadth, and vivacity for the audience while allowing Bohr, Margrethe, and Heisenberg to relive the meeting in 1941 until they are satisfied with what happened. The audience is able to connect to the characters and experience many different possible scenarios through the process that they could not have experienced if Frayn wrote one hypothetical version of the meeting. The unusual use of time allows the characters impeccable freedom and they are able to bridge the gap between the present and past for the audience as well as themselves. The atypical use of time gives Copenhagen amazing strength as a part of dramatic entertainment, historical mysteries, and an exploration of how the human mind works.

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